GENERAL ECONOMICS

COURSE CODE: SGB24EC101MI

Minor Course - Economics

For FYUG Programmes (Honours)

Self Learning Material

SREENARAYANAGURU
OPEN UNIVERSITY

SREENARAYANAGURU OPEN UNIVERSITY

The State University for Education, Training and Research in Blended Format, Kerala

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To increase access of potential learners of all categories to higher education, research and training, and ensure equity through delivery of high quality processes and outcomes fostering inclusive educational empowerment for social advancement.

Mission

To be benchmarked as a model for conservation and dissemination of knowledge and skill on blended and virtual mode in education, training and research for normal, continuing, and adult learners.

Pathway

Access and Quality define Equity.

General Economics

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Semester - II

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വിദ്യകൊണ്ട് സ്വതന്ത്രരാവുക

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SREENARAYANAGURU
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Dr. Rajeev S. R.

Development of the Content

Nijil Jacobi
Dr. Suchitra K. R.
Dr. Lakshmy Ravi
Yedhu T. Dharan

Review and Edit

Dr. K.N. Kamalasanan

Linguistics

Dr. R. Premkumar

Scrutiny

Dr. Suchitra K.R.
Dr. Lakshmy Ravi,
Yedu T. Dharan
Soumya V.D.
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Design Control

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Cover Design

Jobin J.

Co-ordination

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Message from Vice Chancellor

Dear Learner,

It is with great pleasure that I welcome you to the Four Year UG Programme offered by Sreenarayanaguru Open University.

Established in September 2020, our university aims to provide high-quality higher education through open and distance learning. Our guiding principle, 'access and quality define equity', shapes our approach to education. We are committed to maintaining the highest standards in our academic offerings.

Our university proudly bears the name of Sreenarayanaguru, a prominent Renaissance thinker of modern India. His philosophy of social reform and educational empowerment serves as a constant reminder of our dedication to excellence in all our academic pursuits.

The Four Year UG Minor course "General Economics" covers the syllabus of Economics as an introductory course. It has adequate space for disseminating the basics of the discipline for a new learner with the required emphasis on the formation of ideas and concepts. The purpose of the course is to expose learners to the basic threads in the evolution of economic ideas and entities.

Our teaching methodology combines three key elements: Self Learning Material, Classroom Counselling, and Virtual modes. This blended approach aims to provide a rich and engaging learning experience, overcoming the limitations often associated with distance education. We are confident that this programme will enhance your understanding of statistical methods in business contexts, preparing you for various career paths and further academic pursuits.

Our learner support services are always available to address any concerns you may have during your time with us. We encourage you to reach out with any questions or feedback regarding the programme.

We wish you success in your academic journey with Sreenarayanaguru Open University.

Best regards,

Dr. Jagathy Raj V.P.
Vice Chancellor

01-01-2025

Contents

BLOCK - 01

Microeconomics

Unit 1
Introduction to Economics

Learning Outcomes

After reading this unit, the learner will be

- familiar with economics as a part of social science
- introduced to the subject matters and scope of economics
- able to distinguish between different economic systems

Prerequisites

Imagine a society, a community of people with diverse needs and desires. From basic necessities like food, clothing, and shelter to services such as healthcare, education, transportation, and banking, every individual requires a variety of goods and services to lead a fulfilling life. These needs are not only vast but also interdependent, as they range from essential daily requirements to specialised professional services, including doctors, teachers, and postal workers. To meet these needs, a complex web of economic activities are needed involving the production, distribution, exchange, and consumption of goods and services. These activities are essentials of any economy, driving the creation and flow of commodities that people rely on for their survival and well-being. Economic activities are driven by people's interactions, where they engage in transactions in exchange for money or valuable goods. The environment where these activities take place is known as the economy.

However, no one person or community starts with everything they need. The sheer number of goods and services that people require often exceeds what they can access at any given time. Each person is limited to a small portion of the desired goods and services, creating a fundamental dilemma, i.e., with finite resources, how can we satisfy infinite wants? This leads to the concept of scarcity, the condition where resources are insufficient to fulfill everyone's desires. Faced with scarcity, individuals and societies must make choices. Each person's access to resources is limited, meaning they must prioritise their needs and make trade-offs. For example, a family running a farm might need to decide between purchasing more land to grow crops or building a larger home to improve living conditions. Such decisions highlight the inherent challenge in resource allocation about how to efficiently match what people want with what is available. Economics, therefore, is the branch of social science that investigates how individuals, businesses, and societies make choices in the face of limited resources. It examines how we allocate resources to produce the goods and services that people want, and how we manage trade-offs to achieve the best possible outcomes. In a world of scarcity, economics helps us understand how to make the most efficient and effective use of the resources at our disposal.

Keywords

Social science, Wealth, Welfare, Scarcity, Growth, Capitalist economy, Socialist economy, Mixed economy

1.1.1 Economics as a Social Science

Economics is a subject matter of social science. It studies the economic matters involved in a society. Economics is the study of how people choose to use their scarce resources in order to satisfy their unlimited wants. We know that scarcity refers to shortage. Economics focuses on the consumption, production, distribution of goods and services, and allocation of resources in the economy. It examines the choices of individuals, governments, industrial firms, businesses, and companies regarding the allocation of resources and the economic matters concerned with them.

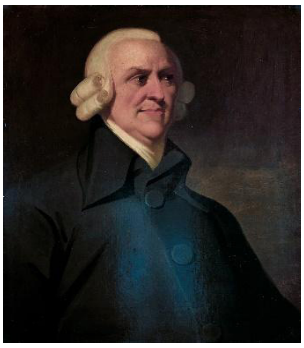
We all know that the resources available in our world are not enough to meet all the needs of society. The land, pure air, water, minerals, forest products, trees, sand, rocks, and fuel are limited in stock in the world. However, the wants of human beings are unlimited. Considering the limited resources, we must prioritise our wants so that the limited resources can be efficiently utilised to achieve maximum possible benefit out of the resources. Economics deals with efficient management of the scarce or limited resources for satisfying the wants of the society. Hence, economics forms an important part of social sciences.

Social science is the science of society and the relations among human society. Social science deals with human behaviour in society. The major subject matters of social sciences include politics, history, sociology, economics, psychology, and ethics. Economics is a notable subject under social sciences as it studies the human behaviour of dealing with limited resources and unlimited wants. Paul M Samuelson considers, 'economics is a queen of social sciences'.

Economics deals with the economic decision making of human beings living in a society. Some economists are of the view that economics is not about the decision making of resources by solitary individuals like Robinson Crusoe. Hope you all are aware of the story of Robinson Crusoe. It is the story of a person who lived alone on an island. Economics deals with the activities of people living in societies. But economists like Lionel Robbins considers economics as a human science which studies economic matters of solitary individuals as well.

Whether economics is a normative or a positive science is a matter of debate. Positive economics is focused on the present, i.e., on "what is". It deals with economic connections that can be demonstrably verified through data. It focuses on the examination of how economic issues are actually resolved. The focus of normative economics is on "what ought to be". It deals with evaluating potential policy changes. It is involved with the study of how to address a society's economic issues.

Origin of Economics



Adam Smith (1723 – 1790)

The Greek word "oikonomia," which means home management, is where the word "economics" originates. Early on, the discipline of social science, today commonly referred to as economics, was referred to as political economy. Adam Smith, a Scottish Economist, contributed significantly to the development of economics as a scientific field of study by publishing his *Wealth of Nations* in 1776. He is known as the father of economics.

1.1.2 Subject Matter and Scope of Economics

The subject matter and scope of economics is broad. Economics deals with all matters related to human wants, resource allocation for satisfying human wants, wealth, production, consumption and distribution of goods, value and pricing of goods, and decision making of individuals, firms, businesses, governments regarding the economic matters.

Each of the above mentioned matters may have many sub-matters to deal with. For example, with respect to taking decisions of production of goods, it is very important to deal with availability and pricing of factors of production. Major factors used for the production of all goods are land, labour, capital, and entrepreneur. Factor pricing is an important area of decision making in economics, and in turn is related to the pricing of goods. In terms of pricing of goods, firms and governments have different mechanisms, especially in different types of economic systems. We will discuss this in a later section.

Economics is considered as a science, though not a pure science like Chemistry and Physics. Classical economists considered economics as a science representing cause and effect relations, say the relation between consumption and income, or saving and investment. In modern times, economics is considered both as a science and an art. Economics analyses how economic problems of the society are solved. Economic analysis is done based on the statistical, mathematical, and econometric analysis of economic data. Future predictions of the relationship between key economic concepts such as aggregate economic activity, GDP, inflation, unemployment, recession, depression, boom etc. can be done through data analysis.

Adam Smith in the book, *An Inquiry into the Nature and Cause of Wealth of Nations*, explains economic study in terms of wealth of the country. It was criticised by Alfred Marshall and his followers. According to them, the classical school gave more emphasis to wealth than human beings. Therefore, Marshall defined Economics in terms of welfare of human beings. Later, there were Scarcity and Growth definitions. Let us discuss the definitions of economics to have an idea of the matters dealt with in economics.

1.1.2.1 Definitions of Economics

Economics is defined in a variety of ways. Because it is impossible to describe economics accurately, Canadian economist Jacob Viner provided the following definition: "Economics is what economists do."

The definitions of economics are broadly classified into wealth definition, welfare definition, scarcity definition, and growth definition.

Wealth Definition: Adam Smith

According to Adam Smith, "economics is an inquiry into the nature and causes of the wealth of nations" (Wealth of Nations: 1776).

Welfare Definition: Alfred Marshall

"Political economy or Economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well-being". Thus, it is, on the one side, a study of wealth; on the other and more important side, a part of the study of man' (Principles of Economics: 1890).

Scarcity Definition: Lionel Robbins

Lionel Robbins' definition of economics is the one that is most frequently used.

According to Robbins, "Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses" (The Nature and Significance of Economic Science: 1932).

The three important postulates of the scarcity definition are the following.

1. Human wants are unlimited: When one want is met, a new one emerges. There wouldn't have been an economic crisis if man's wants were constrained.
2. Resources are limited: Resources are few compared to what people demand. Again, there wouldn't be any economic issues if resources were limitless. In reality, since resources are scarce, all the desires of a person cannot be satiated.
3. Resources have alternative uses: The issue of allocation arises because the resources can be employed for a variety of objectives.

Growth Definition: Paul A Samuelson

"Economics is the study of how men and society end up choosing with or without the use of money, to employ scarce productive resources that could have alternative uses, to produce various commodities and distribute them for consumption, now or in the future, among various people and groups in society". It analyses the costs and benefits of improving patterns of resource allocation (Economics: 1948).

1.1.2.2 Scope of Economics

The scope of economics is broad and encompasses a wide range of topics related to human behaviour, resource allocation, production, distribution, and consumption. The primary focus is on understanding how individuals, businesses, and governments make choices in the face of limited resources and how these choices impact the overall well-being of society.

The key areas within the scope of economics include:

1. Microeconomics: This branch of economics analyses the behaviour of individual economic agents, such as a household, a firm, and an industry. It studies how they make decisions about what to produce, how to produce, and for whom to produce. Microeconomics also examines

market structures, consumer behaviour, production costs, and factors influencing supply and demand.

2. Macroeconomics: Macroeconomics deals with economy as a whole. It looks at aggregate economic variables such as GDP (Gross Domestic Product), inflation, unemployment, and economic growth. Macroeconomists study government policies, monetary systems, fiscal policies, and international trade to understand and influence the overall economic performance of a country or region.

3. Public Economics: This area of economics focuses on the role of the government in the economy. It examines how the government raises revenue through taxation and how it allocates resources to provide public goods and services like education, healthcare, and infrastructure.

4. International Economics: International economics examines the economic interactions between countries. It deals with topics like international trade, exchange rates, balance of payments, and global economic policies. It helps in understanding the benefits and consequences of international trade and economic cooperation.
5. Development Economics: This field studies the economic growth and development of countries, particularly in low-income regions. It looks at factors that can promote or hinder economic development, such as investment, technological advancements, education, and healthcare.
6. Labour Economics: Labour economics focuses on the labour market, including employment, wages, labour mobility, and the impact of labour policies on employment and income distribution.
7. Environmental Economics: This area analyses the economic consequences of environmental issues, such as pollution, resource depletion, and climate change. It seeks to find ways to internalise environmental costs into economic decision-making and promote sustainable practices.
8. Behavioural Economics: Behavioural economics combines insights from psychology and economics to study how individual biases and cognitive limitations influence economic decision-making.
9. Financial Economics: Financial economics explores the behaviour of financial markets, including stock markets, bond markets, and other financial instruments. It analyses investment decisions, risk management, and the relationship between financial markets and the broader economy.

The scope of economics continues to evolve as new challenges and opportunities arise in the global economy. Economists use various tools and models to understand complex economic phenomena and provide valuable insights for policymakers, businesses, and individuals.

1.1.3 Different Economic Systems

There are innumerable economic activities that are performed in a country every day. There is an organisational set up or economic system to coordinate the economic activities. Hence, an economic system refers to the arrangement in which economic activities are coordinated and performed in an economy. According to Leonard S. Silk, "Economic system refers to the way different economic elements, i.e., individual workers and managers, productive organisations such as factories or firms, and government agencies etc. are linked together to form an organic whole". The major economic systems in the world are Market Economy, Centrally Planned

Economy, and Mixed Economy.

1.1.3.1 Market Economy

In a free-market economy, the allocation of resources is done based on the choices made by consumers and businesses. In such an economy, the government abstains from interfering with how the economy runs. This system is also known as capitalism. Private individuals are the owners of the production equipment. Selling the services of the production factors they own is how people make their money. Prices are decided in free market places when demand and supply meets. The price mechanism controls how products and services are produced and distributed. Maximum individual freedom and the absence of central planning are characteristics of these economies. Capitalism exists in some of the most advanced countries of Europe and America with modification and deletion of some of its original features.

1.1.3.2 Centrally Planned Economy

In a centrally planned economy, all decisions about production and consumption are made by the government. The government owns the means of production and allocates the resources. The centrally planned economy is also referred commonly as Command economy or Socialist economy. The central planning apparatus determines the economic objectives in the system. What are the things to be produced, in what quantities, how they will be produced, and for whom the goods will be produced are decided by the government. In a command economy, the price system has no influence over how goods are produced and distributed. Lack of economic and personal freedom is a defining feature of command economies. Command economies can be seen in China, North Korea, and the former Soviet Union etc. Private participation in economic activities is progressing in these countries.

1.1.3.3 Mixed Economy

Practically, neither a fully developed capitalist economy nor a fully developed socialist economy exist. Both economic systems have their drawbacks. As a result, a new economic system known as the mixed economy has arisen as a combination of the two systems mentioned above. Therefore, a mixed economy is described as an economic system in which the public and private sectors coexist and cooperate for the benefit of the nation.

The characteristics of both capitalism and socialism are combined in a mixed economy. The existence of both the public and private sectors defines it. The businesses held by private individuals make up the private sector. Market signals are used to inform the decisions. Local governments, businesses, and government-owned departments make up the public sector. Their capital is owned by the public, and the government has a say in how they conduct business. The existence of the public sector enables the government to exert significant economic control. In a mixed economy, the planning commission is crucial for coordinating the public and private sectors. The mixed economies of Sweden, France, and India are good examples.

Recap

- Economics is a social science
- Studies economic matters involved in societies.
- Explores how people use limited resources to satisfy unlimited wants
- Positive economics describes how economy works and predicts outcomes
- Normative economics makes value judgments
- Major factors of production - land, labour, capital, entrepreneurship
- Economics focuses on human behaviour related to production, distribution, exchange, and consumption of goods and services
- Production is creating goods and providing services
- Distribution is how goods and services are shared in society
- Exchange is act of trading goods, services, or resources between individuals or entities.
- Consumption is using products and services to fulfil wants.
- The term "economics" comes from the Greek word "oikonomia," meaning home management.
- Adam Smith's *Wealth of Nations* (1776) earned him the title "father of economics."
- Jacob Viner's definition: "Economics is what economists do."
- Adam Smith's definition: "An inquiry into the nature and causes of the wealth of nations."
- Alfred Marshall's definition Welfare definition
- Lionel Robbins' definition Scarcity definition
- Paul Samuelson's definition Growth definition
- Three primary economic systems: market system (capitalism), Centrally Planned System (socialism), mixed economy
- Free-market economy: consumer and business choices heavily influence resource allocation.
- Centrally Planned System: all decisions made by the government
- Mixed economy: public and private sectors coexist and cooperate for the nation's benefit

Objective Questions

1. Who is considered as the "father of economics"?
2. Who is associated with the scarcity definition of economics?
3. What are the three important postulates of the scarcity definition in economics?

4. Who wrote the book 'Economics'?
5. What are the four main factors of production?
6. Where does the term "economics" originate from?
7. Why is resource allocation a challenge in economics?
8. Which branch of economics studies individual behaviour of households and firms?
9. What does the term "exchange" refer to in economics?
10. Which economic system relies on market forces for resource allocation?
11. In a socialist economy, who makes decisions about production and consumption?
12. What type of economy combines elements of both capitalism and socialism?

Answers

1. Adam Smith
2. Lionel Robbins
3. Unlimited wants, limited resources, alternative uses
4. Paul Samuelson and William Nordhaus
5. Land, Labour, Capital and Entrepreneurship
6. Greek
7. Because of scarcity
8. Microeconomics
9. Trading goods or services
10. Capitalism
11. Government
12. Mixed Economy

Assignments

1. Explore the historical origin of the term "Economics" and its relation to home management.
2. Examine the characteristics and functioning of free market, socialist, and mixed economies.
3. Analyse the three postulates of scarcity in economics: unlimited wants, limited resources, and alternative uses.

Suggested Readings

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Unit 2
Introduction to Microeconomics

Learning Outcomes

After completing this unit, the learner will be

- aware of the two major branches of economics
- introduced to the scope of microeconomics
- familiar with the basic economic problems that every society faces

Prerequisites

Economics analyses how individuals, organizations, and governments make decisions about distributing resources to meet their needs. At its core, it explores how these groups optimise the use of their resources to achieve the highest possible production and satisfaction. Central to this process is the production, distribution, and consumption of goods and services that define the economy. The scope of economics is vast, covering a wide array of critical issues such as production, consumption, saving, investing, inflation, employment, unemployment, national income, international trade, fiscal and monetary policy, and much more. The topics are endless, and each area plays a vital role in shaping the world we live in. To truly understand an economic problem, it is essential to recognise what type of issue is being addressed and identify the specific field or branch of economics it belongs to.

Economics is divided into two primary branches viz. microeconomics and macroeconomics. Microeconomics focuses on the behaviour of individual economic units which include people, businesses, workers, consumers, investors, property owners, and others who contribute to the functioning of the economy. Microeconomics seeks to understand the decisions made by these units, such as how consumers choose what to buy, how businesses set prices, or how workers decide where to invest their time and skills whereas macroeconomics see how aggregate variables like GDP, unemployment, inflation are under work in an economy.

Keywords

Micro economics, Macroeconomics, What to produce, How to produce, For whom to produce

Discussion

1.2.1 Microeconomics

The word "micro" comes from the Greek word "Mikros," which means "small". In 1933, Ragnar Frisch of Oslo University used it for the first time in a work of economic literature. Adam Smith played a major role in developing microeconomics as a specialised field of economics.

Microeconomics focuses on the conduct of small economic units. Microeconomics focuses on the study of consumers, workers, savers, business managers, firms, individual industries, and markets. Consumers choose how many of various goods to purchase, workers choose which occupations to accept, and business people choose how many employees to hire and how much to produce. It covers the variables that affect these decisions as well as how the outcomes of the numerous small decisions combine to shape the functioning of the larger economy. Microeconomics is commonly referred to as price theory due to the significant influences that prices have on these specific decisions.

Several fundamental principles in microeconomics include, but are not limited to:

- Supply, demand, and equilibrium: The theory of supply and demand determines prices. This brings about economic equilibrium.
- Production Theory: This concept examines the process of producing goods and services.
- Costs of Production: This includes the cost of the resources employed in the production process, which in turn determines the price of goods or services.
- Factor Pricing: This deals with pricing of factors of production.

Microeconomics: Definitions

According to Gardner Ackley, 'Microeconomics deals with the division of total output among industries, products and firms and the allocation of resources among competing groups'.

According to Paul Samuelson, 'Microeconomics deals with the intricate system of relationships known as the market mechanism'.

1.2.1.1 Scope of Microeconomics

The following points can be used to explain the scope of microeconomics.

1. **Theory of Product Pricing:** The market forces of demand and supply determine the price of each individual commodity. Microeconomics is concerned with demand analysis, or the behaviour of individual consumers, and supply analysis, or the behaviour of individual producers. The theory of product pricing describes how a commodity's price is established.

2. **Theory of Factor Pricing:** The production process is aided by the factors of production viz. land, labour, capital, and entrepreneurship. They receive compen-

sation in the form of rent, wages, interest, and profits for their contributions, accordingly. The way that factor prices (or rewards) are established is explained by the theory of factor pricing.

3. **Theory of Economic Welfare:** The efficiency of resource distribution is essentially what the theory of economic welfare addresses. When the distribution of resources maximises individual pleasure, efficiency has been achieved.

Three efficiencies are necessary for economic efficiency.

a. Efficiency in production: Efficiency in production refers to producing the maximum possible goods and services out of the available resources.

b. Efficiency in consumption: Efficiency in consumption refers to the allocation of produced goods and services among consumers in a way that maximises the total satisfaction of the society.

c. Overall economic efficiency: This refers to the creation of the goods and services that people want the most.

Microeconomic theories explain the circumstances under which these efficiencies are attained. We can therefore draw the conclusion that the study of microeconomics is restricted to resource allocation and price theory (including factor and product pricing). It does not research the broad economic aggregates.

1.2.2 Distinction between Microeconomics and Macroeconomics

Microeconomics and macroeconomics are two important branches of economics. While microeconomics deals with individual decision making and its collective impact on the allocation of a society's scarce resources, macroeconomics deals with aggregate phenomena. Booms and recession, the pace of economic growth, poverty, inflation, and the rate of unemployment are all macroeconomic topics. Microeconomics deals with partial equilibrium analysis whereas macroeconomics deals with general equilibrium analysis. Macroeconomics and microeconomics are not distinct. For example, the explanations for aggregate outcomes are often found in the theories of decision making by consumers and firms.

The classical economists like Adam Smith, David Ricardo, and John Stuart Mill rejected the scope and relevance of macroeconomics in the smooth functioning of an economy. They argued for minimum government intervention in economic activities. But the outbreak of the Great Depression of 1929 and the resultant economic slumber in Europe and North America prompted many economists to think differently. The British economist John Maynard Keynes published his celebrated book 'The General Theory of Employment, Interest and Money' in 1936 and this paved the way for the emergence of Macroeconomics. John Maynard Keynes is considered the founder of macroeconomics. Other leading lights in macroeconomics include Franco Modigliani, Milton Friedman, James Tobin, John Richard Hicks, Robert Merton Solow, and James S. Duesenberry.

Table 1.2.1 Distinction between Microeconomics and Macroeconomics

Basis of Difference	Microeconomics	Macroeconomics
Meaning	It is the study of a particular industry and segment of the economy.	It is the study of the economy as a whole.
Purpose	The purpose of microeconomics is to analyse the market and determine the price levels of commodities.	The purpose of macroeconomics is to maximise national income and economic growth.
Deals with	It deals with supply, demand, production, price levels, consumption etc.	It deals with national income, distribution of income, employment, inflation, money etc.
Main determinant	It's main determinant is price.	It's main determinant is income
Approach	It uses a bottom-up approach	It uses the top-down approach
Solution	It provides solution to the problem of "what, how, and for whom to produce"	It provides solution to the problem of under utilisation of resources in the economy.
Significance	It is useful in regulating the prices of goods and services as well as the factors of production.	It is useful in solving the major issues in the economy, like inflation, unemployment and poverty.
Accounts for	It accounts for factors such as demand and supply of a specific commodity to determine its price.	It accounts for the aggregate demand and aggregate supply to determine the general price level.
Scope	It has a narrower scope as it is related to a specific segment of the economy.	It has a broader scope as it is related to the whole economy.
Main Tools	Demand and supply are the main tools.	Aggregate demand and aggregate supply are its main tools.
Other name	Price theory	Theory of income and theory of employment
Examples	Some examples of its components are – Individual income and savings, price determination of a commodity, individual firm's output and consumer's equilibrium etc.	Some examples of its components are – National Income, General Price Level, Aggregate supply, Aggregate demand, unemployment etc.

Even though microeconomic and macroeconomic analysis are two approaches, they cannot be treated as two watertight compartments. They are interrelated in several spheres. According to Prof. Samuelson, "There is really no opposition between micro and macroeconomics. Both are vital, and you are only half educated if you understand one while being ignorant of the other ''.

1.2.3 Scarcity and Choice: Central Economic Problem

Economics is the study of how people try to fulfil their unlimited demands while making use of limited resources. This issue is the root cause of all other problems in economics. The use of limited or scarce human and non-human resources to satisfy unlimited demands is referred to as the "fundamental economic problem." Scarcity in economics simply refers to a limited supply. In the real world, we don't have enough resources to meet unlimited wants. Scarcity is a sign that there are more wants than goods to satisfy them. Despite the fact that human beings have limitless wants, there are only limited resources that can be used to produce the commodities and services needed to fulfil those wants.

The factors of production are referred to as the resources at every society's disposal. Since the resources are limited, the factors of production are also limited. The commodities and services generated by these limited resources are also scarce because of the scarcity of these production factors. Given the scarcity of goods and services as well as the resources required to generate them, a decision must be taken regarding the best way to utilise the factors of production. Since it is impossible to fulfil all of a consumer's wants, the consumer must also determine which of their wants is most important. Therefore, choice and scarcity are fundamental concepts in economics.

1.2.4 Basic Economic Problems and Solutions

Some of the most fundamental economic activities are the production, exchange, and consumption of goods and services. The fundamental issue in economics is scarcity. Because it has always had an impact on all individuals in all civilizations, scarcity is known as the universal economic problem. Every society must deal with resource scarcity during the course of these fundamental economic operations, and it is the resource shortage that leads to the choice problem. There are conflicting uses for an economy's limited resources. In other words, each community must choose how to allocate its limited resources. The issues with an economy are frequently summed up as follows:

Any society that deals with economics operations will experience the following.

1. What goods and services should be produced?
2. How should those goods and services be produced?
3. For whom should the goods and services be produced?
4. How to achieve economic growth?
5. How to ration a given quantity of commodity over time?

Among the problems, the basic economic problems are what to produce, how to produce, and for whom to produce? Let us discuss all these problems in detail and see how different economic systems solve all these central issues.

1.2.4.1 What to Produce

What to produce refers to what goods and services that the economy should produce, as well as how much of each to produce. This query relates to resource allocation, or the distribution of limited resources among competing users. No economy can produce as much of each product or service as is required by every member of society since resources are limited. Typically, more of one product or service means less of the others. Every society must therefore decide precisely which goods and services to create and how much of each to produce. These issues are all a result of the fundamental economic problem of meeting everyone's needs regardless of available resources. Different economies employ various strategies to address their fundamental economic issues.

In a free market economy, price mechanism decides what to produce. Here, the commodities from which the producers can make a lot of money will be produced and supplied. These are goods that consumers are willing to spend more money on. When the price of a commodity increases, its supply also increases. On the other hand, a drop in the price typically leads to a decrease in the quantity of the commodity supplied.

In a command economy or socialist economy, the problem of what to produce is solved by the government or central planning authority. The Central Planning Authority refers to the governmental body formed to plan for the economy. According to the nation's priorities and the resources that are available, the central planning authority determines the types of goods and services that will be produced. Resources are distributed more widely for those items that are necessary for the country. Growth, equality, and price stability are the primary goals of the state. To accomplish the aforementioned goals, the government enacts fiscal policies, such as taxation, spending, public debt, and deficit financing programmes.

A mixed economy is described as an economic system in which the public and private sectors coexist and cooperate for the benefit of the nation. Since the private sector uses a free market system, prices may vary according to supply and demand for certain items. As a result, the private sector is able to produce items based on consumer demand and market prices. Through its monetary or fiscal policies, the government may manage and control private sector production. The planning authority, on the other hand, uses a controlled price mechanism (economic planning) for the public sector. The central planning body thus determines the commodities and services to be produced in the public sector. Thus, in such economies, the free market mechanism and the controlled market mechanism are used to solve all economic problems (economic planning). In short, in a mixed economy, the problem of what to produce is resolved by integrating central planning with a modified price system.

1.2.4.2 How to Produce

How to produce refers to the decision taken on the specific procedure of production together with the selection of the factor combination to be used. Typically, there are multiple technically possible ways to produce a given product. The production technique which combines a lower amount of capital with a greater amount of labour is referred to as labour intensive technique. A capital intensive method of production involves combining a higher amount of capital with a lower amount of labour. A decision on what method of production to choose depends mainly on the availability of factors and its price. The price of the factors gives the cost of production. So, when multiple options are available, the economically sound course of action is to select the production strategy that has the lowest cost .

Under a free market economy, the decision on how to produce is determined by the price mechanism. The method with the lowest production cost will be chosen by the producer. The producer will move to a method that utilises less of the more expensive factor and more of the cheap factor. For example, if an economy has more labour and labour is the cheap factor, the free market economy will choose a labour intensive method of production and vice versa.

In a socialist economy, the central planning authority decides or chooses the production techniques or procedures. Whether a labour or capital intensive production method will be employed is decided by the central planning body. The social and economic circumstances of the economy are taken into account while choosing the best approach.

In a mixed economy, based on factor pricing, technology accessibility, etc., the private sector chooses the production methodology or method. The central planning authority, on the other hand, determines the production method or technique for the public sector. National priorities, national employment policies, and social objectives are crucial factors when choosing the production method for the public sector.

1.2.4.3 For Whom to Produce

For whom to produce is a term used to describe how the final product will be distributed among consumers. Every economy produces a finite amount of products and services. Therefore, no society can fully satiate the needs of its entire population.

The issue of for whom to produce is resolved by the price mechanism in a free enterprise system. The economy will create the goods needed to fulfil the needs of those with the means to purchase them. Therefore, in a market economy, output is reserved for individuals with large purchasing power. Under a free market economy, the demand in the economy determines for whom to produce.

In a socialist economy, the government rations goods to ensure social justice. The rationing strategy was implemented to provide access to basic commodities to the less privileged sections of the society. Here, goods are distributed at reasonable rates or fair prices through specialised mechanisms such as Public Distribution Systems.

In the case of a mixed economy, the private sector deploys its resources to produce goods that consumers with high purchasing power demand. The price set by the free market mechanism may be higher than the purchasing power of people in the low or marginal income group, even though production by the private sector is occasionally controlled and regulated by the government through various policies such as licensing policy, taxation policy, subsidy, etc. As a result, the government has the authority to start producing some items. The rationing policy is additionally implemented to give the less fortunates, the access to basic items at fair prices. As a result, the government ensures social fairness by its participation in the mixed economy.

Recap

- Microeconomics focuses on individual decision-making
- It analyses decisions on production, consumption, and market prices.
- Vital for understanding market mechanisms and economic decision-making
- The term "micro" originates from Greek word "Mikros," meaning "small"
- Microeconomics is also known as price theory
- Economic efficiency involves production, consumption, and overall resource allocation
- Macroeconomics studies the economy as a whole
- It analyses growth, inflation, unemployment
- Microeconomics deals with individual agents, while macroeconomics examines aggregate behaviour
- Both microeconomics and macroeconomics influence policy decisions at various levels
- Scarcity refers to limited resources
- Scarcity leads to economic choices and trade-offs
- Central economic problems involve what, how, and for whom to produce goods and services

Objective Questions

1. What does scarcity mean in economics?
2. What is the root cause of all problems in economics?
3. What does microeconomics focus on?
4. Name the word from which the term"micro" is derived from?
5. What is another name for microeconomics due to its emphasis on pricing?
6. What are the three efficiencies under economic efficiency?
7. What does macroeconomics focus on?
8. What are the basic economic problems?
9. What type of decisions does microeconomics analyse?
10. Which is the mechanism used to solve the basic economic problems under a free market economy?
11. Who decides what to produce under a socialist economy?
12. What are the two major techniques of productions available in the economy?

Answers

1. Limited supply of resources
2. scarcity
3. Individual decision-making
4. “Mikros” (Greek for “small”)
5. Price theory
6. Efficiency in production, efficiency in consumption, overall economic efficiency
7. The economy as a whole, including growth and inflation
8. What, how, and for whom to produce
9. Production, consumption, market prices
10. Price mechanism
11. Government or Central Planning Authority
12. Labour Intensive Technique of Production and Capital Intensive Technique of Production

Assignments

1. Explain the key focus areas of microeconomics and its significance in understanding individual decision-making in resource allocation.
2. Compare and contrast microeconomics and macroeconomics, highlighting their respective scopes and policy implications.
3. Discuss the three efficiencies necessary for achieving overall economic efficiency and how they contribute to the optimal allocation of resources in an economy.

Suggested Readings

1. Salvatore, D (2008): *Microeconomics: Theory and Practice*, Oxford University Press.
2. Koutsoyiannis, A. (1990): *Modern Microeconomics*, Macmillan
3. Pindyck, R.S and Rubin field, D.L (2001): *Microeconomics*, Pearson Education

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1. Hunt, Elgin F (2008). *Social Science: An Introduction to the Study of Society*, Alyn and Bacon.
2. Lipsey, Crystal (1999): *Principles of Economic Analysis*, 9th ed, Oxford University Press.
3. Blaugh, Mark (1990): *Economic Theory in Retrospect*, 4th ed, Cambridge University Press, New York.

Unit 3
Demand and Supply

Learning Outcomes

After learning this unit, the learner will be

- able to understand the concept of demand and supply
- familiarised with elasticity of demand
- aware of how equilibrium is established between demand and supply

Prerequisites

Every day, we make decisions to satisfy our needs and wants by purchasing a variety of goods and services. This process of using products and services to fulfil our desires is known as consumption, and the individuals who engage in this activity are called consumers. As consumers, our primary goal when purchasing goods and services is to maximise satisfaction using the available funds, while considering the market price of these items. We often hear the term demand in our daily lives, which refers to the quantity of goods or services that consumers are willing and able to buy at various prices. The demand for a product is influenced by a variety of factors, primarily price and income. For instance, imagine you are planning to buy oranges. If the price of oranges is high, you might only buy half a kilo instead of a full kilo. On the other hand, when your income increases, you may be able to afford products you could not buy before, like luxury goods.

The demand for a commodity is shaped by both economic and non-economic factors. Some key factors that determine demand include the price of the commodity, the prices of related goods (substitutes or complements), the consumer's income, and individual preferences or tastes. If any of these factors change, the amount of a product a consumer is willing to buy will also likely change. However, for consumers to purchase goods, these products must be available in the market. This is where supply comes into play. The supply of commodities refers to the quantity of goods available in the market, which is determined by a series of actions starting from producers to wholesalers and finally to retailers. Retailers, in turn, sell the goods to consumers. The supply of goods is directly influenced by the price of the commodity, the higher the price, the more producers are willing to supply.

The balance between demand and supply in the market is crucial for economic stability. When demand and supply are in harmony, it creates market equilibrium, where the quantity of goods demanded equals the quantity supplied at a particular price. In this unit, we will explore the concepts of demand, supply, and market equilibrium, understanding how these forces interact to shape the economy and impact consumers' everyday decisions.

Keywords

Demand, Price elasticity of demand, Income elasticity, Cross elasticity, Supply, Equilibrium

Discussion

1.3.1 Demand

People frequently alternate between using the words "desire," "want," and "demand." They are not the same in economics. Desire is simply the longing to possess something. It is merely a craving for any goods or services. Therefore, regardless of whether something is actually available or not, anyone can desire it. On the contrary, want is a desire that is supported by both the ability and the willingness to pay. Therefore, not every desire is a want. Only when a person is in a position to fulfil a desire does it turn into a want.

When we talk about a commodity's demand, we imply the desire backed by the ability and willingness to buy. A consumer is considered to have demand for something or service when the person wants to use it and also possesses the requisite purchasing power, such as income and the willingness to spend the income.

Thus, in economics, demand is defined as the combination of a desire for something and the ability and willingness to pay a specific price in order to own it. More specifically, it refers to how much or what kind of goods consumers in the market will purchase during a specified period of time at a particular price. The amount of products that customers choose depends largely on the price of the product, the price of competing products, the customer's income, and person's preferences.

Three crucial components of demand are :

1. Price of the commodity
2. Quantity of the commodity
3. Period of time - it can be a day, a week, a month, a year, or any other time frame.

1.3.1.1 Determinants of Demand

The determinants of demand refer to the various factors that influence the quantity of goods or services that consumers are willing and able to buy at different prices. Some of the main determinants of demand include:

1. **Price:** The price of a commodity or service is one of the most important determinants of demand. Generally, consumers will buy more of a commodity or service when its price decreases, and vice versa. So, generally, there is an inverse relation between price and demand.

2. **Income:** The income of consumers can influence the quantity of any goods or services that they are willing and able to buy. For normal goods, as income increases, the quantity demanded increases.

3. **Preferences and tastes:** Consumer preferences and tastes can influence the

demand for some goods or services. If any goods or services become more popular or desirable, demand for them may increase.

4. **Price of related goods:** The price of related commodities, such as substitutes and complements, can influence the demand for a commodity. Substitute goods are those goods that can be used for the same purpose. Hence, these goods can be replaced for one another. Complementary goods are goods that are demanded together. In the case of substitute goods, if the price of any substitute goods increases, the demand for the original good may increase. However, for complementary goods, if the price of one increases, the demand for the other decreases since they are consumed together.

5. **Number of consumers:** The number of consumers in a market can influence the demand for any goods or services. Generally, more consumers lead to greater demand.

6.**Consumer expectations:** Consumer expectations about the future price or availability of some goods or services can influence demand. If consumers expect the price of any goods or services to increase in the future, they may buy more of it in the present.

Some of the determinants of market demand include distribution of income among the households, distribution of wealth, size of the population, stocks of the product that consumers have already purchased, advertisements, weather, social and economic characteristics, such as age, education, and employment. These determinants of demand interact with the price of the goods or services to determine the quantity demanded at any given time.

1.3.1.2 Demand Function

Demand is a multivariate relationship that is influenced by numerous factors at once. The price of a product itself, consumer income, the price of relative commodities, consumer tastes, income distribution, population size, consumer wealth, credit availability, governmental policies, past demand and income levels are some of the key factors that affect market demand.

The relationship between the quantity of a commodity that is demanded and its many determinants is shown by the demand function. That is,

$$Q_d^n = f(P_n, P_1, P_2 \ldots P_{n-1}, Y, S, W, T, Pe, A)$$

Where,

Q_d^n = Quantity demanded of commodity, n

P_n = Price of the commodity, n

$P_1, P_2 \ldots P_{n-1}$ = Price of all other related commodities

Y = Income of the consumer

S = Socio-economic characteristics, such as age, gender, education, and employment etc.

W = Weather

T = Consumer tastes and preferences

Pe = Price expectations

A = Advertisements

1.3.1.3 The Law of Demand

The law of demand is an economic principle that states that, under *ceteris paribus*, (i.e., all other factors being constant or unchanged), as the price of any goods or services increases, the quantity demanded by consumers decreases, and vice versa. In other words, there is an inverse relationship between the price of a commodity and the quantity demanded of that commodity. The law of demand is based on the idea that as the price of any goods or services increases, consumers are less willing or able to purchase it, as it becomes relatively more expensive compared to other goods or services. Conversely, as the price of any goods or services decreases, consumers are more willing or able to purchase it, as it becomes relatively less expensive.

However, the law of demand assumes that all other factors affecting demand, such as income, tastes and preferences, and availability of substitutes, remain constant. If any of these factors change, the demand curve may shift, and the relationship between price and quantity demanded may change as well.

The law of demand can be represented graphically using a demand curve. The following figure shows a demand curve. Here, the demand curve of pens is represented.

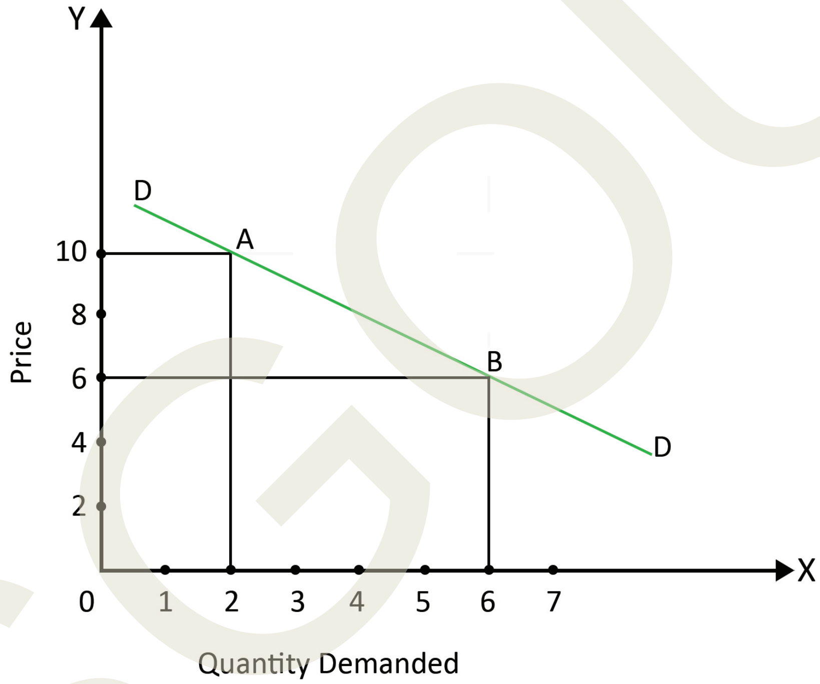

Fig 1.3.1 Demand Curve

Suppose you purchase 2 pens at rupees 10. If price falls, you will be able to purchase more pens since the price of the pen and quantity demanded of the pen are inversely related. When the price falls to 6, you will be able to purchase 6 pens. This inverse relation between the price of pens and quantity demanded of pens are shown in the above demand curve for pens. The demand curve is negatively sloped showing the inverse relation between price of the commodity and the quantity demanded.

1.3.1.4 Elasticity of Demand

A commodity's demand is influenced by various factors, including its price, the price of related commodities, the buyer's income, their tastes and preferences, etc. Elasticity indicates degree of responsiveness. Elasticity of demand refers to how responsive the demand is. A commodity's demand changes in response to changes in price, the price of related commodities, income, etc.

Let us discuss the different types of elasticity of demand.

1. **Price elasticity of demand:** The ratio of the percentage changes in quantity demanded to the percentage change in price is known as price elasticity of demand. Price elasticity is a measurement of how sensitive the demand for a commodity is to the changes in price. For instance, if a commodity's price drops by 10% while demand increases by 20%.

$$\text{Price elasticity of demand (ep)} = \frac{\textit{Percentage change in quantity demanded}}{\textit{Percentage change in price of the commodity}}$$

The coefficient of price elasticity of demand is a negative number because price and quantity are inversely related. A minus sign is arbitrarily introduced to make the elasticity coefficient a positive number.

Let us explain the above equation.

A percentage is mathematically defined as

$$\text{Percentage} = \frac{\textit{Final Value} - \textit{Initial Value}}{\textit{Initial Value}} \times 100$$

If the initial quantity is Rs.100 and it rises to Rs.120, then the percentage change in the price is

$$\frac{120-100}{100} \times 100 = 20\%$$

The symbol Δ (the Greek letter delta) indicates a change in a variable. Thus the percentage change in quantity may be written as,

$$\frac{\Delta Q}{Q} \times 100$$

Similarly, the percentage change in price may be written as,

$$\frac{\Delta P}{P} \times 100$$

Elasticity coefficient can be estimated by using the formula,

$$Ed = \frac{\frac{\Delta Q}{Q}}{\frac{\Delta P}{P}} = \frac{\Delta Q}{Q} \times \frac{P}{\Delta P} = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

Here, Q is quantity, P is price, and Δ (delta) is the symbol representing 'a change'. Thus ΔQ/Q is a relative change in quantity and ΔP/P is a relative change in price. In general, the elasticity coefficient can assume values between zero and infinity.

If the result is greater than 1, demand is said to be elastic, meaning that the quantity demanded is highly responsive to changes in price. If the result is less than 1, demand is said to be inelastic, meaning that the quantity demanded is not very responsive to changes in price. If the result is equal to 1, demand is said to be unit elastic.

In our example, $Ep = \frac{20}{10} = 2$

Here are some examples of price elasticity of demand:

- Fuel: Fuel is generally considered to be price inelastic because it is a necessity for many people and there are few good substitutes. However, in the long run, consumers may switch to more fuel-efficient cars or use public transportation if the price of fuel remains high.
- Luxury goods: Luxury goods, such as high-end jewellery or designer handbags, are generally considered to be price elastic because consumers have a wide range of alternatives and can easily choose to buy cheaper goods or delay their purchases.
- Fast food: Fast food is generally considered to be price elastic because consumers have many choices in terms of where to eat and can easily switch to a competitor if the price of a particular fast food item becomes too expensive.
- Medicines: Medicines can vary in their price elasticity depending on the nature of the illness they treat. For example, a medication for a life-threatening condition may be price inelastic because patients are willing to pay a high price to save their lives, while a medication for a less serious condition may be more price elastic.
- Soft drinks: Soft drinks are generally considered to be price elastic because they are not necessities and there are many alternatives, such as water or juice, that consumers can choose instead.
- In general, products that have more substitutes and are not necessary for survival tend to have a higher price elasticity of demand, while products that have fewer substitutes and are necessities tend to have a lower price elasticity of demand.

2. Income elasticity of demand: The degree to which a commodity's demand is responsive to a change in the buyer's income is referred to as income elasticity of demand. Suppose a buyer's income increases by 10% and his demand for a commodity increases by 20%.

$$\text{Income elasticity of demand (ey)} = \frac{\textit{Percentage change in quantity demanded}}{\textit{Percentage change in income}}$$

$ey = (\Delta Q/Q)\times 100 \div (\Delta Y/Y)\times 100$

rearranging the equation,

$$ey = \frac{\Delta Q}{\Delta Y} \times \frac{Y}{Q}$$

Here, Y is the income of the consumer, Q is the original quantity, ΔY is the change in income, ΔQ is the change in quantity.

In our example, $Ey = \frac{20}{10} = \;= 2$

3. Cross elasticity of demand: The term "cross elasticity of demand" refers to how responsive a commodity's demand is to changes in the prices of goods that are related to it (substitute goods or complementary goods).

$$\text{Cross elasticity of demand (ec)} = \frac{\textit{Percentage change in quantity demanded}}{\textit{Percentage change in price of the related commodity}}$$

Let's say a commodity's demand increases by 10% as a result of a 5% price increase for its related commodity, then,

$$Ec = \frac{10}{5} = 2$$

Given the above example, can you name the type of goods used? The example discusses the cross elasticity of substitute goods. It is given that the quantity of the commodity increases with the increase in the price of the related commodity. We have discussed that usually price and quantity demanded are inversely related. But, here it is positively related. So, it is not a normal good, but a substitute good. Under substitute goods, since goods are replaced for others, a rise in the price of one good makes the other good relatively cheaper, and a rational consumer will consume the cheaper one. Hence, the demand for the substitute goods increases when the price of the other goods increases. The case of complementary goods are the opposite. The increase in price of one complementary good decreases the quantity demanded of other complementary good since they are consumed together unlike the substitute goods where each one replaces the other.

1.3.2 Supply

We have already examined the concept of demand, factors affecting demand, the law of demand, elasticity of demand and other related topics. The buyers of the commodities create the demand for the goods. However, buyers can only purchase a commodity when it is offered for sale. The businesses produce the items and services that households need to fulfil their needs. Firms must spend money to purchase the inputs needed to produce the goods and services. Selling these products and services generates income for them. The goal of the firms in this process is to maximise profit.

The quantity of a commodity that a firm or seller provides for sale at a certain price within a given time period may be referred to as the supply of a commodity by a firm or seller. However, the commodity's supply and actual sale may differ.

For instance, a farmer who grows wheat could be willing to sell 70 quintals of the crop for Rs.10 per kg, but he can only sell 50 quintals at that price. In this instance, 70 quintals of wheat are available but only 50 quintals are actually sold. So, it is important to avoid mixing these two ideas. Like demand, there are three components to supply.

1. the quantity of the commodity that a firm is willing to supply
2. the price at which the firm is willing to supply the quantity
3. the time period during which it is willing to supply that quantity.

1.3.2.1 Supply Function

The relationship between the various quantities of a product that a firm supplies and the factors that affect those quantities is known as the supply function. The supply function can be represented mathematically as,

$$Q_s^n = f(P_n, F_1, F_2 ... , F_m, T, T_r, G)$$

Where,

Q_s^n = Quantity supplied of product n

P_n = price of product n

$F_1, F_2 ... , F_m$ = prices of factors of production

T = Technology of production

T_r = Government policy or tax rate

G = Goal or objective of the producer

When all other supply factors are held constant, a supply function typically depicts the relationship between price and quantity supplied. It displays the quantity of a commodity that a seller offers at different price levels.

1.3.2.2 Determinants of Supply

The determinants of supply refer to the various factors that influence the quantity of goods or services that suppliers are willing and able to offer for sale at different prices. Some of the main determinants of supply include:

1. **Price of inputs:** The price of the inputs needed to produce a commodity, such as labour, raw materials, and machinery, can affect the cost of production and therefore, the quantity of the commodity that suppliers are willing and able to offer for sale.
2. **Technology:** Advances in technology can increase the efficiency of production and lower the cost of production, which can increase the quantity of the goods or services that suppliers are willing and able to offer for sale.
3. **Number of suppliers:** The number of suppliers in a market can affect the quantity of the goods or services that are available for sale. More suppliers generally means more quantity supplied.
4. **Government policies:** Government policies such as taxes, subsidies, regulations, and tariffs can affect the cost of production and the quantity of the goods or services that are available for sale.
5. **Expectations of future prices:** Suppliers may adjust their supply based on their expectations of future prices. If they expect prices to rise in the future, they may withhold supply in the present in order to sell at higher prices later.
6. **Price of related goods:** The price of related goods, such as substitutes or complements, can affect the quantity of the goods or services that suppliers are willing and able to offer for sale. For example, if the price of a substitute good increases, suppliers may shift production to the original good in question, increasing its supply.

The other determinants of supply include goals of the firm, weather, strikes, power failure etc. These determinants of supply interact with the price of the goods or services to determine the quantity supplied at any given time.

1.3.2.3 Law of Supply

The law of supply is an economic principle that states that, all other factors being constant, as the price of any goods or services increases, the quantity supplied by producers also increases, and vice versa. According to the law of supply, the price of a commodity directly affects its supply. The quantity supplied will depend on the price: the higher the price, the greater the quantity supplied; the lower the price, the smaller the quantity supplied.

In other words, there is a direct relationship between the price of goods and the quantity of the goods that producers are willing and able to offer for sale in a given market. The following figure shows the shape of the supply curve.

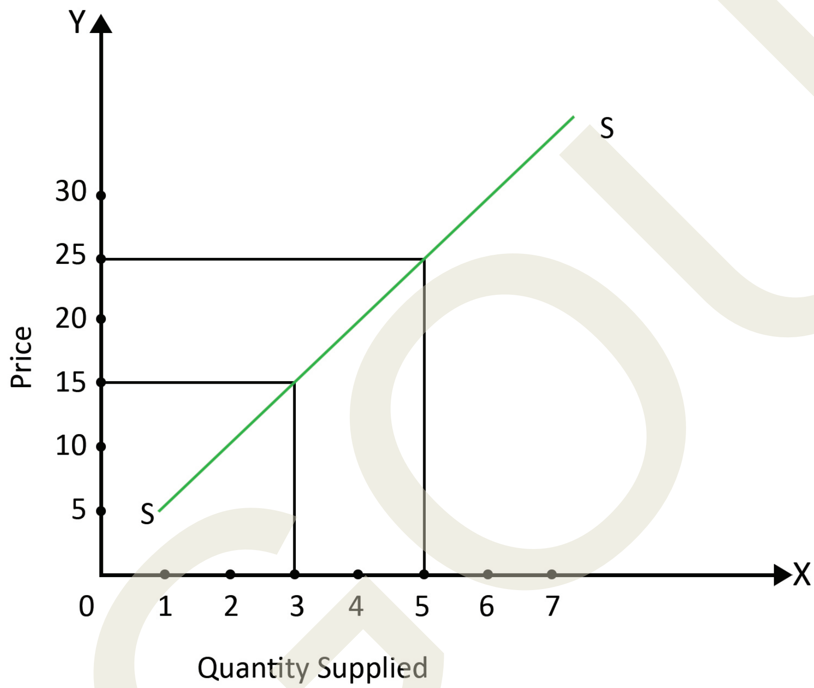

Fig 1.3.2 Supply Curve

Supply Curve is positively sloped. This reflects a direct relationship between the price and quantity supplied. In the above figure, when the price is Rs. 15, the quantity supplied is 3 units. When price rises to Rs. 25, the quantity supplied increases to 5 units. Therefore, the supply curve shows the postive relationship between the price and quantity supplied. Here, when price is Rs. 15, the quantity supplied is 3, and when price increases to Rs. 25, the quantity supplied also increases to 5. The law of supply is based on the idea that as the price of a product increases, the profit potential for producers increases, which provides an incentive for them to produce and sell more of that product or commodity. Conversely, as the price of any goods or services decreases, the profit potential for producers decreases, which may lead them to reduce the quantity supplied.

However, the law of supply assumes that all other factors affecting supply, such as input costs, technology, and government policies remain constant. If any of these factors change, the supply curve may shift, and the relationship between price and quantity supplied may change as well.

1.3.3 Concept of Equilibrium

A state of balance between competing forces or actions is called equilibrium. In microeconomics, equilibrium refers to a situation in which the supply of a commodity is equal to its demand. In other words, the quantity that consumers are willing and able to buy at a given price is equal to the quantity that producers are willing and able to sell at that price. When a market is in equilibrium, there is no excess demand or excess supply.

Disequilibrium, on the other hand, refers to a situation in which the supply of a commodity does not equal its demand. This can happen when the market price is either too high or too low. When the market price is too high, there is excess supply, which means that producers are willing to sell more than consumers are willing to buy. When the market price is too low, there is excess demand, which means that consumers are willing to buy more than producers are willing to sell.

In disequilibrium, there are forces that push the market towards equilibrium. For example, when there is excess supply, producers may lower the price of the commodity in order to encourage more consumers to buy. As the price decreases, the quantity demanded increases and the quantity supplied decreases until the market reaches equilibrium. Similarly, when there is excess demand, consumers may bid up the price of the commodity, which encourages producers to increase supply until the market reaches equilibrium.

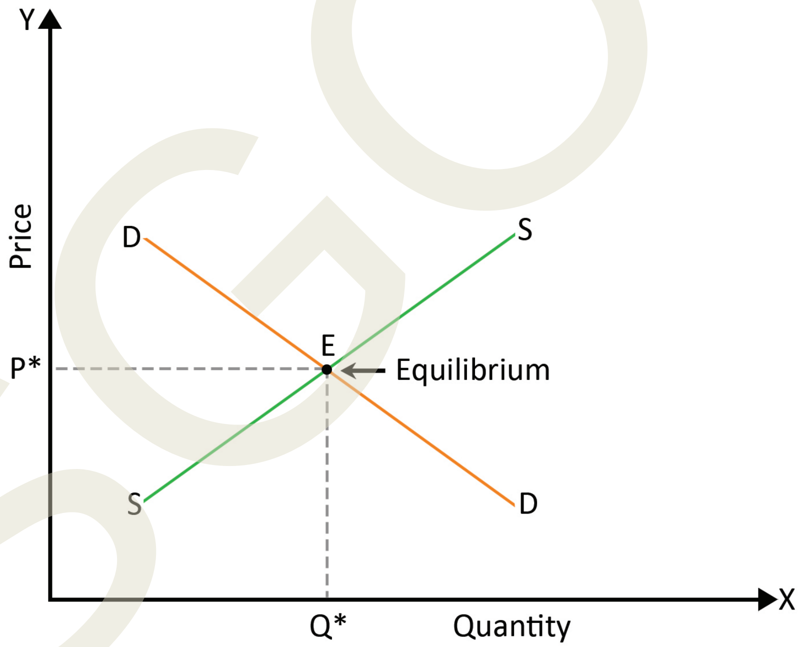

Fig 1.3.3 Equilibrium

The demand and supply are shown in the above figure as DD and SS respectively. Point 'E' depicts the equilibrium between the opposing forces of demand and supply. As a result, it can be considered as a point of equilibrium. Disequilibrium exists at any price level that is either greater or lower than the one shown by the intersection of the two curves (P*). The aggregate quantity provided will be more than the aggregate quantity sought at a higher price level, and the price level will drop to achieve equilibrium. The converse will occur at a lower price level, and the price level will increase to reach equilibrium. Overall, equilibrium is a state of balance in the market, while disequilibrium is a temporary state of imbalance that is corrected through market forces.

Recap

- Demand amount of goods consumers are willing and able to purchase at given price and time
- Determinants of Demand: Price of commodity, Income, Price of related commodity, Taste
- Law of Demand: As price increases, quantity demanded decreases, and vice versa, under *ceteris paribus*
- Elasticity of Demand: how quantity demanded responds to changes in price, income, or other factors
- Price Elasticity of Demand: responsiveness of quantity demanded to price changes
- Income Elasticity of Demand: responsiveness of quantity demanded to changes in consumer income
- Cross-Price Elasticity of Demand: responsiveness of quantity demanded to changes in the price of related good
- Elasticity Coefficient: Value varies between zero to infinity
- Supply: quantity of a product or service producers are willing and able to sell at given price during a specific time
- Law of Supply: As price increases, quantity supplied increases, and vice versa under *ceteris paribus*

Objective Questions

1. What does the law of demand state about the relationship between price and quantity demanded?
2. Which is the term used to refer to 'other factors being constant' under the law of Demand and Supply?
3. What is the shape of the demand curve?
4. Name the term that refers to responsiveness of demand to price of its related goods.
5. What is the measure of the degree to which quantity demanded responds to a change in price?
6. What is the measure of degree to which quantity demanded responds to a change in income?
7. What type of goods are measured under cross elasticity of demand?
8. Name two types of goods measured under cross elasticity.

9. What is the term for the quantity of a product that producers are willing to sell at a given price?
10. According to the law of supply, what happens to the quantity supplied as price increases?

Answers

1. Inverse
2. Ceteris paribus
3. negatively sloped
4. Cross elasticity
5. Price Elasticity
6. Income Elasticity
7. Related Good
8. substitute and complementary good
9. Supply
10. Increases

Assignments

1. Explain the law of demand and its significance in economics. Provide real-life examples to illustrate the concept.
2. Examine the price elasticity of demand and income elasticity of demand.
3. Analyse the law of supply and its implications for producers. Examine the real life examples.

Suggested Readings

1. Salvatore, D (2008): *Microeconomics: Theory and Practice*, Oxford University Press.
2. Samuelson, P. A., & W. D. Nordhaus (1998) *Economics*. New Delhi: Tata McGraw Hill.

References

1. Lipsey, Crystal (1999): *Principles of Economic Analysis*, 9th Edition, Oxford University Press.
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3. Koutsoyiannis, A. (1990): *Modern Microeconomics*, Macmillan

Unit 4
Production Function

Learning Outcomes

After reading this unit, the learner will be able to:

- understand production function
- distinguish between short-run and long-run production function
- familiarised with the different stages of Law of Variable Proportion
- differentiate among different returns to scale

Prerequisites

Have you ever wondered how the items you buy at the market such as books, pens, clothing, bread, butter, fruits, and vegetables comes to the market? While we have previously discussed consumers and their role in the market, those who purchase goods and services to fulfill their needs, this unit shifts focus to the other crucial side of the market viz. producers or firms. Producers are the engines that drive the market. They are responsible for creating the goods and services that consumers demand. But how do they do this? Producers combine various inputs such as land, labour, capital, and entrepreneurship to produce the products we need. These inputs also include raw materials, fuel, and other essential resources required for production. In essence, a producer is anyone or any firm that transforms these inputs into finished goods or services.

Production is not just about making things; it is the process of creating value or utility. Essentially, production refers to any activity that increases the usefulness of a product, whether by transforming raw materials into consumer goods, creating services, or improving the quality of existing products. It is through production that businesses meet the demand of consumers, satisfying their wants and needs with tangible goods or valuable services. In this unit, we will explore the concept of production in detail. We will examine how different resources come together in the production process and how firms organize their operations to maximize output and efficiency. From small businesses to large multinational corporations, the principles of production apply across all types of firms, driving the economy forward and ensuring that goods and services are available to consumers in the marketplace.

As we dive into the world of production, we'll also consider the various factors that influence the production process, including technological advancements, labor forces, and capital investments. Understanding how production works is crucial for grasping how markets function and how businesses can better serve consumer demand while operating efficiently.

Keywords

Production function, Short-run and long-run production, Total Product, Marginal Product, Average Product, Returns to Scale

Discussion

1.4.1 Production

Production is a process that a firm uses to transform inputs into outputs. It is the method of creating goods and services with the help of inputs or factors of production in order to satisfy human wants. In other terms, production is a general term for the "transformation of inputs into output" when value is added. An input is anything that is employed in the creation of a commodity. For instance, the usage of land, seed, fertiliser, water, pesticides, tractors, labour, and other things are inputs in the production of rice which is the output. In fact, production refers to the process of creating goods and services using various resources such as labour, capital, and raw materials. The process of production typically involves several stages, including planning, organising, financing, and managing resources to ensure efficient and effective production.

Production can take place in different types of industries, including manufacturing, agriculture, mining, and services. The production process involves several steps, which may vary depending on the industry and the specific product or service being produced.

Production is important for several reasons:

1. Creation of value: Production creates value for customers by transforming raw materials and inputs into finished goods and services that meet their needs and wants.
2. Economic growth: Production is a key driver of economic growth and development. It creates employment, generates income, and contributes to the overall growth of the economy.
3. Innovation: Production drives innovation by encouraging firms to develop new products and processes that improve efficiency, reduce costs, and increase quality.
4. Competitiveness: Production is essential for firms to remain competitive in the market. Efficient production processes allow firms to offer products at lower prices, which can increase market share and profitability.
5. Standard of living: Production plays a crucial role in improving the standard of living of people by providing them with access to a wide range of goods and services that enhance their quality of life.
6. Environmental sustainability: Production can also contribute to environmental sustainability by promoting the use of renewable resources, reducing waste and emissions, and improving resource efficiency.

Overall, production is a vital aspect of the economy and plays a significant role in shaping the well-being of individuals and societies. It is a crucial activity in the economy that involves the transformation of inputs into finished goods and services. It serves several important functions, including the creation of value for customers, driving economic growth, promoting innovation, increasing competitiveness, improving living standards, and contributing to environmental sustainability. By efficiently producing goods and services, firms can increase their profitability and market share while providing benefits to society as a whole.

Some key factors that influence the production process include:

1. Technology: Advances in technology can lead to more efficient and effective production processes, resulting in higher output and lower costs.

2. Labour: The quality and quantity of labour available can have an impact on the efficiency and productivity of the production process.

3. Capital: The availability and quality of capital, such as machinery, equipment, and infrastructure, can affect the efficiency and effectiveness of production.

4. Raw materials: The availability, quality, and cost of raw materials can have an impact on the production process.

5. Government policies: Government policies such as taxation, subsidies, and regulations can affect the cost and profitability of production.

1.4.2 Production Function

The physical relationship between inputs and outputs under a certain technology is referred to as the production function in economics. To put it another way, a production function is a mathematical, functional or technical relationship between inputs and output that enables the maximum output to be created with a specific set of factor inputs and technological capabilities at a given period of time.

Consider two inputs, say, labour and capital as the factors of production. Then the production function can be expressed as,

$Q_x = f(L, K)$,

Where,

Q_x = Quantity of output of commodity x.

L = Amount of labour input used in the production

K = Amount of capital input used in the production

Here, there are two things to consider. First, the production function must be taken into account in relation to a specific time frame, such as a short run period and a long run period. Second, the state of technology affects production function.

1.4.2.1 Short run Production Function

The short run production function is a concept in economics that shows the relationship between the quantity of inputs (usually labour) and the quantity of output produced in the short run, while holding other factors constant. The short run is defined as the time period during which at least one input is fixed, while others are variable. For example, in the short run, a firm may not be able to increase its capital stock, but it can increase or decrease the amount of labour it uses.

The short run production function can be represented by a mathematical equation, such as the following:

$Q = f(K, L)$

Where,

Q = Quantity of output produced

K = Capital (fixed input)

L = Labour (variable input)

The production function specifies the maximum quantity of output that can be produced with a given combination of inputs.

In the short run, a short run production function is one that depicts the changes in output when only one factor is changed while the other remains the same. In the production function example given above, labour (L) is the variable factor that can be altered to influence the level of output. The second factor, capital (K), is a constant that cannot be altered. The "law of variable proportion or returns to a factor" serves as the foundational principle for the short run production function. That is, a firm's production function exhibits diminishing marginal returns to labour, meaning that as more units of labour are added, the additional output produced eventually diminishes. This is due to the fact that, in the short run, there are fixed constraints on the firm's ability to increase output, such as limited capital equipment or limited space in the production facility.

Understanding the short run production function is important for firms to make decisions about how much labour to employ, as well as to estimate the costs of production and the optimal level of output that maximises profits.

1.4.2.2 Long run Production Function

The long run production function is a concept in economics that shows the relationship between the quantity of inputs (such as labour, capital, and technology) and the quantity of output produced in the long run, while allowing all factors to be variable. Unlike the short run, there are no fixed inputs in the long run, so all inputs can be adjusted as needed.

The long run production function can be represented by a mathematical equation, such as the following:

$Q = f(K, L, T)$

Where,

Q = Quantity of output produced

K = Quantity of Capital

L = Quantity of Labour

T = Level of Technology

In the long run, a firm can adjust its inputs to optimise its production process and maximise its profits. For example, a firm may decide to build a larger factory or invest in new technology to increase its production capacity. Because all inputs can be adjusted in the long run, the production function in the long run does not exhibit diminishing marginal returns like it does in the short run. Marginal returns can be explained in terms of marginal products which is explained in the next section.

The long run production function is important for firms to make decisions about how much to invest in capital equipment and technology, as well as to estimate the costs of production and the optimal level of output that maximises profits. It is also important for policymakers to understand the long run production function in order to create policies that encourage investment in capital and technology, which can lead to long-term economic growth.

Thus, when all the factors of production can be varied simultaneously then the output is analysed using a long run production function. Therefore, throughout time, the size of the firm can change depending on whether the production elements are increased or decreased. The "law of returns to scale" serves as the foundational principle for the long run production function.

Short-run production function vs Long-run production function

The key differences between the short-run and long-run production functions can be summarised as follows:

Table 1.4.1 Short-run vs Long-run production function

Basis for comparison	Short-run production function	Long-run production function
Meaning	The term "short run" refers to a time frame during which at least one production element is fixed.	The term "long run" refers to a time frame in which all production elements are subject to change.
Law	Law of variable proportion or returns to a factor	Law of returns to scale
Scale of production	The production scale remains unchanged	Change in the production scale

1.4.3 Basic Concepts of Production

In economics, there are three ways to define the output or product during the production process such as,

1. Total Product (TP)
2. Average Product (AP)
3. Marginal Product (MP)

1) Total Product (TP): Total product is a concept in economics that refers to the total quantity of output that is produced by a firm using a given quantity of inputs (such as labour and capital). It represents the total amount of goods or services that a firm can produce using all of its inputs over a given period of time.

2) Average Product (AP): The output per unit of the factor used is known as the Average Product (AP). Average Product (AP) is calculated by dividing the Total Product (TP) by the quantity of the factor used, i.e.

$$\text{Average Product (AP)} = \frac{\textit{Total Product (TP)}}{\textit{Quantity of factor}}$$

The Average Product is measured in respect of a variable factor. For example, let the variable factor be labour (L), then, the Average Product of Labour (AP_L) or the productivity of labour that we can measure will be,

$$AP_L = \frac{TP}{L}$$

From the above equation, we can write TP as the following.

$$TP = AP_L \times L$$

If the variable factor is capital (K), we can find the Average Product of Capital (AP_k) or the productivity of capital as follows.

$$AP_K = \frac{TP}{K}$$

From the above equation, we can write TP as the following.

$$TP = AP_K \times K$$

3) Marginal Product (MP): The change in the Total Product (TP) brought on by using addition of a variable factor is known as Marginal Product (MP). It can also be considered as marginal returns from factors. It can alternatively be defined as the rate at which the Total Product (TP) changes in relation to a variable element.

$$MP = \frac{\Delta TP}{\Delta Variable\ factor}$$

Where,

MP = Marginal Product

ΔTP = Change in Total Product (TP)

ΔVariable factor = Change in Variable factor

That is, the Marginal Product of Labour (MP_L) is measured as:

$$MP_L = \frac{\Delta TP}{\Delta L}$$

Where,

ΔL = Change in labour input

And Marginal Product of Capital (MP_K) is measured as:

$$MP_K = \frac{\Delta TP}{\Delta K}$$

Where,

ΔK = Change in capital input

For example, suppose a factory produces 1000 units of output using 10 units of labour, and produces 1100 units of output using 11 units of labour. The marginal product of labour is calculated as:

MP = ΔTP / ΔL = (1100 - 1000) / (11 - 10) = 100 units per worker

This means that the addition of one more worker leads to an increase in output of 100 units.

Marginal product is an important concept in economics because it helps firms to determine the optimal level of input usage and to maximise their profits. When the marginal product of labour is positive and decreasing, it means that each additional unit of labour is adding less to the total output than the previous unit of labour. This means, there is diminishing marginal returns of labour. This suggests that the firm should hire fewer workers to avoid decreasing marginal returns. When the marginal product of labour is negative, it means that the addition of one more worker leads to a decrease in output, and the firm should reduce its labour input.

Marginal product is also used to determine the shape of the total product curve and the average product curve, which are important tools for firms to make decisions about how much labour and capital to use, and to estimate their short-run and long-run cost curves.

1.4.4 Law of Variable Proportion

The law of variable proportion is a fundamental concept in economics that explains the relationship between the input and output of a production process in the short run. It states that as the quantity of one input is increased while holding all other inputs constant, the marginal product of that input will eventually decline. In other words, there comes a point where adding more units of a variable input will lead to a diminishing marginal product, meaning that each additional unit of input produces smaller and smaller increases in output.

This law can be illustrated through a production function, which shows the relationship between inputs and output. In the short run, at least one input is considered fixed, while the quantity of the variable input is increased. The production function exhibits increasing returns to scale initially, as the variable input is added, until a point is reached where the law of variable proportion sets in and diminishing returns to scale begin to occur.

The Law of Variable Proportion can be illustrated graphically through a production function graph, which shows the relationship between the quantity of inputs used in production and the resulting level of output.

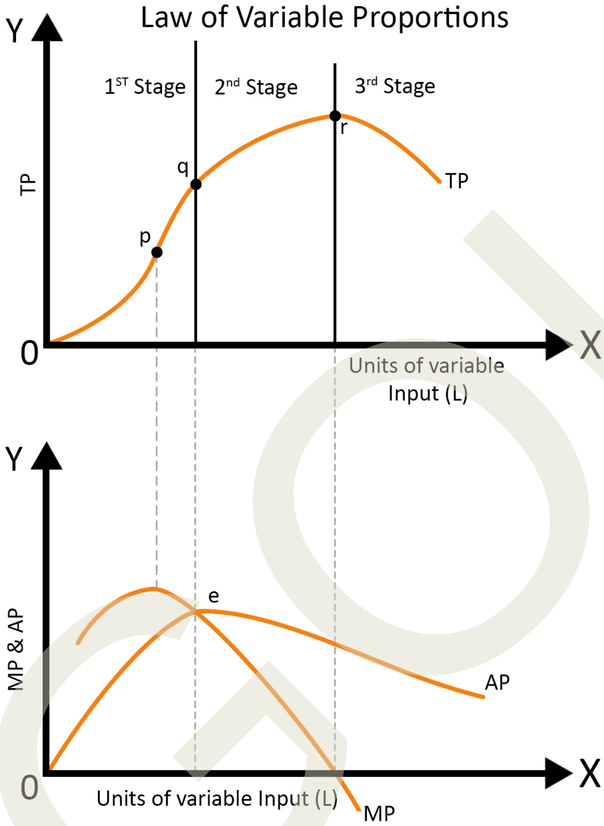

Fig 1.4.1 Law of Variable Proportion

On the X-axis, we have the quantity of the variable input, and on the Y-axis, we have the resulting level of output. In stage I, TP is increasing at an increasing rate till the point ‘p’, and increasing at the decreasing rate from point ‘p’ to ‘q’. MP reaches at its maximum at point ‘p’ and starts falling afterwards. Stage 2 starts at point e when both AP and MP are equal. Afterwards in stage 2, both AP ad MP starts diminishing. As we move to the right along the X-axis, the production function curve eventually starts to flatten out, indicating the stage of diminishing returns. At this stage, each additional unit of the variable input leads to a smaller increase in output than the previous unit. Eventually, the curve reaches a maximum point where the marginal product of the variable input becomes zero. After the maximum point, the total product curve falls as the marginal product curve is negative, indicating negative marginal returns. At this stage, each additional unit of the variable input actually leads to a decrease in output.

The three stages of the law of variable proportion can be examined as follows:

1. **Stage I -** In this stage, the marginal product of the variable input increases as more of it is added to the production process. This is due to increased specialisation and division of labour, as well as the efficient use of fixed inputs. As a result, the total product increases at an increasing rate till p and later decreases at decreasing rate from p to q.
2. **Stage II -** In this stage, the marginal product of the variable input begins to decline as more of it is added to the production process. This is due to the limited capacity of fixed inputs, such as machines and buildings. As a result, the total product still increases but at a decreasing rate.
3. **Stage III -** In this stage, the marginal product of the variable input becomes negative, meaning that each additional unit of input reduces the total product. This can occur when the input is used in excess of its optimal level or when the fixed inputs are fully utilised.

The law of variable proportion is important for firms to understand as it helps them to determine the optimal level of production in the short run. By analysing the marginal product of their inputs, firms can determine the most efficient level of production, which can help to maximise their profits and minimise their costs.

1.4.5 The Law of Returns to Scale

The law of returns to scale describes the relationship between the scale of production and the resulting level of output in the long run. It states that as all inputs are increased proportionately by a certain percentage, the resulting level of output will increase by a greater, equal or smaller percentage depending on the degree of returns to scale.

The following graph of the law of returns to scale is a representation of the relationship between the scale of production and the resulting level of output in the long run.

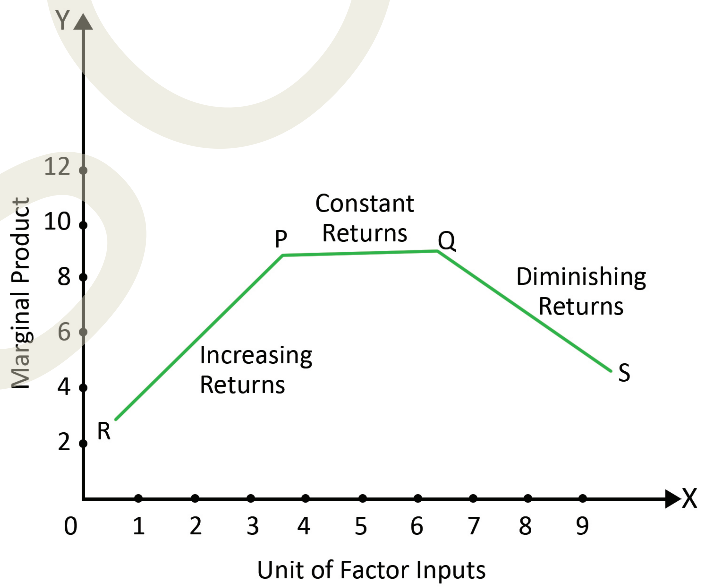

Fig 1.4.2 Law of Returns to Scale

Marginal Product is represented on the Y axis and Factor Inputs are represented on the X axis. There are three possible types of returns to scale which are explained below.

1. **Increasing Returns to Scale:** This is represented by a positively slope. This means that as the scale of production increases, the level of output increases at a greater rate, resulting in a decreasing average cost of production.
2. **Constant Returns to Scale:** This is represented by a straight line that is neither sloped upwards nor downwards. This means that as the scale of production increases, the level of output increases at the same rate, resulting in a constant average cost of production.
3. **Decreasing Returns to Scale:** This is represented by a negatively slope. This means that as the scale of production increases, the level of output increases at a slower rate, resulting in an increasing average cost of production.

The point where the returns to scale change from increasing to constant or from constant to decreasing is called the point of optimum scale. This is the point where the firm can achieve maximum efficiency in its production process and minimize its average cost of production.

The law of returns to scale is important for firms as it helps them to determine the optimal size of their operations in the long run. By analysing the returns to scale, firms can determine whether to increase or decrease the scale of their production, which can help them to maximise their profits and minimise their costs.

Recap

- Production process of creating goods and services to satisfy human needs and wants
- Production contributes to economic growth
- Short-run production function shows relationship between inputs and output when at least one input is fixed
- Long-run production function shows relationship between inputs and output with all inputs being adjustable
- Total product refers to sum of outputs
- Average product (AP) measures output per unit of factor used
- Marginal product refers to additional output gained by using one more unit of input
- The law of variable proportion states that as one input increases while others are constant, marginal product will eventually decline
- Three stages of the law of variable proportion: increasing returns, diminishing returns, and negative returns.
- The law of returns to scale explains the relationship between the scale of production and output in the long run.
- Three types of returns to scale: increasing, constant, and decreasing.

Objective Questions

1. What is the process of transforming inputs into outputs to create goods and services called?
2. What is the additional output gained by using one more unit of input while holding others constant?
3. What is the time period during which at least one input is fixed in the production process?
4. What refers to the total quantity of output produced by a firm using a given quantity of inputs?
5. What is the relationship between the scale of production and the resulting level of output in the long run called?
6. What are the three stages of the law of variable proportion?
7. Which type of returns to scale occurs when all inputs increase proportionately, and output increases by the same percentage?
8. What is the term used for the output per unit of the variable factor used in production?
9. What is the production function that allows all inputs to be adjustable?
10. What will be the total product when the marginal product is zero?

Answers

1. Production
2. Marginal Product
3. Short Run
4. Total Product
5. Law of Returns to Scale
6. Increasing Returns, Diminishing Returns, Negative Returns
7. Constant Returns to Scale
8. Average Product (AP)
9. Long Run
10. Maximum

Assignments

1. Examine the short-run production function.
2. Elucidate the law of variable proportion.
3. Explain the three types of returns to scale.

Suggested Readings

1. Salvatore, D (2008): *Microeconomics: Theory and Practice*, Oxford University Press.
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BLOCK - 02

Macroeconomics

Unit 1
Definition and Scope of Macroeconomics

Learning Outcomes

After completing this unit, learner will be able to

- familiarise the definition and scope of macroeconomics
- differentiate between stock and flow variables
- identify exogenous and endogenous variables
- describe the circular flow model with two sectors

Prerequisites

The basic concepts learned in microeconomics from the previous block like supply and demand, market structures, elasticity, and opportunity cost ideas are the foundation for many macroeconomic theories and models. Additionally, having some knowledge of mathematics and statistical analysis can help learners understand how to measure and analyse macroeconomic variables.

Macroeconomics is a branch of economics that studies behaviour and performance of the economy as a whole. It focuses on issues such as economic growth, inflation, and unemployment. Macroeconomics aims to understand how these aspects are connected and how they can be managed effectively. It examines market behaviour and analyses how government policies and interventions impact the economy. Key concepts in macroeconomics include national income, aggregate demand, aggregate supply, and the aggregate price level.

Macroeconomics is a dynamic field, with new theories and ideas constantly emerging as the global economy evolves. It also connects with other disciplines like mathematics, statistics, political science, and sociology. For beginners, studying macroeconomics can be both challenging and rewarding. It provides a useful framework for understanding the complex forces that shape the global economy. This knowledge can help individuals make better decisions about personal finances and investments. Moreover, it is an essential field for policymakers and government officials who work to manage the economy for the benefit of society as a whole.

Keywords

Employment, National Income, Price, Wage, Macroeconomics

Discussion

2.1.1 Macroeconomics

The word "Macro" comes from the Greek word "Makros," which means "large." In 1933, Ragnar Frisch of Oslo University used it for the first time in a work of economic literature. John Maynard Keynes played a significant role in the development of macroeconomics as a specialised field of economics.

The study of the behaviour of the economy as a whole is known as macroeconomics. It includes elements such as total employment, total consumption, total savings, aggregate demand, general price level, etc. Macroeconomics entails the analysis of general price levels as opposed to individual commodity prices, national output or income as opposed to individual firm income, and total employment as opposed to employment in a single firm. The key focus areas of Macroeconomics include employment, business cycles, monetary fluctuations, international trade, economic expansion, and determining the level of income. Inflation, price levels, economic growth rates, national income, Gross Domestic Product (GDP), and variations in unemployment are only a few examples of the phenomena that macroeconomics analyses.

Definition

Macroeconomics is a branch of economics that focuses on the behaviour and performance of the economy as a whole, rather than individual markets or specific products. It deals with issues such as economic growth, inflation, and unemployment, and seeks to understand how these phenomena are related and how they can be managed.

According to J.M. Culbertson, "macroeconomic theory is the theory of income, employment, prices and money".

To Gardner Ackley, "macroeconomics is the study of the forces of factors that determine the levels of aggregate production, employment and prices in an economy and their rates of change over time".

N.Gregory Mankiw in his work *Principles of Macroeconomics* states that "Macroeconomics is concerned with the behaviour of the economy as a whole, including the interactions between different sectors of the economy, such as households, businesses, and governments."

2.1.2 Scope of Macroeconomics

The scope of macroeconomics is broad and includes a wide range of topics related to the behaviour and performance of the economy as a whole. Macroeconomists study the factors that influence economic growth and development, such as productivity, investment, and technological progress. They also analyse the causes and consequences of inflation, unemployment, and other macroeconomic problems. In addition, macroeconomics examines the role of government policies in stabilising the economy and promoting sustainable growth, such as monetary policy and fiscal policy. Macroeconomic models are used to make forecasts about the future performance of the economy, and to evaluate the impact of different policy choices on economic outcomes. Macroeconomics also includes international trade and finance, as well as the study of global economic issues such as exchange rates, balance of payments, and international financial crises. Overall, the scope of macroeconomics is vast and encompasses many different areas of study, all with the goal of understanding the behaviour and performance of the economy as a whole.

Some of the key areas covered by macroeconomics include:

1. Economic growth: Macroeconomics studies the factors that contribute to sustained economic growth, such as investments in technology, education, and infrastructure.
2. Inflation: Macroeconomics examines the causes and consequences of inflation, and the ways in which it can be managed through monetary and fiscal policy.
3. Unemployment: Macroeconomics studies the causes of unemployment and the effectiveness of government policies in reducing it.
4. International trade: Macroeconomics analyses the factors that contribute to international trade, such as exchange rates, tariffs, and trade agreements.
5. Fiscal policy: Macroeconomics examines the impact of government spending and taxation on the overall economy, and the role of fiscal policy in promoting economic growth and stability.
6. Monetary policy: Macroeconomics studies the impact of central bank policies, such as interest rates and money supply, on the economy.
7. Macroeconomic models: Macroeconomics uses various models to study the behaviour of the economy, such as the aggregate demand and supply model, the Phillips curve, and the IS-LM model.

Overall, the scope of macroeconomics is quite broad, covering a wide range of topics related to the overall performance and behaviour of the economy. It is a critical field for policymakers, academics, and individuals seeking to understand and navigate the global economy.

2.1.3 Macroeconomic Variables

Macroeconomic variables are key indicators that are used to measure the overall health and performance of an economy. These variables include measures of economic activity, such as Gross Domestic Product (GDP), which is the total value of all goods and services produced in a country over a given period of time, usually a year. Other important macroeconomic variables include inflation, which measures the rate at which prices are rising; unemployment, which measures the percentage of the labour force that is out of work; and the balance of trade, which measures the difference between a country's exports and imports.

2.1.3.1 Stock and Flow Variables

Stock and flow variables are two important types of macroeconomic variables. These variables are used to measure the quantity and rate of change of economic activities, respectively. Stock variables are measured at a specific point in time and represent the quantity of a particular economic variable that exists at that point. Examples of stock variables include the amount of money held in a bank account, the number of cars produced by a company, the quantity of gold in a country's reserves, or the number of houses in a city. Stock variables are usually measured at a specific point in time, such as the end of a fiscal year or the end of a quarter. Flow variables, on the other hand, are measured over a period of time and represent the rate at which a particular economic variable is changing. Examples of flow variables include income, spending, and investment. Flow variables are usually measured over a specific period of time, such as a month, a quarter, or a year.

In macroeconomics, stock variables and flow variables are often used together to analyse economic phenomena. For example, the stock of money in an economy (measured at a specific point in time) can be used to determine the flow of money in an economy (measured over a period of time). Similarly, the stock of capital goods in an economy (measured at a specific point in time) can be used to determine the flow of investment in an economy (measured over a period of time). The distinction between stock and flow variables is important in macroeconomics because it helps economists to understand how the economy is changing over time. For example, changes in the stock of money in an economy can be used to analyse the flow of money through the economy over a period of time. Similarly, changes in the stock of capital goods in an economy can be used to analyse the flow of investment over time.

2.1.3.2 Exogenous and Endogenous Variables

In macroeconomics, exogenous and endogenous variables are two important types of economic variables that are used to explain changes in the economy. Exogenous variables are external factors that affect the economy but are not directly influenced by it. Examples of exogenous variables include changes in government policies, natural disasters, and technological innovations. These variables are often unpredictable and can have a significant impact on the economy.

On the other hand, endogenous variables are internal factors that are directly influenced by the economy. Examples of endogenous variables include consumption, investment, production, prices, wages, and interest rates. These variables are influenced by other economic factors and can be predicted using economic models. The distinction between exogenous and endogenous variables is important in macroeconomics because it helps economists to understand how different factors contribute to economic growth and development. For example, changes in government policies can be used to predict the impact on the economy's growth rate as an exogenous variable, while the rate of investment in the economy can be analysed as an endogenous variable that affects the economy's overall performance.

2.1.3.3 Dependent Variable and Independent Variable

In economics, the dependent variable and independent variable have similar meanings to their definitions in statistical analysis. The dependent variable in economics is the economic outcome or variable that is being studied or measured. It is the variable that is affected by changes in other variables in the study, such as the independent variable. For example, in a study of the effect of interest rates on consumer spending, consumer spending would be the dependent variable.

The independent variable in economics is the variable that is being manipulated or controlled in a study to observe its effect on the dependent variable. It is the variable that is hypothesised to cause changes in the dependent variable. In the example above, interest rates would be the independent variable. It is important to carefully choose and define the dependent and independent variables in economic studies to ensure that the study is well-designed and the results are meaningful. In addition, economists must be cautious when interpreting the results of their studies, as there may be other factors that influence the relationship between the variables.

2.1.4 Circular Flow (two sectors)

The circular flow of income is another important macroeconomic concept. It is a simplified model that shows how money flows through an economy. In this model, there are two sectors: households and firms. Households supply labour to firms and receive income in return. Firms use the labour and other inputs provided by households to produce goods and services, which are sold in the market. The income received by households is used to purchase these goods and services, completing the circular flow of income.

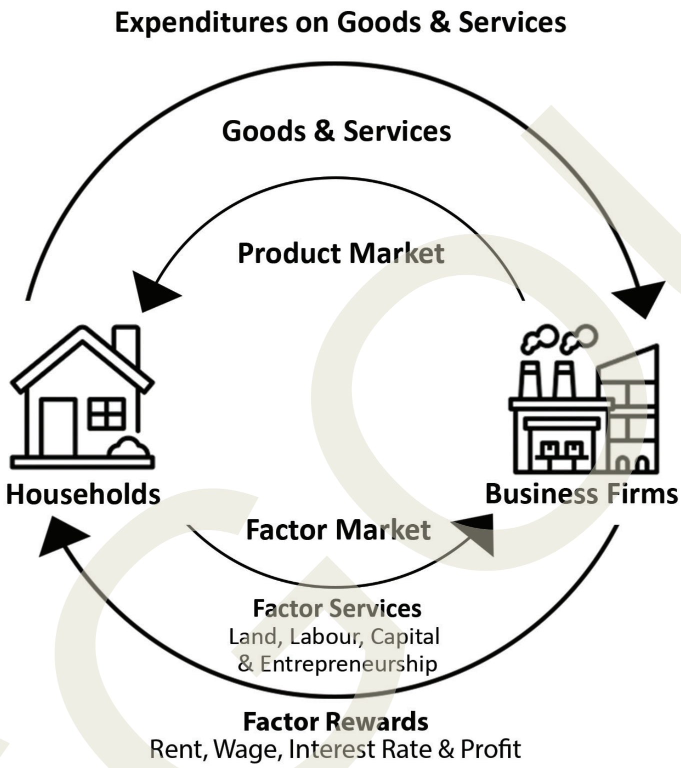

Fig: 2.1.1 Circular flow in a two sector model

The model assumes that households provide resources such as land, labour, capital, and entrepreneurship to firms in exchange for factor incomes such as rent, wage, interest and profit, while firms produce goods and services that are sold to households for consumption in exchange they get expenditures made on such goods and services by the households. In the circular flow model, households are the owners of resources, and they supply these resources to firms in exchange for income. This income can be used by households to purchase goods and services produced by firms, which completes the first part of the circular flow.

Firms, on the other hand, use the resources provided by households to produce goods and services, which are then sold to households for consumption. Firms pay for these resources with the income generated by their production activities, which completes the second part of the circular flow.

The two sector circular flow model assumes that there are no government or foreign sectors in the economy, and it simplifies the complex interactions that occur between households and firms. However, it provides a useful framework for understanding the basic flow of goods and money in an economy.

In summary, the circular flow model is a simple but important tool used in macroeconomics to illustrate the interactions between households and firms in an economy. It shows how resources, income, goods, and services flow between these two sectors, providing a basic understanding of how an economy functions.

Recap

- Macroeconomics focuses on the behaviour of the economy as a whole.
- Macroeconomics deals with economic growth, inflation, unemployment, and government policies.
- Key concepts include national income, aggregate demand and supply, and the role of government.
- Macroeconomists study the factors influencing growth, productivity, investment, and more.
- Stock variables represent the quantity of an economic variable at a specific point in time.
- Flow variables represent the rate at which an economic variable changes over time.
- Exogenous variables are external factors that affect the economy.
- Endogenous variables are internal factors influenced by the economy.
- Dependent variables are the economic outcomes being studied or measured.
- Independent variables are manipulated to observe their effect on the dependent variable.
- The circular flow of income is a model showing how money flows between households and firms in the economy.

Objective Questions

1. Which branch of economics focuses on issues such as economic growth, inflation, and unemployment?
2. What are the external factors that affect the economy but are not influenced by it directly?
3. What are the internal factors directly influenced by the economy?
4. What variable is being studied or measured and affected by the other variables?
5. What variable is manipulated to observe its effect on the dependent variable in an economic study?
6. Which type of variables represent the quantity of an economic variable at a specific point in time?

7. Which type of variables represent the rate at which an economic variable changes over time?
8. What is the branch of economics that studies individual economic units such as households, firms, and markets?
9. What is a simplified economic model that shows how money flows through an economy using households and firms?

Answers

1. Macroeconomics
2. Exogenous
3. Endogenous
4. Dependent
5. Independent
6. Stock
7. Flow
8. Microeconomics
9. Circular flow of economic activity

Assignments

1. Define macroeconomics and explain its focus in the field of economics.
2. Differentiate between exogenous and endogenous variables in macroeconomics.
3. Describe the circular flow of income model involving households and firms.

Suggested Readings

1. Stone and Stone (1968). *National Income and Expenditure*, Bowes and Bowes
2. Brown, William S (2004). *Macroeconomics*, Prentice-Hall, New Jersey.
3. Nattrass, Nicoli and VisakhVarma, G (2014). *Macroeconomics Simplified: Understanding Keynesian and Neoclassical Macroeconomic Systems*, Sage publications India, New Delhi.

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1. Mukherjee, Sampat (2002). *Modern Economic Theory*, (4th ed): New Age International Publishers, Bangalore.
2. Rangarajan, Narayan, and R, Dholakia (2001). *Principles of Macroeconomics*, Tata McGraw Hill Education (India) Private Limited, New Delhi
3. Shapiro, Edward (1996). *Macroeconomic Analysis* – Galgotia Publications, New Delhi.

Unit 2
National Income
Concepts and Measurement

Learning Outcomes

After completing this unit, the learner will be able to

- explain the different national income concepts
- identify the methods of national income calculation
- know the difficulties in the measurement of National Income

Prerequisites

National income is an important concept used to understand how much money a country earns in a year. Just like you might earn money by doing chores or receiving an allowance, a country earns money through the work and activities of its people. When people work and get paid for their jobs, this is called wages. When business owners sell goods or services and make money, this is called profits. When someone owns land and rents it out to others, the money they earn is called rent.

All these earnings like wages, profits, and rent are added together to calculate the national income of a country. This helps us to understand how much money the country is making and gives us an idea of how well the economy is performing.

Keywords

National Income, GDP, Disposable Income, Per Capita Income

Discussion

2.2.1 National Income

National income is a measure of the total income earned by all the people and businesses in a country during a specific time period, usually a year. It is an important concept in macroeconomics, which is the study of how the overall economy of a country works. To calculate national income, economists add up all the income generated within a country's borders. This includes the income earned by workers from their jobs (wages), the income earned by business owners from selling goods and services (profits), and the income earned by landlords from renting out property (rent). The total income earned from these sources is called Gross Domestic Product (GDP), which is the most commonly used measure of national income.

National Income is important because it helps us understand the overall economic health of a country. A high national income generally indicates a strong economy with a high standard of living for its citizens, while a low national income can be a sign of economic challenges, such as high unemployment or poverty. Governments also use national income data to make important policy decisions, such as setting tax rates and determining the level of public spending on services such as healthcare, education, and infrastructure.

2.2.1.1 Definitions of National Income

According to the International Monetary Fund (IMF), "National income refers to the total income earned by a country's residents and businesses from all sources within its borders during a given time period, usually a year"

> The Organization for Economic Co-operation and Development (OECD) defines that "National income is the sum of all the income earned by households, businesses, and the government within a country during a specific time period. It is used as an indicator of a country's economic health and is a key component of economic policy-making".

According to the World Bank "National Income is a measure of the economic activity of a country, representing the total income generated by all factors of production, including labour and capital, during a specific time period".

2.2.1.2 National Income Concepts

The concept of national income refers to the total income generated by all individuals, businesses, and other economic entities within a country's borders during a specific time period, usually a year. National income is an important measure of a country's economic health and is used to gauge the overall level of economic activity and living standards.

Some key concepts related to national income include:

1. Gross Domestic Product (GDP): GDP is the total value of all goods and services produced within a country's borders during a specific time period, usually a year. It is the most widely used measure of national income.

In simple terms,

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

Where,

C=Consumption

I=Investment

G=Government expenditure

X = Exports of goods and services

M = Imports of goods and services

(X-M) =Export minus import or Net Export

GDP is an important measure of a country's economic health because it provides an indication of the overall level of economic activity and the size of the economy. It includes all goods and services produced by businesses, individuals, and the government within a country's borders, regardless of the nationality of the producer.

Nominal GDP and real GDP are two measures of a country's economic output. Nominal GDP measures the total value of goods and services produced in a country during a given period of time at current market prices. Real GDP, on the other hand, measures the total value of goods and services produced in a country during a given period of time at constant market prices, adjusted for inflation.

2. Net Domestic Product (NDP): NDP is a measure of a country's economic output that takes into account the depreciation of capital goods, such as machinery and equipment, that are used in the production process. To calculate NDP, the depreciation of these capital goods is subtracted from the Gross Domestic Product (GDP) of a country. That is,

NDP = GDP - Depreciation

NDP provides a more accurate measure of a country's economic output because it takes into account the fact that capital goods become less valuable over time as they are used in production. By subtracting depreciation from GDP, NDP provides a measure of the value of goods and services that are actually available for consumption or investment in a given period.

3. Gross National Product (GNP): GNP is the total value of all goods and services produced by a country's residents, regardless of their location, during a specific time period. It includes income earned by citizens and businesses from abroad and excludes income earned by foreigners within the country's borders.

Mathematically,

GNP = C + I + G + (X - M) + NFIA

Where,

C = Private Consumption expenditure

I = Investment expenditure

G = Government expenditure

(X-M) =Export minus Import or Net Export

NFIA =Net Factor Income From Abroad

Net Factor Income from abroad is the difference between the income earned by domestic residents from abroad and the income earned by foreign residents in the domestic economy.

Unlike GDP, which measures the total value of goods and services produced within a country's borders, GNP includes income earned by citizens and businesses from abroad and excludes income earned by foreigners within the country's borders.

Nominal GNP and Real GNP are the other two measures of GNP. Nominal Gross National Product (GNP) is the total value of all goods and services produced by a country's residents and businesses, regardless of where they are located, in a given period of time, usually a year, using current market prices. Real GNP, on the other hand, is the total value of all goods and services produced by a country's residents and businesses, adjusted for inflation, in a given period of time, usually a year.

4. Net National Product (NNP): NNP is the value of all goods and services produced by a country's residents, minus the depreciation of capital goods such as machinery and equipment.

NNP = GNP - Depreciation

To calculate NNP, the depreciation of capital goods, such as machinery and equipment, is subtracted from the Gross National Product (GNP) of a country. This provides a measure of the value of goods and services that are actually available for consumption or investment in a given period, after accounting for the wear and tear that occurs on capital goods over time. NNP provides a more accurate measure of a country's economic output than GNP because it takes into account the fact that capital goods become less valuable over time as they are used in production. By subtracting depreciation from GNP, NNP provides a measure of the value of goods and services that are available for consumption or investment in a given period.

5. Green GNP: Green GNP refers to the Gross National Product (GNP) that takes into account the environmental sustainability of a country's economic growth. It is an attempt to measure the economic growth of a country in a way that considers the impact on the environment, including natural resources depletion, pollution, and climate change. Green GNP takes into account the costs associated with environmental degradation, which are not reflected in traditional GNP calculations. The idea of Green GNP highlights the importance of sustainable development and promotes the idea that economic growth should not be achieved at the expense of the environment.

6. Personal Income: Personal Income is the total income received by households and individuals, including wages, salaries, rental income, and transfer payments such as social security.

Mathematically,

Personal Income = National Income – Undistributed Corporate Profits – Corporate Taxes – Social Security Contributions – Indirect Taxes + Transfer Payments

National Income is the total income earned by all factors of production (i.e. labour and capital) within a country's borders during a specific time period, usually a year.

Undistributed Corporate Profits are the earnings retained by corporations that are not distributed to shareholders as dividends.

Corporate Taxes are the taxes paid by corporations on their profits.

Social Security Contributions are the taxes paid by both employees and employers to fund the social security system.

Indirect Taxes are taxes on goods and services that are included in the prices of the products.

Transfer Payments are payments made by the government to individuals or households without expecting anything in return, such as social security benefits or unemployment allowance.

Personal Income represents the income received by individuals and households from all sources, including wages and salaries, interest and dividends, rental income, and transfer payments. It is an important measure of the economic well-being of individuals and households, and is used to assess the impact of economic policies on households and the distribution of income in the economy.

7. Disposable Income: Disposable income is the income available to households after taxes and other deductions have been taken out.

Disposable Income = Personal Income - Personal Taxes

Disposable income is calculated by subtracting taxes, such as income tax and payroll tax, and adding any transfer payments, such as social security benefits and unemployment insurance, from the total income earned by households. Changes in disposable income can have a significant impact on consumer spending and saving behaviour, and can therefore have important implications for the overall level of economic activity. When disposable income increases, households generally have more money available to spend or save, which can lead to increased demand for goods and services and higher levels of economic growth. Conversely, a decline in disposable income can lead to decreased consumer spending and lower levels of economic activity.

8. Per Capita Income (PCI): Per Capita Income (PCI) is a measure of the average income earned by individuals in a particular region or country. It is calculated by dividing the total income earned in the region or country by the total population.

That is,

$$PCI = \frac{National\ Income}{Population}$$

Per capita income is used as an indicator of the economic well-being of a country or region, as it reflects the average income earned by its citizens. A higher per capita income typically indicates a higher standard of living and greater economic development. However, per capita income is not a perfect measure of economic well-being, as it does not account for income inequality within a population. For example, a country with a high per capita income may still have significant poverty and income inequality.

These concepts are all used to measure different aspects of national income and provide a more nuanced understanding of a country's economic activity and living standards.

2.2.2 Methods of Measurement of National Income

There are three methods of measuring national income, each of which provides a different perspective on the economy and the value of goods and services produced within a country's borders. These methods are:

2.2.2.1 The Output Method

The output method measures national income by adding up the total value of all goods and services produced within a country's borders during a specific time period, usually a year. This is done by adding up the value of final goods and services produced in different sectors of the economy, such as agriculture, manufacturing, and services. In simple terms,

National Income = Value of Final Goods and Services Produced in Agriculture + Value of Final Goods and Services Produced in Manufacturing + Value of Final Goods and Services Produced in Services.

This equation adds up the value of final goods and services produced in different sectors of the economy, such as agriculture, manufacturing, and services. The value of final goods and services is the total value of goods and services produced in a specific sector, minus the value of intermediate goods and services used in production.

For example, if a farmer produces wheat and sells it to a bread manufacturer, the value of the wheat sold would be considered an intermediate good, as it is used in the production of bread. However, if the bread manufacturer sells the bread to consumers, the value of the bread would be considered a final good, as it is sold for consumption.

By adding up the value of final goods and services produced in each sector of the economy, the Output Method provides an estimate of the total value of goods and services produced within a country's borders during a specific period of time, usually a year. This method is useful for assessing the contribution of different sectors of the economy to overall economic growth and can be used to compare the performance of different industries over time.

2.2.2.2 The Income Method

The income method measures national income by adding up the total income earned by all individuals and businesses within a country's borders during a specific period of time, usually a year. This includes wages and salaries, interest and dividends, rent and royalties, and profits earned by businesses. In simple terms,

National Income = Wages and Salaries + Rent and Royalties + Interest and Dividends + Business Profits

This equation adds up the total income earned by all individuals and businesses within a country's borders during a specific period of time, usually a year. The components of the equation represent the different types of income earned by individuals and businesses.

Wages and salaries are the payments made to employees for their labour. Rent and royalties are payments made to property owners for the use of their land or other assets. Interest and dividends are payments made to individuals or businesses that have invested in stocks, bonds, or other financial assets. Business profits represent the income earned by businesses after all expenses, including taxes, have been subtracted from their revenue.

By adding up the different types of income earned within a country, the Income Method provides an estimate of the total income earned by individuals and businesses during a specific period. This method is useful for assessing the distribution of income within an economy and can provide insights into the factors driving economic growth and development.

2.2.2.3 The Expenditure Method

The expenditure method measures national income by adding up the total amount of money spent on goods and services within a country's borders during a specific period of time, usually a year. This includes consumer spending on goods and services, government spending on goods and services, and investment spending by businesses on capital goods like machinery and equipment. In simple terms,

National Income = Consumption Expenditure + Government Expenditure + Investment Expenditure + Net Exports

This equation adds up the total amount of money spent on goods and services within a country's borders during a specific period, usually a year. The components of the equation represent the different categories of spending that contribute to the economy.

Consumption expenditure is the money spent by households on goods and services. This includes everything from food and clothing to entertainment and travel.

Government expenditure is the money spent by government agencies at all levels, including federal, state, and local. This includes everything from salaries and benefits for government employees to infrastructure projects and social welfare programs.

Investment expenditure is the money spent by businesses on capital goods like machinery and equipment. This includes everything from office furniture to factories and warehouses.

Net exports are the difference between the value of goods and services exported by a country and the value of goods and services imported by that country. If the value of exports is higher than the value of imports, net exports are positive, indicating that the country is exporting more than it is importing.

By adding up the different categories of spending, the Expenditure Method provides an estimate of the total amount of money spent on goods and services within a country's borders during a specific time period. This method is useful for assessing the overall health of the economy and can provide insights into the factors driving economic growth and development.

2.2.3 Difficulties in the Measurement of National Income

Measuring national income is a difficult task because it involves adding up the value of all the goods and services produced in a country over a certain period of time, usually a year. There are a few challenges that make this task more complex, including:

i. Non-Market Activities: National income measures the value of goods and services produced in the market economy. However, non-market activities such as household work, volunteer work, and illegal activities are not included in the calculation of national income. This can lead to an underestimation of the actual value of goods and services produced.

ii. Informal Economy: A significant portion of economic activity in developing countries takes place in the informal sector, which is not recorded in official statistics. This can result in an underestimation of national income and may lead to inaccurate economic policy decisions.

iii.Quality of Goods and Services: National income measures the value of goods and services produced, but it does not take into account the quality of those goods and services. An increase in the quantity of goods and services produced does not necessarily mean an improvement in their quality, and vice versa.

iv. Environmental Factors: National income measures the value of economic activity, but it does not take into account the environmental costs associated with that activity. For example, the production of goods and services may lead to environmental degradation, which is not reflected in the calculation of national income.

v. Income Distribution: National income measures the total income earned in an economy, but it does not provide information on how that income is distributed. A high national income may mask significant income inequality, which can have negative social and economic consequences.

vi. Time Lags: National income data is often collected with a time lag, which can lead to inaccuracies in economic policy decisions. In addition, revisions to national income estimates may be made in the future, which can affect the accuracy of historical data.

vii. International Comparability: National income data may not be directly comparable between countries due to differences in data collection methods, definitions, and standards. This can make it difficult to make accurate international comparisons of economic performance.

Despite these difficulties, measuring national income is an important task because it helps us understand how well a country's economy is doing and how to make it better. It provides important information for policymakers and businesses to make informed decisions that can benefit the overall economy and society.

Recap

- National income - total income earned by all people and businesses in a country during a specific time period
- GDP - total value of all goods and services produced within a country's borders during a specific time period
- Nominal GDP - the actual monetary value of goods and services without accounting for inflation
- Real GDP adjusts for changes in the price level over time using a base year's prices
- NDP adjusts GDP for the depreciation of capital goods used in production.
- GNP - total value of goods and services produced by a country's residents, including income earned abroad.
- Net factor income from abroad is the difference between income earned domestically and abroad.
- Per Capita Income (PCI) - average income earned by individuals, calculated by dividing total income by the total population.
- Three methods of measuring national income: output, income, and expenditure method.

Objective Questions

1. What does GDP stand for?
2. How is NDP calculated?
3. What is the measure of the average income earned by individuals in a particular region or country?
4. What does GNP stand for?
5. What is the total income earned by all individuals and businesses within a country's borders during a specific period of time?
6. What is the method of measuring national income by adding up the total value of all goods and services produced within a country's borders?
7. What is the method of measuring national income by adding up the total income earned by all individuals and businesses within a country's borders?
8. What is the method of measuring national income by adding up the total amount of money spent on goods and services within a country's borders?

Answers

1. Gross Domestic Product
2. By subtracting depreciation of capital goods from GDP.
3. Per Capita Income (PCI)
4. Gross National Product
5. National Income
6. Output Method
7. Income Method
8. Expenditure Method

Assignments

1. Define national income and explain its significance in the measurement of an economy's performance.
2. Explain the concept of Gross National Product (GNP) and its components, including net factor income from abroad.
3. Describe the three methods of measuring national income: output method, income method, and expenditure method.

Suggested Readings

1. Brown, William S (2004). *Macroeconomics*, Prentice-Hall, New Jersey.
2. Stone and Stone (1968). *National Income and Expenditure*, Bowes and Bowes
3. Nattrass, Nicoli and VisakhVarma, G (2014). *Macroeconomics Simplified: Understanding Keynesian and Neoclassical Macroeconomic Systems*, Sage publications India, New Delhi.

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1. Mukherjee, Sampat (2002). *Modern Economic Theory*, (4th ed): New Age International Publishers, Bangalore.
2. Rangarajan, Narayan, and R, Dholakia (2001). *Principles of Macroeconomics*, Tata McGraw Hill Education (India) Private Limited, New Delhi
3. Shapiro, Edward (1996). *Macroeconomic Analysis* – Galgotia Publications, New Delhi.

Unit 3
Classical Macroeconomic System

Learning Outcomes

After completing this unit, the learner will be able to:

- describe the Classical Macroeconomic system
- explain the Say's law of market
- know about the outcome of Say's law
- familiarise the concept of wage price flexibility

Prerequisites

Macroeconomics is a branch of economics that studies the behaviour and performance of the whole economy. It focuses on big issues like inflation, unemployment, economic growth, and how government policies affect the economy as a whole. Classical macroeconomics is a school of thought that began in the 18th century and was the main way of thinking about the economy until the Great Depression of the 1930s. Classical economists believed that markets work best when left alone and that the economy can fix itself. They assumed that people are rational and act in their self-interest, which helps markets to work efficiently. They also believed that the economy naturally returns to equilibrium over time.

Classical economists opined that the government should play a limited role in the economy. They suggested that the government should focus on keeping a stable monetary system and a balanced budget. They were against government policies like price controls, subsidies, and heavy taxes because these could disrupt market signals and create inefficiencies.

However, after the Great Depression, a new way of thinking called modern macroeconomics emerged. It emphasises the importance of government intervention to stabilise the economy and prevent recessions. Modern macroeconomics uses models to study how the economy works and how government policies affect it. While classical macroeconomics helped to shape economic thinking for centuries, modern macroeconomics builds on it and takes a more detailed and practical approach to the study of the economy.

Keywords

Laissez-faire, Say's law, Wage-Pice flexibility, Classical dichotomy

Discussion

2.3.1 Classical Macroeconomic System

Classical macroeconomic system is an economic theory that originated during the late 18th and early 19th centuries, particularly associated with the ideas of Adam Smith, David Ricardo, and other economists of the time. The central idea of classical macroeconomic theory is that markets operate efficiently when they are left alone and that the government should not intervene in the economy.

Classical macroeconomics emphasises the role of supply in determining the overall health of the economy. According to this theory, the economy will naturally tend towards full employment over the long run. Wages and prices are assumed to be flexible, meaning that they will adjust to ensure that markets attain a stage where supply matches demand. They also argue that individuals act rationally and in their own self-interest, and that this behaviour leads to an efficient allocation of resources. In summary, the classical macroeconomic system is based on the belief that the market operates efficiently when left alone, and that government intervention can do more harm than good. It emphasises the role of supply in determining the overall health of the economy and the importance of individual rational behaviour in guiding economic activity.

2.3.1.1 Invisible Hand

Classical economists believe that market forces, such as the invisible hand, will guide the economy towards its optimal level of output and employment. The invisible hand is a metaphorical concept introduced by the Scottish economist Adam Smith in his seminal work, *The Wealth of Nations*. Smith used the concept of the invisible hand to explain how the self-interest of individuals in a free market economy can lead to the greater good of society as a whole, without the need for central planning or government intervention.

The idea behind the invisible hand is that when individuals pursue their own self-interest, they are led by an invisible hand to promote the general welfare of society. For example, a business owner who seeks to maximise profits by producing goods and services that consumers want to buy will indirectly benefit society by creating jobs and generating wealth. In turn, this will encourage other businesses to enter the market, creating competition and ultimately leading to lower prices and higher quality goods and services.

2.3.1.2 Assumptions of Classical Macroeconomic System

The classical macroeconomic system is based on several elements and assumptions, which are as follows. The first three elements are called the 'Three Pillars' of the classical system.

1. **Full Employment:** Classical economists assume that the economy will always operate at full employment in the long run. They believe that any short-term fluctuations in employment will be self-correcting, and the economy will always return to its long-term natural rate of unemployment.
2. **Say's Law of Markets:** The classical economists also assume that Say's Law of Markets holds true. This law states that supply creates its own demand, which means that all the goods and

services produced in the economy will be consumed, and there will never be a general glut of goods.

3. **Flexible Prices and Wages:** The classical economists assume that prices and wages are flexible and adjust quickly to changes in supply and demand. They believe that in a free market, prices and wages will always adjust to ensure that the economy is always in equilibrium.
4. **The Quantity Theory of Money:** This principle states that changes in the money supply will affect the price level in the economy in the long run. According to this theory, if the money supply in the economy increases, prices will eventually increase proportionally. Therefore, monetary policy should be conducted with caution, as excessive money creation can lead to inflation and erode the value of money.
5. **The Real Theory of Interest:** The real theory of interest refers to the idea that the interest rate is determined by the supply and demand for savings and investment. According to classical economists, the interest rate balances the supply of savings (the amount of funds available for investment) with the demand for investment (the amount of funds that firms and individuals wish to borrow for investment purposes).
6. **Rational Expectations:** Another key assumption of the classical macroeconomic system is that individuals have rational expectations. This means that they make decisions based on all available information and that they are able to accurately predict future economic conditions.
7. **Classical Dichotomy:** This principle suggests that there is a separation between nominal variables (such as prices and money) and real variables (such as output and employment) in an economy. According to this principle, changes in nominal variables do not affect real variables in the long run, and changes in real variables do not affect nominal variables in the long run. This principle implies that changes in the money supply only affect nominal variables, while real variables are determined by factors such as technology, capital, and labour.
8. **Saving-Investment Equality:** The classical economists also assume that saving equals investment. This means that any savings that is not spent on consumption will automatically be invested in the economy, which will lead to economic growth and full employment.
9. **Laissez-faire:** *Laissez-faire* is a French term that means "let do" or "let it be." Classical economists believe in a *laissez-faire* approach. It means that the government should not intervene in markets except to provide basic legal and institutional frameworks. They advocate minimal government intervention in the economy and believe that free markets will allocate resources efficiently, and any government intervention will only lead to market distortions and inefficiencies.
10. **Neutral Money:** Another assumption of classical economics is that money is neutral. This means that changes in the money supply will only lead to changes in the price level and will not affect real economic variables such as output, employment, and productivity.
11. **Perfect Competition:** Classical economists assume that markets are perfectly competitive, meaning that there are many buyers and sellers and no one has market power to influence prices. This assumption is important because it im-

plies that prices are determined by supply and demand and not by individual firms or buyers.

Overall, the classical macroeconomic system is based on a set of assumptions that emphasise the importance of free markets, rational decision-making, and self-correcting mechanisms in ensuring economic stability and growth. However, these assumptions have been subject to criticism and debate, and alternative theories such as Keynesian economics have emerged in response to the limitations of the classical model.

2.3.1.3 Full Employment

In classical macroeconomics, full employment means that all available resources in an economy, including labour, capital, and land, are being fully utilised in the production of goods and services. This implies that there is no involuntary unemployment, and that all individuals who are willing and able to work are employed.

Classical economists believed that the economy would naturally tend towards full employment in the long run, as flexible prices and wages would adjust to clear labour markets and ensure that the quantity of labour supplied equals the quantity of labour demanded. In other words, if wages were too high, there would be excess labour supply and unemployment, and wages would fall until the labour market cleared and full employment was achieved.

2.3.2 Say's Law

Say's Law is a principle in classical economics that suggests that the production of goods and services creates its own demand. In other words, the supply of goods and services in the economy will create its own demand, and there can never be a general glut of goods or excess supply in the economy. In simple words, it is an idea that says that people produce things in order to buy other things. So, if you make something, like a toy or a piece of furniture, you can sell it to someone else and then use that money to buy something else that you need or want.

This principle was proposed by the French economist Jean-Baptiste Say in the early 19th century and became a cornerstone of classical macroeconomic theory. According to Say's Law, any increase in production will ultimately lead to an increase in the purchasing power of consumers, either directly or indirectly, through the generation of income and employment opportunities. Therefore, classical economists believed that there was no need for government intervention to stimulate demand in the economy, as long as the market was left free to operate according to the principles of supply and demand.

Fig 2.3.1 J B Say (1767 – 1832)

2.3.2.1 Assumptions of Say's Law of Markets

Here are the assumptions of Say's Law of Market in simple terms:

1. **Supply creates its own demand:** This means that the production of goods and services will automatically create a demand for them, as people who participate in the production process earn an income, which they will use to purchase goods and services.

2. **No overproduction or underproduction**: This assumption implies that the economy is always producing the exact amount of goods and services that people want to buy, with no excess or shortage.

3. **No hoarding:** This means that people do not hoard their money but rather spend it on goods and services, thereby ensuring that there is enough demand in the market to match the supply.

4. **Flexibility of prices and wages:** This assumes that prices and wages are flexible and will adjust according to changes in supply and demand. This means that if there is excess supply, prices and wages will adjust downwards, leading to an increase in demand, and vice versa.

5. **No government intervention:** This assumption assumes that there is no government intervention in the market, such as taxes, subsidies, or price controls, which could distort the supply and demand dynamics

6. **Perfect competition:** This means that there are no monopolies or oligopolies in the market, and firms operate in a perfectly competitive market, where prices are determined by the forces of supply and demand.

Overall, these assumptions suggest that the market is self-regulating and efficient, and that there is no need for government intervention or economic stimulus.

Say's Law of Markets, also known as the law of supply and demand, is an economic principle that suggests that the production of goods and services generates its own demand. In other words, the total amount of goods and services produced in an economy will always be equal to the total amount of goods and services demanded, assuming that the economy is functioning efficiently.

Say's Law has important implications for macroeconomic policy, particularly in terms of the role of government intervention in the economy. Supporters of Say's Law argue that the government should not interfere in the economy, as it can disrupt the natural balance between supply and demand. Instead, they believe that the market should be left to function on its own, with prices and production levels being determined by the forces of supply and demand. Critics of Say's Law argue that it is not always true, particularly in situations where there is a lack of demand for goods and services. In these situations, production may decrease, leading to unemployment and economic downturns. In response, they suggest that government intervention may be necessary to stimulate demand and get the economy back on track.

2.3.3 Wage – Price Flexibility

Wage-price flexibility is a key concept in classical macroeconomic theory. The theory assumes that wages and prices are flexible and can adjust quickly in response to changes in market conditions. This means that if there is a surplus of goods or services, prices will fall, and if there is a shortage, prices will rise. Similarly, if there is an excess supply of labour, wages will fall, and if there is a shortage of labour, wages will rise.

The wage-price flexibility assumption plays a critical role in the classical macroeconomic system because it implies that the supply of goods and services in a market will always equal the demand for them, and the economy will always be at full employment. This assumption forms the basis for the classical dichotomy, which holds that real variables, such as output and employment, are determined by real factors, such as technology and resources, while nominal variables, such as prices and wages, are determined by monetary factors.

In other words, if the demand for a product increases, the price of that product will rise, and producers will hire more workers, leading to an increase in wages. Similarly, if there is a surplus of goods in the market, prices will fall, and firms may reduce their workforce, leading to lower wages.

2.3.3.1 Assumptions of Wage-Price Flexibility

The assumptions of wage-price flexibility are:

1. Labour and product markets are perfectly competitive, meaning that there are many buyers and sellers, and no single buyer or seller has control over prices.

2. Wages and prices are flexible, meaning that they can adjust easily and quickly to changes in supply and demand.

3. There is full employment, meaning that all available labour resources are being utilised.

4. There is no inflationary expectation, meaning that workers and firms do not expect prices to rise in the future.

5. There are no external shocks or disturbances to the economy, such as natural disasters, wars, or sudden changes in government policies.

6. There is a perfectly competitive market with no monopoly power. This means that both labour and goods markets are characterised by many buyers and sellers, and no individual seller or buyer has the power to influence prices.

The flexibility of wages and prices is important because it helps the economy to adjust to changes in supply and demand, and helps to prevent or reduce the impact of economic shocks such as recessions or inflation. If wages and prices were fixed, it would be more difficult for the economy to adjust to changing conditions, which could lead to more severe economic downturns or inflationary pressures.

Overall, the assumption of wage-price flexibility is central to the classical macroeconomic system because it implies that the economy can self-correct and return to full employment in the long run, even if it experiences short-term fluctuations.

Recap

- Macroeconomics studies the behaviour and performance of the whole economy.
- Classical macroeconomics emerged in the 18th century and dominated until the Great Depression.
- Classical economics emphasises market mechanisms and free markets to determine economic performance.
- Markets are self-correcting, and the economy returns to equilibrium naturally.
- Individuals are rational and act in self-interest, leading to efficient outcomes.
- Limited government intervention is favoured; focus on a stable monetary system and balanced budget.
- The invisible hand guides the economy to optimal output and employment.
- Full employment means all resources are utilised without involuntary unemployment.

- Quantity Theory of Money links money supply and price level.
- Prices and wages adjust quickly in a free market to maintain equilibrium.
- Real interest rates are determined by savings and investment.
- Rational expectations: individuals predict future economic conditions accurately.
- Classical Dichotomy separates nominal and real variables.
- Saving equals investment, leading to economic growth and full employment.
- *Laissez-faire* approach: minimal government intervention is best.
- Money is neutral, impacting only the price level, not real variables.
- Perfect competition: many buyers and sellers with no market power.
- Say's Law supply creates its own demand.
- Wage-price flexibility theory quick adjustments to market conditions.

Objective Questions

1. What branch of economics deals with the study of the behaviour and performance of an economy as a whole?
2. Which school of thought dominated economic thinking until the Great Depression of the 1930s?
3. According to classical macroeconomics, what kind of mechanism is believed to determine economic performance?
4. What is the central idea behind the "invisible hand" concept in classical economics?
5. What does the Quantity Theory of Money explain the relationship between?
6. Classical economists assume that markets are perfectly competitive, meaning what?
7. What is the term used to describe the state where all available resources in an economy are being fully utilised in the production of goods and services?
8. According to classical macroeconomics, what is the impact of changes in the money supply on real economic variables like output and employment?
9. Which principle in classical economics suggests that the production of goods and services creates its own demand?
10. According to the classical dichotomy, what is separated in an economy?

Answers

1. Macroeconomics
2. Classical
3. Self-correcting markets
4. Self-interest
5. Money supply and price level
6. Competitive
7. Full employment
8. Neutral
9. Say's Law
10. Nominal and real variables

Assignments

1. Examine the central idea of Say's Law in classical macroeconomics.
2. Describe the role of government intervention in classical macroeconomics.
3. Discuss the classical economists' views on the concept of full employment

Suggested Readings

1. Stone and Stone (1968). *National Income and Expenditure*, Bowes and Bowes
2. Mukherjee, Sampat (2002). *Modern Economic Theory*, (4th ed): New Age International Publishers, Bangalore.
3. Nattrass, Nicoli and VisakhVarma, G (2014). *Macroeconomics Simplified: Understanding Keynesian and Neoclassical Macroeconomic Systems*, Sage publications India, New Delhi.

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Unit 4
Keynesian Macroeconomic System

Learning Outcomes

After completing this unit, the learner will be able to:

- know about the principles of effective demand
- familiarise with under employment equilibrium
- identify the principles of effective demand
- explain the concepts of Aggregate Demand Function (ADF) and Aggregate Supply Function (ASF)

Prerequisites

The Great Depression was a severe worldwide economic crisis that lasted through most of the 1930s. It began in the United States after a stock market crash in October 1929 and quickly spread to other countries around the world. During this time, many people lost their jobs and homes. Poverty, hunger, and homelessness became widespread, and people faced significant economic hardship. Governments around the world tried to find ways to stimulate their economies and create jobs to help their struggling citizens. The Great Depression had a long-lasting impact and led to important changes in economic policies and the role of governments in managing economies.

John Maynard Keynes, a British economist, believed that governments should play an active role during times of economic hardships. He argued that the economy could sometimes get stuck in a downturn and would not recover on its own. Keynes argued that government spending could help create jobs and boost economic growth during these times. By increasing government spending, the government could generate demand for goods and services, which would encourage businesses to produce more and hire more workers. This approach was very different from the classical economic view, which believed that markets would eventually fix themselves without the need for government intervention. Keynes's ideas greatly influenced modern economic thinking and government policies during the economic crisis.

Keywords

Aggregate demand, Aggregate supply, Effective demand, Involuntary unemployment

Discussion

2.4.1 Keynesian Macroeconomic System

Keynesian macroeconomic system, also known as Keynesian economics, is an economic theory that was developed by British economist John Maynard Keynes in the 1930s. It was a response to the Great Depression and aimed to explain why market economies could remain in a state of prolonged depression with high levels of unemployment and low levels of economic output. Keynesian economics became popular during the 1930s and 1940s, as many governments around the world adopted Keynesian policies to help lift their countries out of the Great Depression. Keynesian economics also played a key role in the post-World War II era, when governments used Keynesian policies to rebuild their economies.

Keynesian economics challenged the classical economic theory that had dominated economic thinking until then, and it focused on the role of government intervention in the economy to stabilise aggregate demand and ensure full employment. The Keynesian system is based on several key assumptions, including the idea that aggregate demand is the primary determinant of economic activity, and that the level of aggregate demand can be influenced by changes in government spending, taxes, and monetary policy. Keynesian economics also assumes that markets are not always self-correcting and that government intervention may be needed to prevent or mitigate economic downturns.

2.4.1.1 Assumptions of Keynesian Macroeconomic System

The major assumptions of Keynesian macroeconomic system can be summarised as:

1. **Prices and wages are sticky or inflexible:** According to Keynes, prices and wages do not adjust quickly in response to changes in demand and supply in the economy. This means that changes in demand and supply can lead to unemployment or inflation, and that government intervention may be necessary to stabilise the economy.
2. **There may be involuntary unemployment:** Keynes believed that it is possible for an economy to experience involuntary unemployment, where there are people who are willing and able to work, but are unable to find jobs. This can happen when there is a deficiency of aggregate demand in the economy.
3. **Consumption and saving decisions are based on current income:** Keynes argued that individuals' consumption and saving decisions are largely determined by their current income rather than their expected future income. This means that changes in income can have a significant impact on consumption and saving levels in the economy.
4. **Investment decisions are based on interest rates:** Keynes believed that investment decisions are primarily influenced by interest rates, and that changes in interest rates can have a significant impact on the level of investment in the economy.

5. **Government intervention is necessary to stabilise the economy:** Keynes believed that government intervention is necessary to stabilise the economy, particularly during periods of recession or depression. This may involve increasing government spending or cutting taxes to boost demand and create jobs.

2.4.2 Aggregate Demand Function (ADF) and Aggregate Supply Function (ASF)

Aggregate Demand Function (ADF) and Aggregate Supply Function (ASF) are two essential concepts in macroeconomics used to describe the relationship between the overall demand and supply for goods and services in an economy. Aggregate Demand (ADF) represents the total demand for goods and services in an economy at a given price level over a specific period. It includes all the components of demand, such as consumer spending, investment spending, government spending, and net exports (exports minus imports).

Aggregate Supply Function (ASF) represents the total supply of goods and services in an economy at a given price level over a specific period. It includes all the components of supply, such as labour, capital, and natural resources.

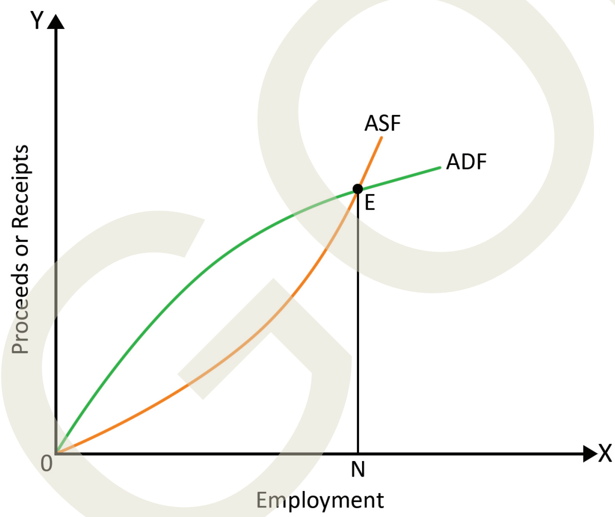

Fig: 2.4.1 Aggregate Demand Function (ADF) and Aggregate Supply Function(ASF)

The actual amount of employment in an economy is determined by the intersection of Aggregate Demand Function (ADF) and Aggregate Supply Function (ASF). The point of intersection between ADF and ASF represents the equilibrium level of output and employment in an economy. When the economy is at equilibrium, the quantity of goods and services demanded equals the quantity of goods and services supplied, and there is no pressure for prices to change. The ADF and ASF curves in the preceding image intersect at point E, which corresponds to the amount of employment N. The point of intersection E signifies the effective demand. At this point, there is no tendency for the economy to move away from this equilibrium, as there is neither excess demand nor excess supply in the economy.

If the ADF is greater than the ASF, then there will be excess demand in the economy, leading to inflationary pressures. On the other hand, if the ASF is greater than the ADF, then there will be excess supply in the economy, leading to deflationary pressures. The ADF and ASF are influenced by various factors such as government policies, changes in interest rates, and international trade. The ASF is considered stable in the short run because it is dependent on manufacturing, technical conditions, raw material availability, and so on. Thus, the ADF is critical in determining the degree of employment in the economy.

The ADF is determined by the consumption and investment functions. Employment can be increased by increasing either consumption or investment expenditure, or both. Thus, the ADF is the effective component in the principles of effective demand. Changes in Aggregate Demand (ADF) or Aggregate Supply (ASF) can cause shifts in the respective curves, which can lead to a new equilibrium point in the economy. For example, an increase in consumer spending or government investment could cause a shift in the ADF curve to the right, leading to an increase in output and employment at a higher price level. Similarly, a decrease in input costs or an increase in productivity could shift the ASF curve to the right, causing an increase in output and employment at a lower price level.

2.4.3 Principles of Effective Demand

Effective demand is a concept in Keynesian economics that refers to the level of demand for goods and services that is actually realised in an economy, based on the spending decisions of consumers, businesses, and the government. It is different from the notion of "absolute demand," which is the total quantity of goods and services that consumers are willing and able to purchase at any given price.

Keynes argued that effective demand was a key driver of economic activity and growth, and that it was subject to fluctuations and instability due to a number of factors, including fluctuations in consumer and business confidence, changes in government spending and taxation policies, and the tendency for investment decisions to be influenced by expectations about future profitability. To address these issues, Keynes proposed a number of policy interventions, including fiscal policy (changes in government spending and taxation), monetary policy (changes in interest rates and the money supply), and other measures aimed at stabilising the economy and promoting full employment. The idea was to use government policy to boost effective demand during times of economic downturn, in order to stimulate economic growth and prevent the kind of catastrophic unemployment that had occurred during the Great Depression.

The following are the principles of effective demand:

1. **Consumption and Investment:** Effective demand is determined by the level of consumption and investment in the economy. Keynes believed that consumption and investment are the two most important components of aggregate demand, and that they determine the level of effective demand.
2. **Income Distribution:** The distribution of income in the economy plays an important role in determining effective demand. If income is concentrated in the hands of a few, it can lead to a situation where there is not enough aggregate demand to support full employment.
3. **Marginal Propensity to Consume:** The marginal propensity to consume (MPC) refers to the proportion of addi-

tional income that is spent on consumption. Keynes believed that the MPC is not constant, but rather varies depending on the level of income.

4. **Interest Rates:** Interest rates play a crucial role in determining the level of investment in the economy, which in turn affects effective demand. Keynes believed that the interest rate is not always sufficient to ensure that investment and savings are equal, and that government intervention may be necessary to ensure that effective demand is sufficient.
5. **Government Intervention:** Keynes believed that government intervention is necessary to ensure that effective demand is sufficient to achieve full employment. This may involve government spending on public works projects or other forms of fiscal stimulus, as well as monetary policy measures such as interest rate adjustments.

Overall, the principles of effective demand emphasise the importance of government intervention in maintaining full employment and ensuring that the economy is operating at its full potential.

2.4.4 Under-employment Equilibrium

Under-employment equilibrium is a concept in Keynesian economics that describes a situation where the economy is not using all of its available resources, such as labour and capital, to produce goods and services. In this situation, there is a level of unemployment that persists even when the economy is producing at its maximum potential output. The term "under-employment" refers to the fact that the available resources are not being fully employed.

According to Keynesian theory, under-employment equilibrium can occur when there is a lack of aggregate demand in the economy. Aggregate demand refers to the total demand for goods and services in the economy. If there is insufficient demand for goods and services, businesses will produce less, leading to unemployment and under-employment.

Under-employment equilibrium can be contrasted with full employment equilibrium, where the economy is producing at its maximum potential output and there is no persistent unemployment. Keynesian economists argue that under-employment equilibrium is a real and significant phenomenon that can be addressed through government intervention, such as fiscal and monetary policies designed to stimulate aggregate demand and reduce unemployment.

Recap

- Keynesian economics developed by John Maynard Keynes in 1930s
- A response to the Great Depression, explaining prolonged depression and unemployment
- Challenges classical economics, advocating for government intervention for stability and full employment
- Prices and wages are sticky, not adjusting quickly to changes in demand and supply
- Involuntary unemployment is possible, where people are willing but unable to find jobs
- Consumption and saving decisions are determined by current income, not future income
- Investment decisions are influenced by interest rates, impacting the level of investment in the economy
- Government intervention is necessary during recessions to boost demand and create jobs
- Effective demand spending decisions of consumers, businesses, and government
- MPC (Marginal Propensity to Consume) - proportion of additional income spent on consumption
- MPC is not constant and varies with income level
- Interest rates are crucial in determining investment and effective demand
- Government intervention is needed to ensure full employment
- Under-employment equilibrium - economy not fully utilising available resources
- Aggregate Demand (ADF) - total demand for goods and services, including consumer, investment, government spending, and net exports
- Aggregate Supply (ASF) is the total supply of goods and services, including labour, capital, and resources
- Actual employment is determined by the intersection of ADF and ASF at equilibrium
- Equilibrium - quantity demanded equals quantity supplied, no pressure for price changes

Objective Questions

1. Who developed Keynesian economics?
2. Keynesian economics emerged in response to what?
3. According to Keynes, what determines consumption decisions of individuals?
4. What role does government play in Keynesian economics during economic downturns?
5. What term describes the stickiness of prices and wages in Keynesian economics?
6. According to Keynes, what is possible in an economy, even with people willing and able to work?
7. What is the concept that refers to the level of demand realised in an economy based on spending decisions?
8. What does MPC stand for in Keynesian economics?
9. When does equilibrium occur in Keynesian economics?

Answers

1. John Maynard Keynes
2. The Great Depression
3. Current income
4. Stabilising
5. Sticky or inflexible
6. Involuntary unemployment
7. Effective demand
8. Marginal Propensity to Consume
9. When quantity demanded equals quantity supplied

Assignments

1. Discuss the key features of Keynesian economics and how it revolutionised economic thinking during the Great Depression.
2. Analyse the role of government intervention through changes in government spending and taxation to stabilise the economy and achieve full employment.
3. Elucidate the concept of effective demand in Keynesian economics and its implications for unemployment.

Suggested Readings

1. Rangarajan, Narayan, and R, Dholakia (2001). *Principles of Macroeconomics*, Tata McGraw Hill Education (India) Private Limited, New Delhi
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BLOCK - 03

Money and Banking

Unit 1
Concept of Money

Learning Outcomes

After reading this unit, the learner will be able to

- familiarise with the nature of money
- identify different types of money
- get awareness about the functions of money
- know about the significance of the money

Prerequisites

When you buy a clothing item, such as a saree, you exchange money for value, with payment options like cash, debit/credit cards, and digital platforms like UPI. These methods reflect the evolving nature of money in transactions.

Historically, societies relied on barter, exchanging goods directly, such as grain for fabric. Barter was inefficient, requiring both parties to want what the other had. The invention of money made trade more efficient.

Currency, including cash and bank deposits, is the most recognisable form of money, serving as a medium of exchange, unit of account, and store of value. However, with digital advancements, traditional currency is no longer the only option.

India has seen a shift toward digital payments, with innovations like UPI systems and widespread use of cards, driven by the government's 'Digital India' initiative. Today, digital platforms enable seamless transactions, reducing reliance on cash and promoting a more transparent financial system.

This shift toward a 'Faceless, Paperless, and Cashless' economy marks a significant transformation, with digital platforms becoming central to financial transactions in a modern economic landscape.

Keywords

Barter System, Money, Measure of Value, Medium of exchange, Store of value

Discussion

3.1.1 Concept of Money

Money is the commonly accepted medium of exchange. There cannot be any exchange of goods in an economy with just one person and money has no use in such a situation. Money serves no use for them, even if there are other people there, like in the case of a family residing in a remote island which does not participate in market transactions. Money becomes a crucial tool for facilitating these exchanges as soon as there are several economic agents involved in transactions through the market. Barter trades are commercial transactions conducted without the use of money as a medium of exchange. However, the success of such an exchange depends on the double coincidence of wants. For example, think of a person who has a surplus of corn and wants to trade it for shoes. If they are not fortunate enough, they might not be able to locate someone who has the exact opposite need for corn and an excess of shoes to trade. The price of conducting searches could become unaffordable as the number of people increases. An intermediate thing that is acceptable to both parties is therefore required to facilitate the transaction. We call such a thing as money. The people can then earn money by selling their goods and utilise that money to buy their requirements.

Money is defined as anything that is generally acceptable as a means of exchange and that at the same time acts as a measure and as a store of value. Different economists have given different definitions of money. However, all of money's functions can be used to define money in the most acceptable manner.

According to Robertson, "Money is anything which is widely accepted in payment for goods, or in discharge of other kinds of business obligations."

W. A. L. Coulborn defines money as, "The means of valuation and payment."

Prof. Walker suggests that, "Money is what money does."

According to Seligman, "Money is one thing that possesses general acceptability."

J. M. Keynes describes money as, "That by delivery of which debt contracts and price contracts are discharged and in the shape of which a store of general purchasing power is held." Crowther defines money as, "Anything that is generally acceptable as a means of exchange (as a means of settling debts) and that at the same time acts as measure and as a store of value."

3.1.2 Kinds of Money

Money is referred to as a generally accepted medium of exchange for goods and services in economics. Anything that fulfils the three functions of money such as medium of exchange, store of value, unit of account, is generally regarded as money. Given this, it is not unexpected that there have always been several forms of currency. We will look at the four most pertinent forms of money: commodity money, fiat money, fiduciary money, and commercial bank money.

1. Commodity Money

The simplest and perhaps oldest form of money is commodity money. It is based on limited natural resources that serve as a medium of exchange, a store of value, and a unit of account. A barter system, in which commodities and services are directly exchanged for one another, is closely related to (and derives from) commodity money. This procedure is made easier by commodity money because it serves as a widely used means of exchange. The most important thing to keep in mind about commodity money is that the intrinsic value of the product itself determines its value. In other words, the item itself turns into currency. Gold coins, beads, shells, spices, and other items serve as examples of commodity money.

2. Fiat Money

Fiat money is valued by a government directive (i.e., fiat). This means that once the government proclaims fiat money to be legal currency, it becomes mandatory for all citizens and businesses to accept it as payment. Fiat money is not backed by any tangible goods, in contrast to commodity money. Its intrinsic value is, by definition, much lower than its face value. Thus, the link between supply and demand determines the value of fiat money. Fiat money is the foundation of contemporary economies. Coins and bills are examples of fiat money.

3. Fiduciary Money

The value of fiduciary money lies on the perception that it would be widely used as a medium of exchange. It is not deemed legal currency by the government, unlike fiat money, so no one is compelled to accept it as payment by law. Instead, if the bearer requests it, the issuer of fiduciary money will exchange it back for a commodity or fiat money. Fiduciary money is much like conventional fiat or commodity money in that it can be used by anyone if they have confidence that the promise will not be breached. Fiduciary money includes things like cheques, bank notes, and demand draft.

4. Commercial Bank Money

Claims against financial institutions that can be used to pay for products or services are known as commercial bank money. It stands for the percentage of a currency's value that is made up of debt created by commercial banks. More specifically, what is known as fractional reserve banking is how commercial bank money is produced. Commercial banks engage in a practice known as "fractional reserve banking," whereby they extend loans that exceed the value of the actual currency they possess. Just keep in mind at this point that, debt created by commercial banks is essentially what commercial bank money is.

3.1.3 Functions of Money

We have already discussed the three purposes or services that money offers are frequently used as its definition. A medium of exchange, a store of value, and a unit of account, are all functions performed by money. Thus, money solves the problems created by the barter system. Numerous primary, secondary, contingent, and other functions that money performs not only make bartering easier but also grease the wheels of trade and industry in the modern world. According to Professor Kinley, there are three general categories under which money might be used. That is,

1. Primary functions
2. Secondary functions
3. Contingency functions
4. Other functions

Let us discuss all these functions in detail.

3.1.3.1 Primary Functions

Money is essential to the economy because it serves as a medium of transaction and a benchmark for determining value. These essential money-related functions are regarded as its main purposes. The following are some of the crucial basic purposes of money:

a) Money as a Medium of Exchange

When making trades and purchases, money serves as a mediator. Money makes it easier to buy and sell things, removing the double coincidence of wants, inconveniences, and challenges pertaining to the barter system. Money also provides a lot of economic independence and helps the market function more efficiently by boosting competition and expanding the market.

For instance, the baker who provided the greengrocer with bread would not enjoy or have enough of these things if the greengrocer had to accept payment in onions and carrots. As a result, the baker would have to resell the goods, which would be exceedingly inconvenient and take a lot of time. It is possible to save a lot of hassle by substituting the use of money for these difficult transactions. If the baker accepts payment in cash, the person is free to use the money anyway she/he sees fit.

The disadvantages of bartering are overcome by using money as a medium of exchange. Money thus offers the most effective way to fulfil desires. Every consumer has a unique set of desires. With money, one can prioritise one's wants according to importance and capacity, and then take the appropriate action.

b) Money as a Measure of Value

Measuring the worth of items in a barter system is challenging. For instance, a donkey might be worth 100 quintals of corn or five goats, while a Toyota vehicle would be worth ten two-wheelers. Any goods or services have a range of exchange values, which is one drawback of the barter system. Everything can be measured in terms of money. It enables everything to be priced, and valued in terms of money. People can compare prices in order to determine the relative worth of various commodities and services. This accomplishes two key goals: consumers can plan their expenditures and businessmen can calculate their profit and loss figures by keeping track of their costs and receipts.

Money functions as an accounting unit. The rupee is the unit of account in India whereas it is the dollar in the United States, the pound sterling in the United Kingdom, the yen in Japan, and the yuan in China.

3.1.3.2 Secondary Functions

Since they are derived from the basic functions, the secondary functions of money are also referred to as derivative functions. Secondary functions include standard of deferred payments, store of value, and transfer of value. Below is a discussion of them:

a) Money as a Store of Value

The fact that commodities, like wheat or salt, or even animals like horses or cows, depreciate over time and lose their worth as money is a significant drawback. As a result, they are completely inadequate as a means of wealth storage. Consider the case of a farmer in order to get a sense of the difficulties associated with savings in a barter system. Each week, he wished to set aside some wheat for later use. But since the "savings" would have run out, the farmer would be unable to utilise this in his old age. Again, a coal miner would have trouble finding enough storage space for all of his coal if he wished to set aside a particular amount of coal each week for the same purpose. Such issues can be solved and people are able to preserve for the future by using money. People can save their extra money thanks to modern forms of money like coins, notes, and bank deposits. As a result, money serves as storage of purchasing power.

It can be kept for a while and utilised to fund upcoming payments. Additionally, people who save money have the assurance that their savings will be valuable when they want to use them in the future. This is only true, though, if there is no significant inflation (or deflation) in the nation.

b) Money as a Standard of Deferred Payments

The first function has been expanded upon by this. In this case, money is once more employed as a medium of exchange, but the payment is spread out over time. As a result, when things are purchased on hire-purchase, the buyer receives them after making a deposit and is responsible for the remaining balance over a period of time.

Problems could arise in this kind of transaction under the barter system. Consider a fisherman who decides to purchase a washing machine and agrees to pay for it with a specified quantity of fish caught each week for a specific number of weeks. The washing machine seller may have more than enough fish after a few weeks. But in the upcoming weeks, the person will need to obtain additional fish. If money had been exchanged, the seller may then use it to purchase fish or whatever else the person desired, either now or in the future. In other words, using money enables deferring spending from the present to a future event.

In a contemporary economy, credit is used in a majority of transactions (both buying and selling). The use of money enables society's stakeholders to postpone their current spending to some future date.

Money serves as a valuable standard of deferred payments, allowing the existing and present transactions to be paid off in the future. This indicates that it is now feasible to express upcoming payments in monetary terms. A borrower who takes out a loan for a specific amount today agrees to pay it back later. Money reduces the risk associated with borrowing and lending by acting as a common unit of time-based payments. As a result, it aids in boosting all forms of economic activity that rely on credit or borrowed funds.

c) Money as a Transfer of Value

Money continues to move values from one person to another and from one place to another because it is a commonly accepted form of payment and a store of worth. Anybody who has money in the form of cash or other assets can transfer it to another individual. They can also sell assets in Delhi and buy new ones in Mysore. Money thus makes the transfer of value between people and places easier.

3. Contingent Functions

The contingent functions of money were not those that were planned. They rather developed alongside the wider range of facilitating functions of money. Money can be used to help different economic entities, such as consumers, producers, etc., to reach decisions on how much to consume, how much to generate, etc.

The following are the major contingent functions:

a) Maximisation of Utility:

A rational consumer seeks to maximise his utility (or satisfaction) when making a variety of purchases. If the ratio of marginal utilities of various commodities is equal to the ratio of prices of various items, the customer will be able to maximise his satisfaction. Money plays a significant role in equating the marginal utilities because all commodity prices are stated in terms of money.

b) Employment of Factor Inputs:

The manufacturer uses money to determine how many units of various production elements should be used. Every producer seeks to maximise profits by utilising a variety of production elements. A producer aiming for maximum profit will equate a factor's marginal productivity, which is expressed in value terms, with its price or rate of compensation, where compensation is measured in monetary terms. As a result, using money to make judgments about the employment of production-related units is advantageous.

c) Credit System:

The use of credit in the economy has been made easier by the availability of money. Numerous commercial and corporate transactions are financed in the modern economy. The foundation for the entire credit system is money. Important credit instruments like checks and bills of exchange cannot be used if money does not exist.

d) Distribution of National Income:

Since numerous elements contribute to the manufacturing process, it is simple to distribute the nation's profits among the various factors of production using money. Production is therefore the result of the input from the countless units of these various elements. The distribution of national wealth among various production elements would not have been conceivable without the usage of money.

4. Other Functions

In addition to its primary, secondary, and contingent functions, money also serves the following other functions:

a) Helps to Maintain Repayment Capacity:

Money embodies the quality of general acceptability. Every person and business must therefore have a certain level of liquid cash in their assets in order to maintain their ability to pay. By doing this, the company safeguards its ability to repay debt. Similar to this, banks, insurance firms, and even governments keep some money in a liquid state so they can continue to be able to make payments.

b) Money Represents Generalised Purchasing Power:

Money is a symbol of purchasing power. Any purpose can be served by this accumulated purchasing power in monetary terms. It is not required that money be used for the same thing for which it was originally saved. For instance, it is not necessary for someone to use their savings solely for building a house if they have them set aside today to build one in the future. The saver might choose to utilise the money for other, more vital things, like his kids' schooling. Over time, goals for which savings have been established may alter. If the focus of the saver changes, he faces no difficulty because money represents generalised power that can be put to any use saver likes.

c) Money Provides Liquidity to Capital:

Money is the most liquid form of capital and can be put to any use. It is essential to keep capital in a liquid form for a variety of motives. According to J.M. Keynes, money is kept in liquid form for three motives such as transactions motive, precautionary motive, and speculative motive.

Transactions motive refers to the need for money to carry out daily transactions. This motive can be examined from the viewpoints of consumers who seek revenue to cover family expenses, and from the viewpoint of businessmen who need money to conduct their company activities (business motive).

Precautionary motive refers to people's desire to keep cash on hand in case of unforeseen contingencies. People want to save money in case they experience unforeseen circumstances like illness, accidents, etc. The quantity of money held for this purpose depends on the type of person and the circumstances of his or her life. The demand for funds for precautionary balances is strongly correlated with income levels. The cash balance kept for emergencies will be higher for those with higher income.

Speculative motive refers to the holder's preference to hold cash as opposed to other financial assets like bonds. People can supposedly hold their riches in the form of bonds or in the form of cash balances under the speculative motive. Whether to hold bonds or cash balances depends on predictions for future changes in the interest rate or capital value of assets (bonds).

The market value of securities (bonds) varies inversely with the interest rate, i.e., when the interest rate rises, the market value of bonds decreases. Because of this, demand for money for speculative purposes increases at low interest rates and decreases at high interest rates.

3.1.4 Significance of Money

In the modern economy, money occupies a central position. Money is used everywhere for everything. In a money system, every sector of economic activity is fundamentally different from what it would have been in a barter economy. All aspects of economic activities such as consumption, production, exchange, and distribution as well as public finances and economic welfare have been profoundly impacted by money.

Let us discuss the important roles played by money in the modern economy.

1. Money helps us to avoid double coincidence of wants

Money gives us the ability to comprehend the intricate system of many different pricing for goods and services relative to one another that predominates in the barter system, making it challenging to compare costs and make the best choice. Money allowed for the comparison of prices of various commodities and services in a single unit.

For instance, if you are a doctor providing your services, you simply need to know the money price of those services and the money price of the goods and services you will purchase; you do not need a comprehensive inventory of all the goods that are being offered as part of the price of your service.

2. Money facilitates exchange and promotes trade

Money acts as a medium of exchange, a standard of deferred payment, a store of value, and other functions that make it crucial for trade that involves exchange and for economic growth. The double coincidence of wants and a universal standard of value that existed in the barter system have been eliminated by money, which has aided in the global economic growth and development of all nations. Without money, trade and exchanges would have to be very infrequent and time and energy consuming. Money helps the process of exchange.

3. Money promotes specialisation and productivity

Money has a significant role in modern economies because it encourages specialisation and production through the division of labour. Trade and exchange were challenging under the barter system since a man had to be self-sufficient. Exchanging goods and services was very challenging when there was no money. The largest issue with the specialisation and division of labour among people and nations was this. By facilitating the exchange and trade of commodities and services, which resulted in the increase of production, money created the conditions for specialisation.

4. Money promotes savings

Saving is now significantly easier than it was during the barter system. An increase in savings encourages an increase in investment, which supports a nation's economic growth. The availability of more money has made borrowing and lending considerably simpler, which has enhanced both productivity and consumption in an economy. Savings enable investment, which increases the pace of capital accumulation and, ultimately, increases production in the modern economy.

5. Money helps in maximising satisfaction of consumers

Money is a universal means of exchange for consumers; they can use it to purchase anything at any time. Given that the value of all commodities and services is defined in terms of money, consumers may simply assess the relative prices of goods and services and the expected utility from them (a common measure). Consumers can simply allocate their funds to purchase a variety of goods and services whose marginal benefits are inversely correlated with their costs. The level of customer satisfaction will be increased.

6. Money helps in maximising profits by producers

By equating marginal cost with marginal revenue, producers can quickly assess the money costs and money income of the various levels of output and decide on the level of output that optimises their profits. By comparing the marginal revenue product of a factor with the cash payment that must be made, producers can quickly decide how many units of that element should be used. Producers can readily compare the marginal revenue product of one item against the marginal cost of that factor in order to maximise profits.

7. Money can help an economy to overcome from recession or depression

Modern economists contend that money is crucial to bringing about substantive changes in the economy. They claim that during times of recession or depression, when there is a significant amount of excess productive capacity and unemployment, increasing the money supply by the monetary authority will increase aggregate demand, which will then increase output and employment in the economy and help to lift it out of the slump.

8. Money helps in framing government policies

The functioning of the government is crucial in the modern economy. Taxes, fees, the cost of public utility services, and other forms of revenue are received by the government, which uses them for operational and developmental needs. However, a modern state's enormous public revenues and expenditures would be unthinkable without money. Additionally, only a monetary economy may use fiscal tools like public borrowing and deficit financing for economic development.

Since budgetary operations, which are made possible by the institutions of money, can be used to control economic activities, the fiscal policy of a government has recently taken on a significant role in economic life.

Thus, money has a significant impact

on how a nation's economy is shaped. The expansion of the money economy has enabled the development of economic liberalism and, as a result, the current free market or capitalist system. In actuality, the way that economic life is conducted has evolved along with changes in economic development. A nation's monetary system should be run so as to sustain high levels of employment and eliminate business fluctuations for improved economic performance.

Recap

- Money - a medium of exchange, measure, and store of value
- Commodity money - simplest form of money, based on intrinsic value
- Fiat money gains value through government decree and must be accepted as legal currency
- Fiduciary money's value depends on wide acceptance as a medium of exchange
- Commercial bank money - claims against financial institutions for payments
- Money has primary functions (medium of exchange, unit of measurement, store of purchasing power) and secondary functions (standard of deferred payments)
- Money facilitates transactions, serves as a unit of measurement, and stores purchasing power
- Money enables value transfer, making it widely accepted as payment and a store of worth.
- Money helps equate marginal utilities and commodity prices
- Money is the foundation for important credit instruments like checks and bills of exchange
- Money satisfies motives like transactions, precautionary, and speculative needs

Objective Questions

1. What is the primary function of money as stated in economics?
2. Which type of money gains value through government decree and must be accepted as legal currency?
3. What does fiduciary money's value depend on in an economy?
4. What is the foundation for the entire credit system in modern economies?
5. Which motive refers to the need for money to carry out daily transactions?
6. What is the term for the desire to keep cash in hand in case of unforeseen contingencies?
7. Which motive refers to the holder's preference to hold cash as opposed to other financial assets like bonds?
8. Which function of money allows for savings?
9. What was the event that prompted the introduction of Keynesian economics?
10. What is an excessive increase in the money supply known as?

Answers

1. Medium of exchange
2. Fiat money
3. Wide acceptance
4. Money
5. Transactions motive
6. Precautionary motive
7. Speculative motive
8. Store of value
9. The Great Depression
10. Inflation

Assignments

1. Discuss the different types of money, such as commodity, fiat, and fiduciary money.
2. Examine the major functions of money, including medium of exchange, unit of measurement, and store of purchasing power.
3. Analyse the importance of money in facilitating financial transactions.

Suggested Readings

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Unit 2
Inflation

Learning Outcomes

After reading this unit, the learner will be able to:

- familiarise with inflation
- distinguish between various types of inflation
- understand the effects of inflation
- know about various measures used to control inflation

Prerequisites

Anil visited his local market to buy 1 kilogram of bananas for ₹50. Pleased with the price and quality, he returned the following week with ₹50, expecting the same quantity. However, the vendor gave him only half a kilogram due to adverse weather conditions that reduced banana supply, causing the price to rise to ₹100 per kilogram.

This price fluctuation illustrates the concept of price stability, which is crucial for both consumers and businesses. Price stability allows consumers to plan their expenses without unexpected costs, while businesses can make informed decisions about production and investment. Governments and central banks aim to maintain price stability as a key macroeconomic objective, despite challenges like inflation.

Inflation, the sustained increase in prices over time, can erode purchasing power, reduce consumer confidence, and create uncertainty for businesses. Moderate inflation is normal, but excessive inflation can disrupt the economy. To manage inflation, governments use monetary and fiscal policies, such as adjusting interest rates and improving production and supply chains, to maintain stability and foster economic growth.

Keywords

Prices, Interest, Demand Pull, Cost Push, Money Supply, Inflation

Discussion

3.2.1 Inflation

Inflation is the overall rise in the price of goods and services over time in an economy. Each unit of currency may purchase fewer products and services when the general price level increases. As a result, inflation also indicates a decline in the value of money. In economics, the word 'inflation' refers to a general rise in prices measured against a standard level of purchasing power.

In our example, in the initial stage, Akash was able to buy 1 kg of tomato for ₹30. But later he could purchase only half a kilogram of tomato with the same money. That means, in the second case his capacity to buy, that is purchasing power, has decreased due to increase in price.

The term "inflation" describes the increase in the price of commonly used products and services, such as food, clothing, consumer durables, housing, transportation, and recreation. The average price change of a basket of goods and services over a period of time is used to calculate inflation.

If a kilogram of oranges cost ₹100 in 2021 and ₹110 in 2022, there would be a 10% increase in the price of a kilogram of oranges. Similar to this, several goods and services whose costs have increased through time are grouped together, and the percentage is determined by using the base year as the starting point. The rate of inflation is expressed as a percentage increase in the prices of the set of commodities.

Crowther defines inflation as "the state in which the value of money is falling and the prices are rising."

According to Coulborn, inflation can be defined as "too much money chasing too few goods."

Parkin and Bade describe inflation as "an upward movement in the average level of prices. Its opposite is deflation, a downward movement in the average level of prices. The boundary between inflation and deflation is price stability."

Peterson states: "The word inflation in the broadest possible sense refers to any increase in the general price-level which is sustained and non-seasonal in character."

According to Samuleson-Nordhaus, inflation is simply "a rise in the general level of prices."

Johnson defines inflation as "an increase in the quantity of money faster than real national output is expanding."

3.2.2 Types of inflation

Based on the extent of the increase, its seriousness, its character, and its sources, inflation can be divided into many types or divisions. The various forms of inflation are described in the section follows.

3.2.2.1 Classification on the Basis of Magnitude

Based on magnitude or speed, inflation can be classified into creeping or mild inflation, walking, or trotting inflation, running inflation, galloping, or jumping or hopping inflation and hyperinflation. Let us discuss them in detail.

1. Creeping Inflation: If the rate of price rise is slow but significant, we have creeping inflation. Economists have not stated how fast annual price increases are creeping. Some define creeping or mild inflation as an annual price rise of less than 2% and 3%. If the rate of price rise remains at this level, it is beneficial to economic development.

2. Walking or Trotting Inflation: When the annual increase in the general price level is between 3% and 7%, but less than 10% it is said to be walking or trotting inflation. In short, it occurs when prices rise moderately and the annual inflation rate rises by a single digit. Inflation at this rate is a warning sign to the government that it needs to control it before it becomes running inflation.

3. Running Inflation: Running inflation occurs when prices rise at a rate of 10 to 20 percent per year, similar to the running of a horse. Such inflation has an adverse impact on the poor and middle classes. Controlling it necessitates strong monetary and fiscal policies; otherwise, it leads to hyperinflation.

4. Galloping Inflation: Running inflation could eventually become galloping inflation if it is not managed. When an economy collapses, inflation takes an extreme form. "Galloping inflation" is the term for inflation with double-digit or triple-digit annual rates of 20, 100, or 200 percent. Many Latin American countries, including Chile, Brazil, and Argentina, experienced galloping inflation rates ranging from 50% to 700% during the 1970s and 1980s. This type of inflation is also known as hopping inflation or jumping inflation.

5. Hyperinflation: Hyperinflation or runaway inflation is the rapid increase in price of triple digit or more annually. In reality, hyperinflation occurs when the pace of inflation reaches an immeasurable and uncontrollable level. Every day, prices increase frequently. It is the last stage of inflation. Because of the persistent decline in the purchasing power of money, such a circumstance results in the complete collapse of the monetary system.

After the First World War, Germany in 1922 and 1923 experienced hyperinflation. Apart from this, Bolivia in mid-1985 (24,000% annually), Argentina and Brazil in 1989 and 1991, Yugoslavia in 1993, Zimbabwe in the 2000s, and Venezuela in 2018 were also striving hard to overcome hyperinflation. This kind of inflation causes a full lack of confidence in domestic currency very rapidly, and as a result, people start choosing other forms of payment and may even start using the barter system.

3.2.2.2 Classification on the basis of causes

Some major causes of inflation include demand-pull factors, cost-push factors, built-in inflation, and structural inflation. All of these reasons are briefly discussed here.

1. Demand-pull inflation: The flow of money and the flow of commodities and services interact in a market. The excess of demand over supply drives up the cost of goods and services as more money chases a comparatively smaller number of products and services. The phrase "too much money chasing too few goods" best describes this notion. Demand and supply are out of balance; as demand is rising more quickly than supply, prices will rise. This typically happens in economies that are expanding as more people obtain purchasing power and the supply is unable to keep up with the rising demand. When a nation's government prints money excessively, prices rise to match the increase in currency, which causes inflation. Demand-pull inflation is the term used to describe the inflation that results from more money spending. In other words, prices increase when demand for an item or service exceeds supply. Demand pull inflation refers to such a price increase. For example, more money in the hands of the general public due to an increase in government spending leads to an increase in demand and consequently higher pricing. Population growth, money hoarding and fluctuating patterns of consumption are some other factors for this kind of inflation.

2. Cost-push Inflation: Cost push inflation is the term used to describe inflation where prices rise as a result of rising production costs. In order to maintain profit margins, prices rise when production costs rise. Costs for all types of intermediate goods increase as more money and credit are directed toward the commodities or other asset markets. This is particularly clear whenever there is a negative economic shock that affects the supply of important commodities. These changes drive up the price of the final good or service, which in turn drives up consumer pricing.

The cost push inflation is the result of the two inflations listed below.

(a) Wage push inflation: When production costs rise and prices rise as a result of wage increases, this is referred to as wage push inflation. It causes a wage-price spiral.

(b) Profit Push Inflation: Prices can rise when markets are not perfectly competitive, allowing producers to increase their profits.

When cost push inflation occurs in the case of essential inputs, it can lead to run away inflation, a situation in which inflation chases inflation and is therefore difficult to control.

3. Built-in or Hangover Inflation: Built-in or hangover inflation occurs when inflation is caused by a combination of demand pull and cost push inflation. Built-in inflation is linked to adaptive expectations, or the belief that current inflation rates will continue in the future. People may expect a similar rate of increase in the future as the price of goods and services rises. As a result, workers may demand higher prices or wages in order to maintain their standard of living. Their higher wages raise the cost of goods and services, and the wage-price spiral continues as one factor induces the other and vice versa.

4. Structural Inflation: It is inflation that results from structural rigidities. It is distinctive to developing economies. The following are some examples of structural rigidities:

a) Agricultural bottleneck - This prevents agricultural output from being maximised, contributing to an increase in food grain prices.

b) Government budget constraints compel the government to pursue deficit financing.

c) Foreign Exchange Constraints - It causes a Balance of Payment (BoP) problem and forces a country's currency to devalue. Devaluation causes inflation because imports become more expensive, and availability of output in the domestic market decreases due to a large increase in exports.

3.2.3 Impact of inflation

Depending on which side one takes and how quickly the shift happens, inflation can be viewed as either a good or a bad thing. The major impacts of inflation are highlighted in the following sections such as the effects on distribution of income and wealth, effects on production, effects on income and employment, effects on business and trade, effects on the government finance and effects on growth.

3.2.3.1 Impact on Distribution of Income and Wealth

Different groups of people within the national economy experience the effects of inflation differently; some groups benefit by making massive fortunes, while others lose severely. We may now go into greater depth on how inflation affects various social groups:

1. Creditors and debtors: Creditors suffer during inflation because they receive less in goods and services than they would have if they had received the repayments during a time of low prices. On the other hand, because they pay their debts in depreciated currency, debtors as a whole benefit from inflation i.e., the same currency unit will now buy less goods and services.

2. Producers and workers: Producers benefit from increased pricing because they receive more profit from the sale of their goods. Producers can make more money during inflation since the rise in prices is typically greater than the rise in costs. But because their money earnings typically do not increase proportionately with the increase in prices, employees lose out as they experience a decline in their real wages. However, they benefit collectively as a result of increased employment during inflation.

3. Fixed income-earners: People with fixed incomes, such as salaried workers, renters, landlords, pensioners, etc., suffer a lot since inflation lowers the value of their earnings.

4. Investors: Equity shareholders benefit because they get dividends at higher rates due to higher corporate earnings and because the value of their holdings has increased. However, bondholders lose out since they receive fixed interest that has already lost real value.

5. Traders, speculators, and business people: They gain because they make more profits from the persistent and continuous rise in prices.

6. Farmers: Farmers also benefit because the rise in the prices of agricultural products is frequently bigger than the increase in the prices of other goods.

Therefore, inflation causes a change in the structure of income and wealth distribution in the nation. The distribution of income becomes increasingly unequal as a result of inflation.

3.2.3.2 Impact on Production

Rising prices stimulate production of all goods, both consumer and capital goods. As producers get an increasing amount of profit, they attempt to produce an immense share by utilising all of the resources at their disposal. As producers increase their profits, they try to produce more and more by utilising all available resources. However, after the stage of full employment, production cannot increase because all resources are fully utilised. Furthermore, producers and farmers would increase their stock in anticipation of further price increases. As a result, commodity hoarding and cornering will increase. However, such positive effects of inflation on output are not always found. Despite rising prices, production can sometimes come to a halt, as seen in recent years in developing countries such as India, Thailand, and Bangladesh. Stagflation is the term used to describe this situation.

3.2.3.3 Impact on Income and Employment

Inflation tends to increase the aggregate money income i.e., national income of the community due to increased spending and production. Similarly, increased production leads to an increase in the volume of employment. However, due to a decline in the purchasing power of money, people's real income does not rise proportionately.

3.2.3.4 Impact on business and trade

Because of higher incomes, increased production, and increased spending, the aggregate volume of internal trade tends to rise during inflation. However, the export trade is likely to suffer as domestic goods prices rise. However, business firms expand their operations in order to increase profits. Profits increase during most inflations because costs do not rise as quickly as prices. However, wages do not rise in lockstep with inflation, causing hardship for workers and increasing inequality. As the old adage goes, during inflation, prices move up the escalator while wages move down the stairs.

3.2.3.5 Impact on the Government Finance

During periods of inflation, government revenue rises as a result of increased revenue from income tax, sales tax, excise duties, and other sources. Similarly, as the government is required to spend more and more for administrative and other purposes, public expenditure rises. Rising prices, on the other hand, reduce the real burden of public debt because a fixed sum must be paid in instalments per period.

3.2.3.6 Impact on Growth

Mild inflation promotes economic growth, but runaway inflation prevents growth by raising the cost of development projects. Although some inflation is inevitable and desirable in a developing economy, excessive inflation tends to slow growth by slowing capital formation and creating uncertainty.

However, inflation, particularly runaway inflation, is a dangerous situation. It creates unease and uncertainty in the business world. As salaried people become dissatisfied and demand raises in their wages and salaries, society becomes unsettled.

The middle class suffers greatly as the real value of their income declines. Inflation is also unfair because it makes one group of people richer while making another group of people poorer. However, the most serious effect of inflation on the economy is that it makes the business environment unstable.

3.2.4 Measures to Regulate Inflation

The important responsibility of keeping inflation under control falls to a country's financial authorities. Governments generally strive to keep inflation within an optimal range that promotes growth while not significantly reducing the currency's purchasing power. It is accomplished through the implementation of anti-inflationary measures i.e., methods used to control inflation. These policies are primarily aimed at reducing aggregate demand for goods and services, with the underlying assumption that price inflation is caused by an excess of demand over a given supply of goods and services.

The following are some important anti-inflationary measures:

1. Monetary measures
2. Fiscal measures
3. Price control and rationing measures
4. Other measures

Let us discuss the above measures in detail.

3.2.4.1 Monetary Measures

Monetary policy is the measure taken by the central bank to manage the money supply and interest rates using monetary policy instruments under its control. In May 2016, the Reserve Bank of India (RBI) Act, 1934, was amended to provide a legal basis for the implementation of the flexible inflation-targeting framework. The primary goal of monetary policy is to maintain price stability by keeping inflation within the target band of 2 percent to 6 percent. Monetary policies aim to reduce money income. Now let us discuss the major monetary policy measures.

a. Credit control: The country's central bank employs a variety of methods to control the quantity and quality of credit. It does so by raising bank rates, selling securities on the open market, increasing the reserve ratio, and implementing a variety of selective credit control measures, such as raising margin requirements and regulating consumer credit. If inflation is caused by cost-push factors, monetary policy may be ineffective in controlling it. Monetary policy can only help to control inflation caused by demand-pull factors. We will study these measures in detail in the fourth unit of this block.

b. Currency demonetisation: One of the monetary measures is to demonetize higher denomination currency. Such measures are typically implemented when there is an abundance of black money in the country. For example, the Indian government announced the demonetisation of all ₹500 and ₹1,000 banknotes from the *Mahatma Gandhi Series* on November 8, 2016.

c. Issue of new currency: The issuance of new currency in place of the existing currency is the most severe monetary measure.. When a nation has hyperinflation and excessive note issuance, such a measure is implemented. It is a successful strategy. However, it is unfair because it primarily harms small depositors.

3.2.4.2 Fiscal Measures

Inflation cannot be managed by monetary policy alone. Therefore, fiscal measures should be added to it. Financial controls are very effective at reducing public, private, and individual consumption and investment expenditures. The following are the main fiscal measures.

a. Reduction in unnecessary expenditure: In order to control inflation, the government should cut back on unneeded spending on non-developmental activities. Additionally, this will restrain private spending that is reliant on government demand for products and services. But reducing government spending is not simple. Although this strategy is always appreciated, it might be challenging to distinguish between necessary and unnecessary spending. Taxation should therefore be used to supplement this strategy.

b. Increase in taxes: In order to reduce personal consumption expenditures, personal, corporate, and commodity tax rates should be raised. However, the tax rates should not be too high so as to deter saving, investment, and production. Instead, the tax code ought to offer greater incentives to those who invest, save, and generate more. The government should raise export duties while lowering import duties to improve the supply of commodities in the nation.

c. Increase in savings: Another step is to encourage people to save more money. Due to this, people's disposable income and consequently personal consumption expenses will tend to decrease. However, the rising cost of living makes it difficult for people to make significant voluntary savings. The government should launch long-term lottery programmes, high-interest public loans, prize-based savings plans, and other initiatives to achieve this goal. Additionally, mandatory provident funds, provident fund-cum-pension plans, etc. should be implemented. All these actions boost savings and are likely to be successful in limiting inflation.

d. Surplus budgets: Adopting anti-inflationary budgetary policy is a crucial step. The government should stop financing deficits in order to achieve this goal and switch to surplus budgets. It entails generating greater revenue while using less money.

e. Public debt: The repayment of public debt should be suspended concurrently and postponed until inflationary pressures in the economy are under control. Instead, to decrease the amount of money in circulation, the government should increase borrowing.

Fiscal measures by themselves cannot

help control inflation, much like monetary measures cannot. Monetary, non-monetary, and non-fiscal measures need to be added to them.

3.2.4.3 Price Control and Rationing Measures

Price control and rationing is another measure of direct control to check inflation.

a. Price control: Setting a price ceiling for essential consumer goods is referred to as price control. They are the maximum prices set by law, and anyone charging more than these prices is subject to legal punishments. Inflation is suppressed by price control in this method, but it cannot be controlled in the long run. In such a case, the basic inflationary pressure in the economy does not manifest itself in the form of a price rise for a short period of time.

b. Rationing: Rationing aims to distribute scarce goods consumption in order to make them available to a large number of consumers. It is used in the production of essential consumer goods such as wheat, rice, sugar, kerosene oil, and so on. It is intended to stabilise food prices and ensure distributive justice.

3.2.4.4 Other Measures

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

a. Measures to increase production: The following measures should be taken to boost output.

- Increasing production of necessities such as food, clothing, kerosene, sugar, vegetable oils, and other consumer items is one of the most important ways to reduce inflation.
- Preferential imports of the raw materials for such items may be made to boost production of critical commodities if required.
- Productivity improvements should also be pursued. To achieve this, agreements with trade unions that obligate them to refrain from strike action for a period of time should be made to maintain industrial peace.
- Rationalisation ought to be adopted as a long-term solution. Rationalisation boosts an industry's productivity and output through brains, muscles, and bullion.
- Diverse industries producing consumer goods should receive all assistance possible, including the most advanced technology, raw materials, financial aid, subsidies, etc., to boost production.

b. Rational wage policy: The implementation of a sensible wage and income policy is another crucial step to control inflation. A wage-price spiral situation in the economy is due to hyperinflation. The government should put a freeze on all wages, incomes, profits, dividends, bonuses, etc. to manage this. However, such a dramatic action can only be used for a limited time because it is likely to upset both industrialists and workers. Therefore, it is preferable to link compensation increases to productivity gains. This will have two results. It will limit salaries and wages while also boosting productivity, which will improve the output of the economy.

The impacts of inflation are not evenly distributed across the economy. Unexpected or unanticipated inflation rates are bad for the economy. They aggravate market volatility, which makes it challenging for corporations to establish long-term budgets. But a modest inflation rate is beneficial. It gives the economy fresh job and expansion chances. It is evident from the many monetary, fiscal, price control and rationing, and other measures covered above that the government should implement all of them at once in order to manage inflation. Utilising all the tools at the government's disposal, inflation should be combated.

Recap

- Inflation is overall rise in the price of goods and services over time in an economy
- Inflation can be classified based on magnitude or speed-creeping, walking, running, galloping inflation and hyperinflation
- Major causes of inflation - demand-pull factors, cost-push factors, built-in inflation, and structural inflation
- Demand-pull inflation - demand for goods and services exceeds the available supply
- Cost-push inflation - cost of producing goods and services increases, leading to higher prices
- Built-in or hangover inflation - inflation is caused by a combination of demand-pull and cost-push factors
- Monetary measures taken by the central bank to mitigate inflation include credit control, currency demonetisation, and issuing new currency
- Fiscal measures to control inflation include reducing unnecessary expenditure, increasing taxes and savings, and implementing surplus budgets and public debt
- Price control and rationing are direct measures to check inflation
- Price control involves setting a price ceiling for essential consumer goods
- Rationing aims to distribute scarce goods for consumption to make them available to a large number of consumers

Objective Questions

1. What is termed as a rise in the general price level?
2. What is the term for a slow but significant rise in prices?
3. What is the type of inflation when annual price increases between 3% and 7?
4. What is the term for inflation with double-digit or triple-digit annual rates?
5. What is the primary goal of monetary policy in controlling inflation?
6. What is the term for the rapid increase in the price of goods due to rising production costs?
7. What is the type of inflation caused by an excess of demand over supply?
8. Which type of inflation is linked to adaptive expectations?
9. Which type of inflation occurs at a rate between 10% and 20% per year?
10. What is the term for inflation with an annual rate of over 100%?
11. What are the two primary causes of inflation?
12. Which type of inflation is characterised by increasing wages leading to price increases?

Answers

1. Inflation
2. Creeping inflation
3. Walking inflation
4. Galloping inflation
5. Price stability
6. Cost-push inflation
7. Demand-pull inflation
8. Built-in inflation
9. Running inflation
10. Hyperinflation
11. Demand & Cost
12. Cost push inflation

Assignments

1. Explain the major causes of inflation, such as demand-pull factors, cost-push factors, built-in inflation, and structural inflation.
2. Explore the different types of inflation. Compare and contrast the characteristics of each type and their implications for economies and societies.
3. Analyse the relationship between inflation and monetary policy. Explain how central banks use tools such as interest rates, money supply control, and quantitative easing to manage inflation.

Suggested Readings

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Unit 3
Banking

Learning Outcomes

After reading this unit, the learner will be able to:

- familiarise with banking and its significance
- know about different types of deposit
- understand about central bank and its functions
- identity the basic concept of monetary policy

Prerequisites

If you have ₹15,000 to invest for a year or need to borrow ₹7,00,000 for a 15-year home loan, finding individuals to match these specific needs would be challenging. Banks fill this gap by connecting savers and borrowers, enabling efficient capital allocation. Without banks, people would rely on informal lending, which often carries high risks and unfavourable terms.

Banks are crucial in driving economic activity by providing essential services such as infrastructure, financing, and investment opportunities. They help individuals, businesses, and governments manage finances, shaping national economies and supporting sectors like trade, commerce, insurance, and investment.

Globally, the banking sector manages trillions of dollars in assets, highlighting its role in economic development. In developed nations, well-structured banks support business growth, while emerging economies and rural areas suffer from inadequate financial institutions, hindering progress. Modernising and expanding banking services are essential for sustaining growth in underserved regions.

With the rise of digital banking, access to financial services in remote areas has increased, allowing people in rural regions to engage in transactions, secure loans, and invest. This ongoing development of banking infrastructure is crucial for economic progress and financial inclusion, reducing societal inequalities. The banking sector is not just a facilitator of transactions but a foundation for economic stability, investment, and growth, particularly in areas lacking strong financial systems.

Keywords

Banking, Deposits, Banks, Credit, Finance, Monetary Policy

Discussion

3.3.1 Banking

According to some writers, the term bank is a shortened version of the Latin words "bancus" or "banque," which mean a bench. This origin's explanation is ascribed to the fact that Jews in Lombardy conducted their money exchange business on benches in the marketplace, and when the venture failed, the community burned the "Banco". Other authorities believe that the German term "Back," which means joint stock fund, is where the word "bank" originally came from. Later, the word "Back" was Italianised into "Bank" when the Germans took over a large portion of Italy. Therefore, it is impossible to determine which of the opinions is true because there is no record to confirm the validity of any of the opinions.

Banking can be defined as the process of creating, storing, and managing money. Making money available for lending is a cost-effective function that a banker performs. In addition to managing deposits and investments, banking also performs several other financial activities, such as foreign money transfers.

3.3.2 Types of Deposits

Banking and money are now a part of our daily life. Banks provide a wide range of financial solutions to assist with the day-to-day money management. When we deposit money with the bank, it is kept safe and over time, it also accrues interest. This is referred to as the deposit, and the bank gives each deposit a special identification that is referred to as an account. A distinct account corresponds to each deposit, and vice versa.

If you have ever opened an account with one of the Indian banks, you are probably aware of the variety of offers and advantages that the banks provide. These offers are designed to draw a variety of customers with various needs. You can deposit money into an account at a bank and then take it out as needed. You might not be obliged to keep any balance in some accounts while maintaining specific balances in others. In a similar way, you may be required to pay a withdrawal fee for some accounts while being able to readily take money from others. In addition, some accounts have no transaction restrictions, whereas others have daily or monthly transaction caps.

The four main forms of bank deposits that are traditionally available in India on the basis of purpose they serve are,

1. Savings deposit
2. Current deposit
3. Recurring deposit
4. Fixed deposit

Each has a unique set of advantages. We shall examine these deposits in detail now. You will also be aware of which deposit and account kinds are best suited for particular groups.

1. Savings Deposit

This deposit is appropriate for those who have a reliable source of income and desire to save some money, as its name suggests. Let us use an example to understand this. Regular wage earners choose savings accounts because they are best suited for them. A minimal initial deposit, which varies from bank to bank, is typically required to create a savings bank account. Depending on the bank, the minimum balance requirement might vary. Money can be deposited into your savings account at any time. The interest is paid on the remaining balance in your account and is earned in accordance with the interest rate that the bank offers. Money can be deposited at any moment into this account. Additionally, some banks provide unique savings accounts for the various social groups such as women, senior citizens, children, etc. Each has a different interest rate and withdrawal cap. You have many options for taking money out of this account: writing a cheque, using an ATM card, signing a withdrawal form, net banking, mobile banking, using UPI applications etc. The frequency and size of withdrawals from a savings account varies from bank to bank.

2. Current Deposit

Big businessmen, corporations, and organisations like hospitals, colleges, and schools are required to make payments using their bank accounts. They cannot open a savings bank account since there are limitations on the number of withdrawals that can be made. They must have access to an account that allows unlimited withdrawals.

For them, banks have current accounts. Similar to a savings account, this one also needs a minimum deposit to be made upon starting the account. The fact that banks do not offer an interest on a current account is a drawback. Moreover, banks impose high charges for maintenance and services of current accounts. One benefit of current accounts is a feature known as the overdraft facility whereby banks permit withdrawals in excess of the deposit sum for the convenience of account holders. This overdraft facility is permitted to some consumers and up to a certain limit, subject to prior arrangement with the bank.

3. Recurring Deposit

RD account (Recurring Deposit account) is a particular kind of account where you have to deposit an amount on a regular basis rather than all at once. This fixed sum can be as little as ₹100 per month. You should open this account if you wish to start saving money regularly. The interest rate on an RD varies from bank to bank and might be anywhere between 5% and 7%. Senior citizens usually receive a higher interest rate than others.

The maturity periods for recurring deposits might range from six months to 120 months. You can instruct your bank to withdraw a certain sum each month, and this sum will be routinely credited to your recurring deposit account. The bank may impose some penalties for missing an instalment payment, though. The ability to borrow up to 80% to 90% of your deposit is another unique feature of a recurring deposit account. There is no provision for early withdrawal, and you must pay the penalty if you cancel your recurring deposit account before the date of maturity.

4. Fixed Deposit

Some bank customers might prefer to keep money for a longer period of time. A greater interest rate is offered on these deposits. Banks permit a lower rate of interest if funds are deposited in a savings account. To earn interest at a greater rate, money is deposited into a fixed deposit account.

This kind of bank account enables the deposit of a sum for a predetermined time. There is no withdrawal permitted during this deposit period. The depositor may, however, request to pay out the money prior to its maturity. Banks provide interest in that situation that is less than what was agreed upon. At specific intervals of time, a fixed deposit account's interest can be withdrawn. The deposit may be withdrawn at the end of the time frame or renewed for an additional time frame. In addition, banks make loans secured by fixed deposit receipts.

Banks assist in growth of money and savings. To efficiently manage your finances, you can open all of the aforementioned types of deposit accounts with the same bank. Everything is pretty simple to do online. Both the transactional information and the account balance are available online. You may preserve your money and obtain assured returns with investing options like fixed deposits, where you get a good rate of interest. For people who want to invest money to achieve their long-term objectives, fixed deposits are an excellent option. You can save money and earn a good interest rate even with a savings account. For people who desire to invest a fixed sum on a regular basis, recurring deposits are a viable option. Therefore, each account has benefits and drawbacks. You must not only learn but also choose rationally which account type you require now or in the future.

3.3.3 Commercial Banks

A commercial bank is a financial organisation that accepts deposits from the general public and lending loans for investment and consumption purposes in order to maximise profits.

Commercial banks are for-profit organisations that provide their customers with financial services like loans, as well as services like deposits, electronic fund transfers, etc. Commercial banks play a key role in the economy of a nation since they provide the short and medium-term financing needs of various businesses.

Types of Commercial Banks

Commercial banks can be classified into three different categories. They are:

1. Private Sector Banks: Private banks are the commercial banks where the majority of the share capital is owned by private persons and companies. All private banks are listed as limited liability companies. Examples of such banks include Industrial Credit and Investment Corporation of India (ICICI) Bank, Housing Development Finance Corporation (HDFC) Bank, Development Credit Bank (DCB Bank Ltd), Axis Bank, IndusInd Bank, Kotak Mahindra Bank, Yes Bank, etc.

2. Public Sector Banks: This category of bank is nationalised, and the government owns a substantial stake of it. For instance, Bank of Baroda, Bank of India, Punjab National Bank, Canara Bank, Indian Bank, Indian Overseas Bank, Union Bank of India, State Bank of India (SBI), etc.

3. Foreign Banks: These financial institutions are established in foreign nations and have branches overseas. Examples of such banks are American Express Bank, Citibank, Deutsche Bank, Standard & Chartered Bank, Royal Bank of Scotland, Bank of America, Bank of Bahrain and Kuwait Hong Kong and Shanghai Banking Corporation (HSBC) etc.

3.3.3.1 Functions of Commercial Banks

Main activities of Commercial banks include accepting deposits, lending loans, and making investments with the goal of generating profits for both their customers and themselves. There are two broad categories into which functions of commercial banks can be classified: primary functions and secondary functions.

(I) Primary Functions

The primary functions carried out by commercial banks are very essential functions of banking. The following operations constitute the core operations of commercial banks:

(a) Accepting deposits from the public

(b) Lending loans and advances

(c) Credit creation

(d) Transfer of fund

(e) Practice of cheque system and the plastic card

The following is a discussion of these central or top-priority functions of commercial banks:

(a) Accepting Deposits from the Public

One of the key duties of a commercial bank is accepting deposits from the public. The banks use these deposits to mobilise money and pay interest to the depositors. Banks stimulate the economy and increase trade and commerce by turning these deposits into loans. There are many different deposit mobilisation schemes in use. They are,

1. Saving deposits
2. Current deposits
3. Recurring or cumulative deposits
4. Fixed deposits

We have already discussed different types of deposits in the previous section.

(b) Lending Loans and Advances

Another essential role of a commercial bank is extending loans to people for different things. For their business and corporate activities, banks lend money to entrepreneurs, business owners, and other individuals and organisations. Customers are provided loans for their various requirements like purchasing home appliances, construction of houses, buying real estate assets, education of their children, marriage, buying vehicles, etc. They are stated to actively contribute to the growth of industry, trade, commerce, and related activities by doing this. The following sorts of advances and loans are typically offered by banks:

1) Loans

2) Overdraft

3) Cash credit

4) Discounting of bills

5) Money at call and short notice

6) Consumer credit

7) Miscellaneous advances

The various types of loans and advances are briefly explained below.

1. Loans: A loan is a lump sum advance made to the borrower. A specific amount of money is loaned to a person or business under a loan arrangement in a few instances, in exchange for some type of collateral security. The total amount of the approved loan is subject to interest.

2. Overdraft: It is the most popular and practical lending method in India. This service is provided to current account holders who are reputable and trustworthy consumers. A consumer can withdraw money in addition to the balance on his current account. Only current account holders are permitted to use the overdraft option. Only the amount that was overdrawn within a given period is subject to interest.

3. Cash Credit: Cash credit is a form of advancing credit in which the customer opens an account and the sanctioned amount is credited to that account. This is one of the most common types of borrowing used by business people and traders. With a cash credit, a customer is given the option to borrow money up to a predetermined maximum in exchange for a bond of credit signed by one or more sureties or specific other instruments. A new Cash Credit Account is formed in the customer's favour at the time of the cash advance. Cash credit is a permanent financial arrangement.

4. Discounting of bills of exchange: The bill holder has the option of discounting the bank bills of exchange. He can obtain money before the date of maturity by discounting. The bank pays the value of the bill to the bearer after deducting a specific marginal amount as the discount rate. The person who accepted the bill pays the banker the full value of the bill on the maturity date.

5. Money at call and short notice: A loan that is given on demand and with little notice is called money at call and short notice. These loans are very common among bill brokers and the banking industry. The bank can call it back immediately.

6. Consumer credit: Banks grant loans to households so they can buy durable consumer products like home appliances. The customer is given a lump sum payment. It has an instalment repayment plan.

7. Miscellaneous advances: In addition to the aforementioned services, commercial banks offer loans to cooperatives, credit to farmers, discounts and purchases on export bills, financing for self-employment, advances to exporters, and more.

(c) Credit creation

It is a special ability of a modern bank. When a bank accomplishes crucial tasks like accepting and lending money, it also automatically completes another task called credit creation. When a bank advances a loan to a customer, it does not really provide money in the form of cash; instead, it creates an account in the borrower's name and credits the loan amount to it. Thus, when a loan is granted, an equivalent deposit is made, enabling the borrower to withdraw the necessary amount via cheques. It causes an overall rise in the economy's money supply. In a nutshell, the ability of banks to increase deposits through increased loans and advances is known as credit creation. We will discuss the same in detail at the end of this unit.

(d) Transfer of funds

The commercial banks carry out this function by offering services for transferring money within a nation or from one nation to another. Using bank drafts, mails, telegraphic, or electronic fund transfers, banks can send money. The use of mobile banking, online banking, SMS banking, and other similar techniques speed up the transfer of funds today.

(e) Use of the cheque system and the plastic card

Commercial banks perform this duty globally, facilitating the various economic agents' transaction activities. The depositors are permitted to withdraw funds from their deposits under the cheque system. In place of cash, cheques can be used for transactions. The usage of electronic cheque and shortened cheque is very common in the modern banking sector. Plastic cards, including ATM cards, VISA cards, and Master cards, are widely used. This function of commercial banks results in smoother transactions, more trade and commerce, and other benefits.

(II) Secondary functions

The commercial banks carry out a variety of secondary functions, which are non banking services. The customers benefit immensely from these services. The modern banking industry provides a wide range of services to draw in more customers and so grow the business. Agency services, general utility services and online banking services make up the three primary categories of the commercial banks' secondary functions.

a. Agency services

The bank is an agent and the client is the principal. The bank performs many functions in the capacity of special agent of the customers when they authorise such tasks to the bank as follows.

- Collection of credit instruments: On behalf of the customers, banks collect cheques, bills, promissory notes, etc. and credit the money to their accounts.
- Collection of dividends: On behalf of the customers, the bank collects dividends (return from the shares) and interest (return from the debentures) and credits the money to their accounts.
- Purchase and sale of securities: Banks sell government securities, debentures, and stocks on behalf of their customers. They also provide their customers with useful information about investments.
- Serves as trustee or executor: They carry out the instructions of the customer's will after death by serving as executors, trustees, and attorneys.
- Execution of standing orders: A customer can ask the banker to make payments to specific people or institutions on specific dates for services like insurance premiums, rent, and subscriptions. The banks carry out their customers' standing orders in this way.
- Remittance of funds: Banks help their clients send money from one location to another. Modern banks are heavily involved in domestic and international money transfers.
- Serving as a representative or correspondent: The banks also serve in this capacity for other banks and their customers.
- Handles foreign exchange: Banks buy and sell currencies on behalf of their clients.
- The banks serve as both consultants and correspondents for income tax.
- The banks serve as representatives for all levels of government, local authorities, etc.
- Banks will submit requests for allotments resulting from new capital issues on behalf of their clients.

b. General Utility Services

In addition to agency services, modern commercial banks offer a few utilitarian services to the public. Agency services are just intended for consumers, whereas general utility services are intended for both customers and the general public. The modern commercial banks in every country on earth provide the following general utility services.

- Safe custody of valuables
- Locker facilities
- Issuing drafts, traveller's cheques, and letters of credit, etc.
- Providing investment guidelines and advices
- Serving as a referee of the customer's financial position
- Organise and make available statistical data pertaining to trade, business, industry, etc.
- Underwrites shares and debentures

- Credit cards and debit cards
- Foreign exchange facilities
- Travellers' cheques

(c) Online banking services

Providing online banking services is one of the secondary functions of commercial banks. With the rapid growth of technology, online banking has become an essential service offered by most commercial banks. Online banking services include internet banking, mobile banking, and phone banking, which allow customers to access their accounts and perform banking transactions from anywhere at any time.

Internet banking allows customers to access their accounts through a web browser on their computer or mobile device. Customers can view their account balance and transaction history, transfer funds, pay bills, and even apply for loans and credit cards.

Mobile banking provides similar services as internet banking, but through a mobile application on the customer's smartphone or tablet. Mobile banking allows customers to access their accounts, transfer funds, and pay bills on-the-go.

Phone banking allows customers to access their accounts and perform transactions through a phone call. Customers can check their account balance, transfer funds, and even speak with a customer service representative to resolve any issues.

Overall, online banking services provide customers with convenience, accessibility, and flexibility to manage their finances. Commercial banks strive to enhance their online banking services to provide a seamless and secure banking experience for their customers.

In short, commercial banks are essential to the development of a nation's financial system. Without a strong banking system, no nation can reap the rewards of its growth. Their operations guarantee the development of the entire sectors of the economy. The functions and responsibilities of a commercial bank help a nation achieve financial inclusion and make the best use of its financial resources. Every country in the world requires a vibrant, modernised banking system with a human touch. Only then it can reap the best of its goals.

3.3.4 Central Bank

The Central Bank is regarded as the most powerful financial institution in the banking system. It is regarded as an important component of a country's economic and financial structure. The Central Bank is an apex bank in an economy which has an independent authority tasked with monitoring, regulating, and stabilising the country's monetary and banking framework.

More precisely, a central bank, or monetary authority is a public institution in charge of managing a country's currency, money supply, interest rates and commercial banking systems. A central bank, unlike a commercial bank, has control on increasing the nation's monetary base and usually prints the national currency. The Central Bank is the country's apex financial institution. The Reserve Bank of India (RBI), the European Central Bank (ECB), the Federal Reserve of the United States, the People's Bank of China, the Bank of Japan, etc are all examples for central banks.

3.3.4.1 Functions of Central Bank

The central bank occupies a central position in a country's monetary and banking setup, and it is perhaps because of this that it is known as the central bank. In this way, the bank functions as an institution whose primary goal is to control and regulate the money supply while keeping the welfare of the people in mind. A central bank is an institution that meets the credit needs of banks and other credit institutions, acts as a banker to banks and the government, and works for the country's economic interests. In the modern economy, the central bank is also in charge of regulating member banks and formulating monetary policies. The central bank of a country performs the following important functions.

a. Monopoly of Note Issue:

In almost every country, the central bank now has a monopoly on note issuance. In India the RBI has the sole right of issuing currency notes except one rupee notes. ₹1 notes are issued by Ministry of Finance.

Monopoly of note issue is significant because it:

1. provides system uniformity

2. Because the notes are backed by reserves, people have confidence that the basis of the note issue is sound.

3. The system is designed to be elastic, allowing note issues to be expanded and contracted as needed.

4. Credit creation by commercial banks can be controlled because it must be in accordance with the central bank's cash reserve.

b. Banker, Fiscal Agent, and Adviser to the Government

Central banks around the world serve as banker, fiscal agent, and adviser to their respective governments. As the government's banker, the central bank holds deposits from the central and state governments and makes payments on their behalf. As a result, it is the keeper of the government's money and wealth. As the government's fiscal agent, the central bank issues bonds and treasury bills. It contributes to the smooth working of government operations. It floats loans, pays interest on them, and eventually repays the amount on the government's behalf. As a result, it manages the entire public debt. The central bank also advises the government on economic and monetary issues such as controlling inflation, deflation, currency devaluation or revaluation, deficit financing, balance of payments issues related to financial crises, and so on.

c. Custodian of Cash Reserves of Commercial Banks

Commercial banks commonly deposit a portion of their cash with the central bank. This practice offers advantages such as efficient cash management, allowing the central bank to influence credit policies, and providing a safety net for commercial banks to boost their reserves during times of increased demand. Overall, this arrangement contributes to a stable and effective banking system, benefiting the economy at large.

d. Lender of the Last Resort

The central bank serves as the lender of last resort by providing accommodation to commercial banks and others in the form of re-discounts and collateral advances. This function ensures financial stability and inclusion by preventing the banking system from collapsing or failing. Commercial banks can receive central bank assistance and financial accommodation. It also saves the country's funds and resources.

During the Great Financial Recession (2007-2009), central banks in various countries performed their functions in appropriate ways, assisting in the recovery of the global economy from the financial crisis. These policies are part of an accommodative monetary policy and have kept the economy from falling into a severe depression.

e. Custodian and Manager of Foreign Exchange (FOREX) Reserves

The central bank keeps and manages the country's foreign exchange reserves. It serves as an official reservoir of gold and foreign currencies. It determines the value of the domestic currency in terms of foreign currencies. It also maintains proper Balance of Payments (BoP) and policies to stabilise the currency's internal and external value. It promotes international trade and attracts more Foreign Direct Investment (FDI) and Foreign Institutional Investment (FII) by adjusting foreign exchange reserves and rates as needed.

f. Bank of Central Clearance

Since the central bank keeps reserves from commercial banks, it can move money from one bank to another to speed up the clearance of cheques and resolve the claims that commercial banks have against one another.

The clearing houses department is a separate division of the central bank that serves this function. Commercial banks can settle their claims quickly and conveniently at one location when the central bank serves as a clearing agency. It also economises the amount of money used.

g. Controller of Credit

The central bank's most important function is to control commercial banks' credit creation power in order to control inflationary and deflationary pressures in the economy. For this purpose, it employs both quantitative (for example, Bank Rate, CRR, SLR, MSF, Repo, etc.) and qualitative (for example, margin requirements, credit rationing, direct action, etc.) methods. (We will discuss the same under the head monetary policy at the end of this unit). This function ensures that the economy's available resources are used to their full potential and contributes to financial and economic inclusion by maintaining price stability and proper monetary transmission in the country.

The Central Bank in a developing country performs the following developmental tasks in addition to the above mentioned functions:

- Maintains agricultural credit in order to provide special assistance to the agriculture sector.
- Serves as agents for international organisations such as the IMF and World Bank.
- Maintains departments of research and statistics, as well as public information of monetary and banking nature, in many cases for public assistance.
- Ensures proper branch expansion, regulation and financial inclusion.
- Grants licences and prevents systemic malpractices.
- Monitors or audits a bank's finances.
- Directs and manages bank mergers.
- Nationalise banks and provide equitable welfare.
- Eases credit restrictions in the system and supports the agricultural and industrial sectors, thereby generating employment opportunities
- Provide periodical reports on many economic concerns.
- Educate banking staff and conduct research, etc.

To summarise, all the central bank's functions are critical from the perspective of developing countries. Furthermore, there is no hard and fast rule defining a central bank's functions in terms of the goal of growth with stability. The 2008 economic meltdown/crisis has increased the role of central banks in the global economy's revival by implementing "monetary stimulus packages." Its function and role evolve with the passage of time. In a nutshell, the Central Bank is an essential component of any economic system and a vital government organ.

3.3.5 Monetary Policy

Monetary policy functions are at the heart of central banking operations and are essential to all central banks. Currency management and the maintenance of currency's external value were the primary concerns of central banks in the early days of central banking. Although the maintenance of external value and the link to the gold standard effectively implied price stability, the explicit concern for price stability is of relatively recent origin. The policy frameworks within which central banks operate have undergone significant changes in recent decades.

Monetary policy is the macroeconomic policy laid down by the central bank. A country's central bank uses a set of instruments called monetary policy tools to regulate the total amount of money in circulation, foster economic growth, and implement measures like adjusting interest rates and altering bank reserve requirements. It involves management of money supply and interest rate and is the demand side economic policy used by the government of a country to achieve macroeconomic objectives like inflation, consumption, growth, and liquidity.

3.3.5.1 Objectives of Monetary Policy

The objectives of monetary policy can vary from country to country, but generally, monetary policy aims to achieve the following goals:

- **Price Stability:** One of the primary objectives of monetary policy is to maintain price stability, which means controlling inflation and preventing deflation. Stable prices create a conducive environment for economic growth and help in planning and decision-making for individuals and businesses.
- **Full Employment:** Monetary policy also seeks to promote full employment or a low level of unemployment within an economy. By influencing the level of economic activity, central banks aim to create conditions that support job growth and reduce unemployment.
- **Economic Growth:** Monetary policy plays a role in fostering sustainable economic growth. It does this by managing interest rates and money supply to stimulate or moderate economic activity based on prevailing economic conditions.
- **Exchange Rate Stability:** Central banks may also target stable exchange rates to promote stable international trade and investment flows. Stable exchange rates can help reduce uncertainty for businesses engaged in global transactions.
- **Financial Stability**: Maintaining the stability of the financial system is another important goal of monetary policy. Central banks monitor financial markets and institutions to prevent excessive speculation, bubbles, and systemic risks that could lead to financial crises.
- **Controlled Money Supply**: Regulating the money supply is crucial for preventing excessive inflation or

deflation. Monetary policy aims to manage the growth rate of the money supply to align with the broader economic goals.

It is important to note that achieving all these objectives simultaneously can be challenging, as there are often trade-offs between them. Central banks carefully assess the prevailing economic conditions and adjust their monetary policy tools to strike a balance between these objectives.

3.3.5.2 Instruments of Monetary Policy

The ability of a central bank to control the money supply is probably its most significant role. The goal of the central bank's credit management measures is to balance economic stability and growth. The following two categories can generally be used to classify all credit control instruments. These are referred to as monetary policy instruments. The central bank's monetary policy is its strategy for regulating and controlling the amount of credit and money in the economy. The central bank uses two different approaches to credit control. They are,

(A) Quantitative or general methods of credit control and

(B) Qualitative or selective methods of credit control.

Let us examine these two methods in detail.

(A) Quantitative or general methods of credit control

The objective of quantitative or general credit control measures is to affect both the cost and total amount of available credit. These credit control tools consist of:

1. Bank Rate Policy
2. Open Market Operations (OMOs)
3. Cash Reserve Ratio (CRR)
4. Statutory Liquidity Ratio (SLR)
5. Liquidity Adjustment Facility (LAF) - Repo Rate & Reverse Repo Rate
6. Marginal Standing Facility (MSE)

Let us discuss these credit control techniques in detail:

1. Bank Rate Policy: The bank rate is the interest rate at which the central bank rediscounts eligible bills or advances against approved securities. It is also known as the discount rate. In simple terms, the bank rate is the interest rate charged by central banks when they provide financial accommodations to commercial banks.

It is used under the assumption that the bank rate and the market rate have a direct relationship. It is assumed that any change in the bank rate will cause a corresponding change in the market rate.

The central bank can successfully influence a country's credit situation by manipulating the bank rate. If the supply of money exceeds the demand for it, inflationary conditions will undoubtedly occur. During inflation, the central bank will increase the bank rate. A rise in the bank rate leads to an increase in the market rate. A rise in market price implies an increase in borrowing costs (rate of interest). Borrowers' access to funds has become more expensive. The central bank is said to have a "dear money policy" or a "tight monetary policy" in this context.

In contrast, when the country experiences deflation, the central bank intervenes and lowers the bank rate. The central bank in this country follows a "cheap money policy" or "cheap monetary policy".

2. Open Market Operations (OMOs): The central bank also employs open market operations as a method of quantitative credit control. The sale and purchase of government securities and other credit instruments in the open market by central bank is referred to as Open Market Operations. In practice, central banks only buy and sell government securities, both long and short term. The primary goals of open market operations are to influence commercial banks' reserves in order to control their credit creation power and to influence market interest rates in order to control commercial bank credit.

During an inflationary period, a country's central bank aims to control commercial bank credit expansion in order to control inflationary pressures. In this case, the central bank intervenes in the open market by selling government securities. Eventually, the total volume of legal tender currency, as well as the banks' ability to create more credit, will contract. In this situation the central bank implemented a contractionary monetary policy.

When the central bank wants to pursue an expansionary policy during a recession, it buys government securities in the open market with cash or cheque. The total amount of legal tender currency, as well as the bank's ability to create credit, grows in this case. The RBI's purchase of government securities is part of its "quantitative easing policy" or "soft money policy."

3. Cash Reserve Ratio (CRR): A cash reserve ratio, also known as a variable reserve ratio, is an efficient and direct method of credit control. It is also known as the required reserve ratio or the legal minimum requirements. By law or custom, every commercial bank is required to keep a certain percentage of its deposits with the central bank. The central bank's minimum reserve requirement can be expressed as a percentage of its time and demand deposits separately or as a percentage of total deposits. This is insisted upon to ensure the commercial bank's solvency and liquidity. Today, almost every country's central bank uses this instrument as an effective credit control measure.

During inflationary periods, the central bank aims to reduce the money supply by increasing reserve requirements, i.e., raising the CRR. This action is part of the policy of credit squeezing. When reserve requirements are raised, commercial banks will be required to keep more cash on deposit with the central bank. When commercial banks' cash resources or liquidity are reduced, credit creation is also reduced to the same extent. It is a component of the central bank's tight or costly monetary policy.

During periods of depression or deflation, the central bank targets to increase money supply circulation by lowering commercial bank reserve requirements, i.e. the CRR. This action is part of the policy of 'credit liberalisation.' A reduction in the CRR would improve liquidity, lower the cost of funds, and thus boost growth.

4. Statutory Liquidity Ratio (SLR): SLR is one of the most important quantitative credit control tools. SLR is a mandate for banks to keep a specified proportion of their total demand and time deposits in the form of liquid assets, namely cash, gold, and approved securities, mostly government securities with themselves.

The principal objectives of SLR requirements are to allow the government to borrow money from banks by pledging securities as collateral, having enough liquid funds in banks to meet an unforeseen mass panic withdrawal of customer deposits. This is done to make bank deposits safe and liquid and to allow the Central Bank to limit the amount of advances that banks can make.

During an inflationary period, the central bank raises the SLR rate. It will reduce the bank's resources, and as a result, the commercial banks' credit creation capacity will contract. During the crisis and deflation, the central bank reduced the SLR rate. By lowering the SLR holding, more resources will be available for lending, and banks' credit capacity will be increased.

5. Liquidity Adjustment Facility (LAF) - Repo Rate & Reverse Repo Rate: Liquidity Adjustment Facility (LAF) is also known as short term credit control methods. The repo rate and the reverse repo rate are the two most important short-term quantitative credit control techniques used by central banks.

The repo rate is the interest rate charged by the central bank from commercial banks when they borrow money from the central bank. To put it another way, the repo rate is the interest rate at which the central bank lends to banks.

The reverse repo rate is the interest rate offered by the central bank when commercial banks park excess funds with it, or it is the interest rate offered by the central bank to banks for parking funds with it.

During an inflationary period, central banks raise both repo and reverse repo rates. It will absorb excess liquidity in the system. In times of crisis and deflation, central banks lower both repo and reverse repo rates. It will increase liquidity in the system.

6. Marginal Standing Facility (MSF): The Marginal Standing Facility (MSF) is the overnight rate at which commercial banks can borrow from the central bank at their discretion without pledging government securities. During times of inflation, the central bank will raise the MSF rate, while during times of deflation or crisis, it will lower the MSF rate.

(B) Qualitative or selective methods of credit control

The qualitative or selective methods of credit control are used to regulate the use and direction of credit rather than the volume. The central bank uses qualitative controls to discourage the use of credit for inappropriate purposes while encouraging its use for more desirable or productive ones.

The qualitative or selective methods credit controls are:

1. Variations in Margin Requirements
2. Regulation of consumer credit
3. Credit Rationing
4. Direct Action
5. Moral Suasion
6. Publicity

Let us discuss these methods in brief.

1. Variations in Margin Requirements: The difference between the market value of the security and the amount or loan sanctioned on the security is referred to as the margin. Central banks use this technique as a selective credit control measure by increasing or decreasing the margin requirements.

During an inflationary period, the central bank should raise margin requirements so that the public can borrow less, resulting in fewer jobs, lower income, and lower demand. Thus, the prices are reduced. During a period of deflation, the central bank should reduce margin requirements so that the public can borrow more, resulting in more jobs, income, and demand. As a result, prices have increased.

2. Regulation of Consumer Credit: This method of selective credit control that aims to regulate consumer instalment credit or hire-purchase finance. The primary goal of this instrument is to control demand for durable consumer goods such as automobiles and electronics in the interest of economic stability. Under this method, the country's central bank is empowered to establish terms and conditions for the proper regulation of consumer credit extended by commercial banks. Because of the popularity of instalment and hire purchase finance, this method is considered as an appropriate credit control measure.

3. Credit Rationing: The method of credit controls regulates the purposes for which commercial banks grant credit. The central bank limits the amount of credit available to each applicant under credit rationing.

4. Direct Action: Direct action refers to all directives and restrictive measures issued to commercial banks from time to time to force them to follow a specific policy that the central bank wishes to enforce immediately. This policy may be used against errant banks rather than all banks.

The central bank may take direct actions against erring banks such as refusing rediscounting facilities, refusing to sanction further accommodation or loans, charging a penal rate of interest to those who wish to borrow beyond the prescribed limit, and so on. The central bank may even threaten to take over a commercial bank if it fails to follow its policies and instructions.

5. Moral Suasion: Moral suasion is a polite, friendly, and gentle method of achieving long-term tangible results in the direction of quantitative credit control. The central bank does not have excessive statutory compulsion in this method, but instead requests and persuades member banks to refrain from increasing their loans for non-essential activities such as speculation.

6. Publicity: Credit control is achieved through the publication of weekly statistics, periodicals, reviews of money market conditions, trade and industry, public finance, and statements of assets and liabilities, which reveal the prospect of investment, among other things.

In order to maintain price stability and promote rapid economic growth, a central bank, uses monetary policy to exert control over the amount of money available in the economy. It is built in a way that will keep the economy's prices stable. Credit control techniques and monetary policy techniques both fall under the same category. Both expansionary and contractionary monetary policies are possible. A contractionary policy causes the economy's overall supply of money to grow more slowly than usual or even contract, whereas an expansionary strategy causes it to grow faster than usual.

In brief, both quantitative and qualitative credit control are required in a system to achieve economic stability by removing economic problems such as inflation and deflation. Indeed, it appears that coordinating selective and general credit controls were more effective than using any one of them alone. In essence, both quantitative and qualitative monetary policy instruments are complementary rather than competitive.

Central banks are critical to maintaining economic and financial stability. They implement monetary policy in order to achieve low and stable inflation. Following the global financial crisis, central banks' toolkits for dealing with financial stability risks and managing volatile exchange rates have grown. In response to the COVID-19 pandemic, central banks used a variety of traditional and unconventional tools to ease monetary policy, support liquidity in key financial markets, and keep credit flowing. To achieve their goals, central banks require clear policy frameworks. Operational processes tailored to the circumstances of each country improve the effectiveness of central banks' policies.

Recap

- Banking involves creating, storing, and managing money
- The four main types of bank deposits in India are savings deposit, current deposit, recurring deposit, and fixed deposit
- Commercial banks accept deposits from the public and provide loans for investment and consumption to maximise profits
- Commercial banks can be categorised as private banks, public banks, and foreign banks
- Functions of commercial banks can be classified into primary functions and secondary functions
- Primary functions include accepting deposits, lending loans, credit creation, transfer of funds, and practising cheque systems and plastic cards
- Secondary functions include agency services, general utility services, and online banking services like internet banking, mobile banking, and phone banking
- Credit creation is a process where commercial banks create credit by making loans and purchasing securities
- Demand deposits act as the principal means of exchange, and banks can increase them as a multiple of their cash reserves
- The Central Bank is an independent authority responsible for monitoring, regulating, and stabilising a country's monetary and banking system
- Central Bank controls the volume of currency and credit in the country and performs several important functions, including issuing currency, acting as a banker and fiscal agent for the government, and managing cash reserves of commercial banks
- The Central Bank also serves as a lender of last resort, manages foreign exchange reserves, and controls credit in the economy
- In developing countries, the Central Bank may have additional developmental tasks
- Monetary policy - the Central Bank's actions to influence the availability and cost of money and credit in the economy, aiming to achieve specific goals like price stability, full employment, and economic growth
- Credit control involves using quantitative and qualitative methods. Quantitative methods affect the cost and total amount of credit, while qualitative methods regulate the use and direction of credit
- Quantitative methods include Bank Rate Policy, Open Market Operations (OMOs), Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR), Liquidity

Adjustment Facility (LAF), and Marginal Standing Facility (MSF)
- Qualitative methods include variations in margin requirements, regulation of consumer credit, credit rationing, direct action, moral suasion, and publicity
- A contractionary policy slows down the growth of money supply, while an expansionary policy accelerates it

Objective Questions

1. What is the primary function of a commercial bank?
2. What is the process of creating credit by commercial banks through loans and securities?
3. What is the main means of exchange that commercial banks create as a multiple of their cash reserves?
4. Which function of commercial banks involves providing services like internet banking and mobile banking?
5. What type of loan requires collateral from the borrower?
6. Which type of deposit involves regular and fixed payments for a predetermined period?
7. Which important role does the central bank perform for the government?
8. What is the term used for the minimum proportion of deposits that banks are required to keep with the central bank?
9. Which facility allows banks to borrow from the central bank at their discretion without pledging securities?
10. What is the method of credit control that affects both the cost and total amount of available credit?
11. What is the interest rate at which the central bank re-discounts eligible bills or advances?
12. Which tool of credit control involves the central bank buying and selling government securities?
13. What is the ratio of total demand and time deposits that banks are required to maintain in the form of liquid assets with themselves?
14. Which method of credit control is used to regulate the direction of credit rather than the volume?
15. What is the term used for the rate at which banks can borrow from the central bank in the short term?
16. What is the term for the ratio of total reserves held by banks in comparison to their deposits?

Answers

1. Accepting deposits
2. Credit creation
3. Demand deposits
4. Online banking services
5. Secured loan
6. Recurring deposit
7. Fiscal agent and adviser
8. Cash Reserve Ratio (CRR)
9. Marginal Standing Facility (MSF)
10. Quantitative credit control
11. Bank Rate
12. Open Market Operations (OMOs)
13. Statutory Liquidity Ratio (SLR)
14. Qualitative credit control
15. Repo Rate
16. Reserve Ratio

Assignments

1. Explain the vital role of commercial banks in an economy.
2. Discuss the development of internet banking, mobile banking, and phone banking services, and how they have transformed the way people conduct financial transactions
3. Discuss the role and significance of Central Banks in modern economies. Explain the key functions performed by Central Banks.
4. Compare and contrast quantitative and qualitative methods of credit control used by Central Banks.

Suggested Readings

1. Ghosh and Ghosh, *Fundamentals of Monetary Economics*, Himalaya Publishing House
2. Maheswari and RR Paul (2003): *Banking and Financial Services*, Kalyani Publications
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Unit 4
Capital Market

Learning Outcomes

After completing this unit, the learner will be able to:

- know about the concepts of capital market
- identify the difference between share and bonds
- familiarise with stock market indicators
- distinguish between SENSEX and NIFTY

Prerequisites

The Indian financial system consists of two key components: the money market, which handles short-term financing, and the capital market, which provides long-term funds. The money market involves participants like the Reserve Bank of India and commercial banks, ensuring liquidity. This unit focuses on the capital market, crucial for economic growth through long-term investments.

The capital market facilitates the trading of long-term securities, such as equities and bonds, essential for funding infrastructure, industrial projects, and technological progress. Capital formation, the creation of physical assets like factories and transport facilities, is critical for economic development. In India, the capital market channels funds from savers to investors, enabling companies to raise capital via shares and bonds. This process converts savings into active investments that drive growth.

The capital market also ensures financial stability by providing a structured trading environment, boosting investor confidence, and promoting transparency through institutions like SEBI.

Keywords

Primary Market, Secondary Market, Shares, Bonds, Stock Exchange

Discussion

3.4.1 Capital Market

Capital market is a market where long-term securities are bought and sold. These markets channel funds from savers to long-term investors constituting government or companies who utilise these savings to productive use. Their main aim is to divert funds from unproductive to productive purpose. It is a platform where instruments such as shares, bonds, government securities, debentures, ETF's, etc are traded and funds are raised from individuals, government, and institutions. Thus, they help small enterprises to grow into big companies and gives opportunities for people like you and me to invest or save for the future. They are controlled by regulatory authorities. Stock exchanges, debt markets, option markets, etc are examples of capital markets. Based on the nature of shares the capital market is classified into stock and bond markets.

Let us now see the functioning of the capital market with the help of an example. Suppose, a firm needs money to operate its business, they borrow from individuals or institutions by selling shares or bonds to them through the capital market. In return for it, the suppliers of funds get profit. Thus, through the capital market businessmen obtain financial capital for successful functioning of the company.

The capital market is of two types – the primary market and secondary market.

Primary market is the market where new shares or securities are issued to the investor or buyer in exchange for cash through an Initial Public Offering (IPO). Once the IPO becomes successful the shares of the company get listed in the stock exchange.

Secondary market is the market where listed securities or shares are bought and sold. It helps to resell already existing shares in the market. Stock exchange is the place where these shares and securities are bought and sold. In India, the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE) are the two major stock exchanges where the transactions for the secondary market take place. Now it is possible for us to buy or sell shares of a company online through these stock exchanges.

The broad constituents in the capital market are the fund raisers, investors, intermediaries, organisers, and market regulators. The fund raisers are the companies that raise funds from public, private, and foreign sources. The investors are the individuals and institutions that purchase shares from the primary and secondary market. Foreign investment in the capital market is promoted through Foreign Institutional Investment (FII). Organisers constitute various stock exchanges like NSE, BSE etc. In India the major capital market regulator is Securities and Exchange Board of India (SEBI).

3.4.2 Concepts of Capital Market

The capital market constitutes various instruments like shares, bonds, etc; major stock exchanges; various indicators of stock exchanges like SENSEX and NIFTY. Let us discuss some of these concepts.

3.4.2.1 Shares

The investors who purchase shares are known as shareholders and they are owners of a specified company. Shares constitute the capital of a company. Shares are issued by both private and public sector companies. By purchasing shares, the investor becomes the owner of the company based on the total investment made. They are bought and sold in the stock market. Let us discuss this with an example. Suppose Rahul started a detergent manufacturing company in 2019, out of his savings and relied on a business loan. For further expansion of the operations, he was not able to take loans. To meet the expenditure the company issued an IPO, which qualifies it to be listed in BSE or NSE, and obtain fund from the public

The investor potentially receives return in the form of dividends and capital gains. Dividend refers to the profit of the company and capital gain occurs when the difference between purchase price and selling price of the share is positive. Here the returns you receive from the investment depends on the performance of the company as well as the market forces which affect the stock prices. Investment in shares is thus a risky affair compared to other instruments.

Shares are classified into two – equity shares and preference shares. Equity shareholders carry voting rights along with dividends whereas preference shareholders have no voting rights even though they receive dividends.

3.4.2.2 Bonds

Bonds are issued in the bond market for short, medium, and long periods. Short-term bonds mature within one to three years, medium-term bonds in four to ten years and long-term bonds have a maturity period of greater than 10 years.

A bond is issued by government or private entities. It is a form of loan provided by the investor to a company or government for an agreed period. The investors here do not become the owners of the company. The investors receive an interest rate and the loan amount is repaid by the company at a future date. Usually, the interest or coupon is received twice a year. Bond is not a risky investment compared to shares. Let us see an example. Suppose, you purchase a bond of ₹10,00,000 and the interest rate is 5 percent. You will receive ₹25,000 as interest twice a year or ₹50,000 once in a year until the maturity period. You will receive the principal when the bond gets matured.

3.4.2.3 Stock Market

Stock market refers to a place where the participants or the buyers and sellers of stocks will purchase and sell the equity shares of companies. The participants in a stock market are investors and traders who are interested in participating in the financial market by expecting profits. The investors in a capital market have long time periods and they benefit from capital appreciation over time. According to Pyle, "security exchanges are market places where securities that have been listed thereon may be bought and sold for either investment or speculation". K.L. Garg has described the stock exchange as "an association of persons engaged in the buying and selling of stocks, bonds and shares for the public on commission and guided by certain rules and usages". Based on the above discussion and definitions, we can identify the characteristics of a stock exchange as follows:

1. Stock exchange is an organised market.

2. Securities (shares, debentures, bonds, etc.) issued by central, state and local governments, municipalities, port trusts, public utility concerns, joint stock companies and public corporations are bought and sold on the floor of a stock exchange.

3. In a stock exchange, transactions take place between members or their authorised agents on behalf of the investors.

4. In a stock exchange all transactions are regulated by the rules and by laws of the concerned stock exchange.

The two major stock exchanges in India are National Stock Exchange and Bombay Stock exchange. It is a virtual place where securities, debentures, and bonds are bought and sold. The shares, bonds, and debentures of companies are listed in stock exchange. Once the new shares are first sold in the primary market, they become listed in a stock exchange and get sold in the secondary market.

3.4.2.4 SENSEX

The Sensex was launched on January 1, 1986. It is an index that tracks the performance of India's largest and financially healthy 30 industries. These 30 industries are listed on the Bombay Stock Exchange (BSE). It is India's most tracked index. Indian rupee (INR) and US dollar (USD) are used to calculate the SENSEX. The top five index constituents in SENSEX with the highest weightage are Reliance industries, HDFC Bank, ICICI Bank, ITC and Infosys in the beginning of August 2023 after the merger of HDFC with HDFC Bank.

The SENSEX methodology has been developed and evolved by the evolution of the Indian economy. When it first started, it was computed using market capitalisation, but in September 2003, it switched to a free-float capitalisation technique. This gave a weighting to a company's impact on the index. Because the index uses the float rather than the outstanding shares of a firm, it excludes restricted stocks that cannot be sold easily, such as those held by corporate executives.

Despite the modifications in methodology, the index's goals have remained the same.

The SENSEX is re-evaluated twice a year, between June and December. The S&P BSE index Committee chooses its components based on numerous criteria.

a. They should be listed on the BSE in India.

b. They should be a large to mega-cap company.

c. The stocks should be relatively liquid.

d. The companies should make money from their core activities.

e. They should try to keep the sector balanced, similar to the Indian stock market.

3.4.2.5 NIFTY

NIFTY constitutes the yardstick index of the National Stock Exchange. It is derived from two words National Stock Exchange and Fifty in 1996 with the name CNX Nifty. In 2015 it was renamed as Nifty 50. It tracks the performance of 50 top companies in India. The NIFTY 50 is a benchmark-based index and the NSE's flagship, showcasing the top 50 equity stocks listed on the stock exchange out of a total of 2000. The meaning of NIFTY is derived from a combination of two terms, namely "National Stock Exchange" and "fifty". The National Stock Exchange Fifty is abbreviated as NSE Fifty. The NIFTY 50 index has shaped up to be the largest single financial product in India, with an ecosystem consisting of exchange-traded funds (onshore and offshore), and futures and options at NSE and SGX. NIFTY 50 is the world's most actively traded contract. Between 2008 & 2012, the NIFTY 50 index's share of NSE market fell from 65% to 29% due to the rise of sectoral indices like NIFTY Bank, NIFTY IT, NIFTY Pharma, and NIFTY Next 50. As of January 2023, NIFTY 50 gives a weightage of 36.81% to financial services including banking, 14.70% to IT, 12.17% to oil and gas, 9.02% to consumer goods, and 5.84% to automobiles.

Recap

- Capital market - market for long-term securities
- Stock exchanges, debt market, option market - examples of capital market
- The capital market is of two types – the primary markets and secondary markets.
- Primary market - market where new shares or securities are sold
- Secondary market - market where listed securities or shares are bought and sold
- Major market regulator of capital market in India is SEBI
- Bombay Stock Exchange and National Stock Exchange - major stock exchanges in India
- Indicators of stock exchange- NIFTY AND SENSEX
- Shares are classified into two – equity shares and preference shares
- Bonds are issued in the bond market for short, medium, and long periods

Objective Questions

1. What is the capital market?
2. Give some examples of the capital market.
3. What are the two types of capital market?
4. How is the capital market classified based on the nature of shares?
5. Specify the market in which Initial public offer is made?
6. Who is the regulator of the capital market in India?
7. What are the major stock exchanges in India?
8. Name the major indicators of the stock exchange.
9. What are the two types of shares?
10. What is a bond?
11. Which is the benchmark index of BSE?
12. Which is the benchmark index of NSE?

Answers

1. The capital market is a market where long-term securities are bought and sold
2. Stock exchanges, debt market, option market
3. Primary markets and secondary markets
4. Stock and Bond market
5. Primary market
6. SEBI

7. Bombay Stock Exchange and National Stock Exchange
8. NIFTY AND SENSEX
9. Shares are classified into two – equity shares and preference shares
10. It is a form of loan provided by the investor to a company or government
11. SENSEX
12. NIFTY

Assignments

1. Elucidate the differences between stock and bond.
2. Examine the structure of the capital market.

Suggested Readings

1. Ghosh and Ghosh, *Fundamentals of Monetary Economics*, Himalaya Publishing House
2. Maheswari and RR Paul (2003): *Banking and Financial Services*, Kalyani Publications
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BLOCK - 04

Public Economics

Unit 1
Public Finance and Private Finance

Learning Outcomes

After going through this unit, the learner will be able to:

- understand the concept of public finance and private finance
- distinguish between public finance and private finance
- identify the scope of public and private finance

Prerequisites

Finance refers to the management of monetary assets. It involves decisions on saving, investing, borrowing, and spending to achieve financial goals, both from the perspective of individuals and governments, who make financial arrangements for the betterment of the future. Suppose there is a person named Ravi. He decides to build a house and buy a car within the next 5 years. To achieve these goals, Ravi saves money and adjusts his household consumption expenditures. He might work more hours or engage in part-time work to earn extra money. In other words, he makes decisions about saving, budgeting, and borrowing. This is an example of private finance. Similarly, the government makes a budget for 5 years. In this budget, the government might decide to spend 50 crore rupees on social welfare activities. To fund these initiatives, the government raises money through taxation and may also borrow from both domestic and international sources. This process of the government managing its resources for the welfare of the economy is known as public finance. Both private and public finance are important for the overall economy. However, the nature of both is different. In this unit, we will explore the scope and nature differences and similarities between private and public finance, as well as their nature differences and similarities between private and public finance.

Keywords

Fiscal Policy, Public Finance, Private Finance, Laissez Faire Policy

Discussion

4.1.1 Meaning and Scope of Public Finance

In the earlier period, the governments followed a policy of non-intervention in the economic system as they followed the classical ideas of economic thought. The classical economists limited the role of the state as a police state to protecting citizens from external aggression, maintaining law and order on domestic territory, and offering minimal basic economic services. They supported the government's non-interventionist policy in economic activities. However, in the modern era, particularly after the "Great Depression" of the 1930s, public authorities began to take a keen interest in the country's socio-economic development. John Maynard Keynes, held that traditional economic theory did not offer a means of putting an end to depressions. Keynes favoured government action when there was economic unrest. He argued that economies are inherently unstable and that full employment can only be achieved with the support of public policy and investment in his book "The General Theory of Employment, Interest, and Money" in 1936. He stated that because of the uncertainty, people and businesses have stopped investing and spending, and government intervention and public investment is necessary to restart the economy. His ideas led to a revolution in economic thought.

The role of government in an economy has evolved over time, and it is now regarded as an indispensable component of contemporary nation states. The laissez-faire principle has been compromised, and governments are being urged to intervene even in areas that were formerly solely the domain of the private sector. Economic stability and full employment have not been achieved by the markets. Even though many nations have market economies, governments everywhere play a significant role since markets do not allocate all or even nearly all of the output that an economy creates.

4.1.1.1 Meaning of Public Finance

To function, every nation needs money. The government spends money that is raised through the collection of taxes and investment returns. Healthcare, medical facilities, public education, salaries to the employees, etc. are some expenses. The government either collects or pays for all of the revenue and expenses. As a result, finance is known as public finance because a significant portion of it is contributed by the general public. At every point, the public is involved, whether, at the state or central levels, it deals with revenue and expenditure. The management of public finances is crucial to the growth of the economy since the efficient use of public funds is a key factor in that growth. In short, the study of revenue and expenditures of the government is known as public finance. The term "finance" refers to the use of monetary resources, such as coins, to create income through revenue and pay for communal activities. However, the term "public" is a collective one for people within an administrative region. On the other hand, it alludes to revenue and outlay. In this sense, public finance might be described as the study of government revenue and expenditure. It monitors how the government is carrying out its obligations to the nation's economy. Public finance is responsible for keeping an eye on the nation's income, obligations, and expenses.

Additionally, it discusses fiscal policies that should be implemented in order to accomplish goals like price stability, economic growth, and more equitable distribution of income. According to shifts in the economic environment, economic theory has occasionally shifted about the function that public finance is expected to perform.

Definition of Public Finance

According to Prof. Hugh Dalton, "public finance is concerned with the income and expenditure of public authorities and with the adjustment of one to the other".

According to Adam Smith "public finance is an investigation into the nature and principles of the state revenue and expenditure".

Prof. Richard R. Musgrave opines that "the complex of problems that centre around the revenue expenditure process of the government is referred to as public finance".

Prof. P. E. Taylor states that "public finance deals with the finances of the public in an organised group under the institutions of government. It studies the manner in which the state, through its organ, the government, raises and spends the resources required. Public Finance is thus concerned with the operation and policies of the fiscal public treasury".

According to Harvey S. Rosen, "public finance, also known as public sector economics, focuses on the taxing and spending activities of the government and their influence on the allocation of resources and distribution of income."

Prof. Otto Eckstein writes "public finance is the study of the effects of budgets on the economy, particularly the effect on the achievement of the major economic objectives—growth, stability, equity and efficiency."

4.1.1.2 Scope of Public Finance

Public finance is the study of how public organisations, whether they are at the central, state, or local levels, manage their financial resources. These tasks require money to be spent on them. The cost is covered by revenue obtained through taxes, fees, sales of goods and services, and loans. The public authorities' revenue comes from a variety of sources. The field of public finance investigates how money is obtained, how it is spent on various things, etc. Therefore, public finance focuses on the revenue and expenses of public authority as well as the ideas, issues, and policies associated with these issues.

According to Prof. Dalton, there are four main scopes of public finance: public revenue, public expenditure, public debt, and financial administration. Let us discuss these concepts briefly. We will examine them in detail in the coming units.

1. Public Revenue: Public revenue is the income of the government.This part mainly explains the examination of various government revenue sources, the guiding principles for obtaining revenue, their respective advantages and shortcomings, and their consequences on the economy (such as impact and incidence of taxation).

2. Public Expenditure: Public expenditure deals with the expenditure pattern of the central, state, and local governments for protecting the interest of its own citizens. This part mainly deals with the classification of the public expenditures, the guiding principles and the factors that influence growth, and the outcomes of public spending.

3. Public Debt: Public debt is the debt of the public authorities that are governments and their agencies. In current times, the study of public debt is a crucial component of public finance since governments are increasingly turning to debt to meet the rising demands of the population.Therefore this section looks at the types of expenditures,effects and factors that influence the public expenditures.

4. Financial Administration: Financial administration is the crucial subject in public finance.It explains the management of the financial resources of the public authorities. This segments elucidate the budget preparation, adoption, and implementation as well as the socioeconomic effects of budgetary policies, intergovernmental financial interactions, fiscal management, and fiscal responsibility.

Apart from Prof. Dalton's scope of public finance, we can include one important component of public finance, that is, economic stabilisation.

5. Economic Stabilisation: Today, the two areas of the government's economic policy that have received substantial attention in the debate over public finance policy are economic stabilisation and growth. This section outlines the different economic policies and other steps the government has taken to ensure the nation's economic stability.

From the discussion above, it is clear that the topic of public finance is dynamic and constantly expanding due to shifts in the notion of the state and its functions. The ways in which the government raises revenue, spends money, and borrows money are changing along with the state's rising economic and social obligations.

4.1.2 Meaning and Scope of Private Finance

Private finance is the study of revenue and expenditure activities of private entities. It deals with the income, expenditure, borrowing and financial administrations done by private firms and private persons. Here the private entities possess fewer resources to create income which is used for creating profits and to meet personal needs. Some of the major examples of private finance are financial planning and management, private equity and venture capital, small business financing and stock market investment etc.

4.1.2.1 Meaning of Private Finance

Private finance deals with the financial planning and management at the individual level.

Private finance is divided into two types:

1. Personal Finance

Personal finance is concerned with the process of optimising financial resources by individuals such as individuals, families, and single consumers. A good example is a person who uses a mortgage to finance his or her own car. Personal finance is concerned with financial planning at the most basic individual level. Savings accounts, insurance policies, consumer loans, stock market investments, retirement plans, and credit cards are all examples.

2. Business Finance

Business finance is the process by which businesses optimise their finances. It entails the acquisition of assets and the proper allocation of funds in order to maximise the achievement of set goals. Businesses may require funds on one of three levels: short-term, medium-term or long-term.

4.1.2.2 Scope of Private Finance

Private finance, also known as personal finance, refers to the management of an individuals or a family's financial resources to achieve personal financial goals and secure their financial well- being. The scope of private finance is quite extensive and covers various aspects of financial planning, management, and decision-making. Let us discuss the different dimensions of the scope of private finance in detail:

1. Financial Goal Setting: Private finance begins with setting clear financial goals. These goals can be short-term (e.g., buying a car, taking a vacation), medium-term (e.g., buying a home, funding education), or long-term (e.g., retirement planning, wealth accumulation). The scope involves identifying these goals and understanding the financial resources required to achieve them.

2. Budgeting: Budgeting is a fundamental aspect of private finance. It involves creating a plan for income and expenses, ensuring that spending aligns with financial goals. Budgeting helps individuals track their cash flow, manage debt, and save for various Purposes.

3. Income Management: Effectively managing income sources, such as salary, investments, rental income, or side gigs, is crucial. Private finance encompasses strategies for increasing income through career growth, investments, and other means.

4. Expense Management: Controlling and prioritising expenses is essential for achieving financial goals. Private finance covers strategies for reducing discretionary spending, cutting unnecessary costs, and optimising regular expenses.

5. Debt Management: Many individuals have debts such as student loans, mortgages, credit card debts, etc. Private finance involves strategies to manage and minimise debt through responsible borrowing, consolidation, and repayment plans.

In conclusion, the scope of private finance is comprehensive and covers a wide range of topics that enable individuals to effectively manage their financial resources, achieve their goals, and secure their financial future. It involves everything from goal setting and budgeting to investing, risk management, retirement planning, and estate planning. By mastering the principles of private finance, individuals can make informed decisions to enhance their financial well-being over time.

4.1.3 Importance of Public Finance

Public finance is a branch of economics that examines how governments raise money, spend it, and what impact these actions have on the whole economy and society. It examines how all tiers of government such as national, state, and local governments deliver desired services to the general population and find the funding to do so.

Public financing is required for the provision of public goods such as roads, military services, and street lighting, etc. Because no one will pay for these things and business organisations will not be motivated to make them.

Governments can combat or lessen unfavourable effects of a market economy through public finance. The spillovers or externalities are the side effects of public finance. Consider pollution, government can implement recycling initiatives to reduce pollution, pass legislation to limit pollution, or levy fees or taxes on activities that cause pollution.

Governments can redistribute money with the use of public finance. Governments can impose taxes on wealthier citizens and provide products and services for the less fortunate in order to lessen economic inequality.

Numerous programmes in public finance are available for balancing the earnings of the wealthy and the poor. Social security, welfare, and other social programmes are examples of such programmes.

The notion of a welfare state and the importance of public finance are becoming more widely accepted. After the great depression, the classical economists' concept of modern governments based on the laissez-faire policy, that is minimum governmental interference in the economic affairs of individuals and society as police states, is no longer valid. Every nation gives importance to the supreme role of government through public finance to achieve macroeconomic goals such as full-employment or fuller utilisation and efficient use of resources, price stability and economic development.

Public finance has expanded along with the extent of the government's involvement in economic activities. Some of the government's key focus areas include creating employment opportunities, controlling economic fluctuations like boom and depression and sustaining economic stability.

The method of managing public funds is called public finance. However, it is restricted to managing public funds as well as other issues including economic growth, income disparity, unemployment, and human rights. The broader concept is management of public finances. To assure the progress of the country, proper planning, resource allocation, and control of unfavourable circumstances are required. To do this, financial and fiscal policies, budgets, and other tools must be created.

In short, public finance encompasses more than just money management. It also emphasises maintaining the appropriate infrastructure, boosting the national economy, lowering unemployment, managing the financial pillars of the economy, operating the nation's hygiene and cleanliness, analysing tax collection, making sure the tax burden is not too high, monitoring and enforcing the implementation of the financial and fiscal policy, upholding the confidence of the general public etc.

4.1.4 Similarities and Dissimilarities between Public Finance and Private Finance

A comparison of public or government finance with private or individual finance helps us better comprehend and study public finance. Despite the fact that most of us have a general idea of what the two terms signify, it's crucial to have a thorough understanding of what they mean and how they differ. Such a comparison will enable us to understand how the goals, objectives, and operating procedures of public finance operations are comparable to or different from those of individual financial operations. We shall now make an attempt to distinguish between public and private finance.

The finance sector that deals with the allocation of resources to meet the budgets of government entities is known as public finance. This branch of economics is in charge of scrutinising the meaning and effects of the government's financial policies. This sector investigates the effects and outcomes of taxation, as well as the expenditures of all economic agents and the overall economy.

According to Richard Musgrave, public finance is a complex of problems centred on the government's income and expenditure processes. There are several branches of public finance: public revenue, public expenditure, public debt, budget policy, and fiscal policy. Private finance is the financial management of the private entities.

4.1.4.1 Similarities

1. **Objective:** The primary goal of both public and private finance is to satis-

fy human desires. The primary goal of public finance is to satisfy social desires, while the primary goal of private finance is to satisfy individual desires.

2. **Principles**: The maximisation of social benefits is the guiding principle by which the government spends its money. Individuals also adhere to the maximisation of satisfaction principle when spending their available funds.
3. **Scarcity:** Both are concerned with the problem of economic choice, that is, they try to satisfy unlimited ends with scarce resources having alternative uses.
4. **Income, Expenditure and borrowing**: Both the government's and individuals' resources or income are limited. Borrowing can be done for both in the event of a shortage, and both are obligated to repay the borrowed money.
5. **Policies:** For both kinds of finances, the guiding principle is rationality. Rationality is in the sense that maximisation of personal benefits and social benefits through corresponding expenditure. Only sound policies in both private and public finance will allow for the maximisation of welfare and benefits.
6. **Administration:** The administrative machinery determines the effectiveness and success of measures implemented by the private and public sectors. Losses will result if the administrative machinery is inefficient and corrupt.

4.1.4.2 Dissimilarities

1. **Meaning:** Private finance is the study of individual, household, and business firm income and expenditure, borrowings, and so on. Public finance, on the other hand, is concerned with the economy's or government's revenue/income and expenditure, borrowings, and so on.
2. **Objective:** Private finance seeks to fulfil private interests or maximise profit. Public finance, on the other hand, seeks to maximise social benefit to society or to promote public welfare.
3. **Income–Expenditure Adjustment:** Individuals adjust their spending in accordance with their income. However, the government adjusts the income based on the size of expenditure on various segments. Private finance will attempt to adjust expenditure in accordance with income, and in doing so, may forego the fulfilment of certain desires. Government, on the other hand, is guided by welfare and growth considerations, for which expenditure must be predetermined. They try to adjust their revenues to the predetermined expenditure requirements because they have the power to raise funds through taxation, borrowing, and deficit financing.
4. **Magnitude:** Households and businesses have fewer resources available to them, so their budgets are smaller in size when compared to those of governments.
5. **Nature of Financial Transaction:** Personal financial transactions are kept confidential. Personal household budgets are a private affair that is not made public. Public finance transactions, on the other hand, are open and transparent to all. The budget is made available to stakeholders and the general public for review and comment. In the case of public finance, every budgetary decision must be communicated to the people of the country.
6. **Revenue Sources**: Private economic units generate income by utilising assets that they own. Their sources of income are salaries, wages, interest, rent, and transaction profits. Taxes and non-

tax revenues are the sources of income for governments. There is an element of compulsion in the case of taxes, fees, and fines.

7. **Borrowing Sources:** Private economic units may borrow from informal sources such as friends, relatives, and moneylenders, as well as formal sources such as banks and financial institutions. Public bodies can borrow from both internal and external sources almost continuously. They can borrow from the general public, the central bank, commercial banks, and other financial institutions, as well as from other financial institutions.
8. **Time Dimension**: Both private and public financial activities strive to achieve a balance between immediate and long-term objectives. However, private economic units, particularly households, are primarily concerned with meeting present and immediate needs. In the case of public authorities, the emphasis is on both the present and the future.
9. **Assessment of Outcomes:** The outcome of private financial activities is much easier to measure and evaluate than the outcome of public financial activities. In the case of private economic units, the outcome can be measured by business profits and household desires being met. In the case of public finance, the outcome must be measured and evaluated using a variety of parameters. Social welfare, economic growth, security, productivity, and efficiency are examples of these.
10. **Nature of Budget:** Private economic units strive for a budget surplus. A surplus is regarded as economically prudent. This is not true of government budgets. Deficit budgets must be followed in countries that need to grow and develop quickly. A long-term surplus budget suggests that the government may be failing to meet some of its obligations.
11. **Right to Print Currency:** Individuals do not have the right to print money. The government, on the other hand, can print notes if required through their respective central banks in case of extreme emergencies.
12. **Effect on Economy**: Private finance has a minor impact on a country's economy. The impact of public finance on the country's economy is immense. In essence, public finance aims to maximise social benefits or welfare, while private finance focuses on fulfilling individual desires, achieving personal benefits, and generating profits. Public finance benefits citizens directly, while private finance benefits owners, shareholders, or individuals themselves. Private finance allows individuals to postpone or avoid certain expenses, whereas public finance cannot avoid essential expenditures like defence, agriculture, research, or public administration. Despite differences, both sectors share common features such as facing scarcity, borrowing needs, and income precedence. Both contribute to a country's economy and are interdependent, as one cannot exist without the other.

Recap

- Public finance: Study of government revenue and expenditures
- Public finance concerned with income and expenditure of public authorities, aims for the wellbeing of the nation
- Prof. Dalton's scopes of public finance: Public revenue, public expenditure, public debt, and financial administration
- Private finance: Divided into personal finance and business finance
- Personal finance: Optimisation of financial resources for individuals, families, and consumers
- Business finance: Optimisation of finances for businesses, includes asset acquisition and fund allocation to achieve goals

Objective Questions

1. What is the study of government revenue and expenditures known as?
2. According to Prof. Hugh Dalton, what does public finance concern?
3. What is the main aim of public finance?
4. Name the four main scopes of public finance according to Prof. Dalton.
5. How is private finance divided?
6. What does financial administration deal with in public finance?
7. Which type of finance involves individuals, families, and single consumers?
8. What is the process by which businesses optimise their finances called ?

Answers

1. Public finance
2. Income and expenditure of public authorities
3. Wellbeing of the nation
4. Public revenue, public expenditure, public debt, financial administration
5. Personal finance and business finance
6. Government revenue and expenditure management
7. Personal finance
8. Business finance

Assignments

1. Explain the meaning and scope of public finance, highlighting its key objectives and functions.
2. Compare and contrast public finance and private finance, highlighting their distinct roles, objectives, and stakeholders.

Suggested Readings

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Unit 2
Public Revenue and Expenditure

Learning Outcomes

After learning this unit, the learner will be able to:

- familiarise the concept of public revenue and expenditure
- identify the different sources of public revenue
- distinguish between different types of public expenditure

Prerequisites

The modern state is often referred to as a welfare state, as its primary goal is to promote the well-being of its citizens. To achieve this, the government allocates resources to various sectors, such as healthcare, education, and infrastructure. For example, government spending includes funding for public hospitals and vaccination programs in healthcare, as well as public schools, scholarships, and grants in education. Infrastructure development, such as road construction and public transport systems, is also a key area of expenditure. To support these expenses, the government collects revenue from a variety of sources, including both tax and non-tax revenues. For instance, when you purchase a product, you pay sales tax or VAT, which is a form of public revenue. Additionally, the government raises money through other methods, such as income taxes, corporate taxes, and even borrowing. These funds are used to benefit the public and improve society. In this unit, we will explore the nature of public revenue and expenditure, the different sources of revenue, and the various types of public expenditure.

Keywords

Public Revenue, Tax, Direct Tax, Indirect Tax, Public Expenditure

Discussion

4.2.1 Public Revenue

To maximise social and economic welfare, governments must perform a variety of functions in the field of politics, social welfare, and economics. A government, like any other economic unit, requires revenue or income to fund its operations. The income earned by the government or public authorities from all sources is referred to as public revenue. Thus, public revenue or public income refers to the government's income from all sources, including taxes, borrowing, fines, fees, gifts, grants, and donations.

According to Dalton, the term public income has two meanings: broad and narrow. In a broader sense, it refers to all of the income or receipts that a public authority may receive at any given time. However, in its narrow sense, it only refers to the public authority's sources of income that are commonly referred to as revenue resources. To clarify the meaning, the former is referred to as public receipts, while the latter is referred to as public revenue.

Prof. Hugh Dalton
(1887 – 1962)

Receipts from public borrowings (or public debt) and the sale of public assets are largely excluded from the definition of public revenue. For example, the Government of India's budget is divided into revenue receipts and capital receipts. Different types of taxes are the source of revenue receipts. Primary internal market borrowing and foreign loans are both considered capital receipts. However, internal sources account for the majority of the state's income. The main difference between the two is that the former is derived from people's receipts or earnings, whereas the latter is derived from public property. We will discuss these concepts in the coming units.

4.2.1.1 Sources of Public Revenue

Public revenue refers to the government raising income from the public through various resources. Tax is one of the major sources of revenue. But taxes are not only the source of revenue. The government collects revenue from various resources such as taxes, prices, penalties, gifts and profits etc. The methods and volume of public revenue have a greater impact on the country's wealth and income production and distribution. Indeed, as government functions and expenditures have grown in recent years, so has the volume of public revenue. The modern welfare states have two types of public revenue sources such as,

1. Tax revenue and
2. Non-tax revenue

The government collects or earns money through various forms of tax and non-tax revenue, which it then uses to cover administrative and other expenses. Tax revenue is derived from the process of direct and indirect taxation, whereas non-tax revenue is derived from various types of public undertakings and other forms of miscellaneous receipts. The various sources of government revenue are discussed in detail below.

1. Tax Revenue

Taxation is the most important source of revenue for modern governments. Taxes are compulsory contributions levied by the government on its citizens to cover general expenses incurred for the common good, with no corresponding direct returns (quid-pro-quo) or benefit to the taxpayer.

Definitions of Tax

According to E.R.A. Seligman, "a tax is a compulsory payment from a person to the government to defray to expenses incurred in the common interest of all without references to special benefits conferred".

Taussing defines it, "as the essence of a tax, as distinguished from other charges by government, is the absence of a direct quid-pro-quo between taxpayer and the public authority".

Hugh Dalton in his "Principles of Public Finance '' stated that "a tax is a compulsory contribution imposed by a public authority, irrespective of the exact amount of service rendered to the taxpayer in return and not imposed as a penalty for only legal offence".

Characteristics of a Tax

The following are the main characteristics of a tax:

- A tax is a mandatory payment made by citizens who are required to pay it. As a result, refusing to pay a tax is a punishable offence.
- There is no direct, monetary exchange between taxpayers and the government. In other words, the taxpayer cannot claim reciprocal benefits in exchange for paying taxes. However, as Seligman points out, the state must do something for the community as a whole in exchange for the taxpayers' contributions. However, the government's reciprocal obligation is not to the individual as such, but to the individual as part of a larger whole.
- A tax is levied to finance government spending in the general interest of the nation. It is a payment for an indirect service that the government will provide to the community as a whole.
- A tax must be paid on a regular and periodic basis as determined by the taxing authority.

In modern public finance, taxes account for a sizable portion of public revenue. Taxation has macroeconomic consequences. Taxation has the potential to influence the size and mode of consumption, the pattern of production, and the distribution of income and wealth.

Progressive taxes, tax based on the taxpayer's ability to pay, can help to reduce income and wealth inequalities by reducing the disposable income of the wealthy. The income left in the hands of the taxpayer for disbursement after tax payment is referred to as disposable income. In a developing economy, taxes imply forced savings. As a result, taxes are an important source of development finance.

Classification of Taxes

Taxation is one of the most important sources of revenue for the government. You pay taxes in a variety of ways, including your salary, restaurant meals, multiplex movie tickets, driving your car on roads, and simply purchasing a packet of biscuits from a general store. It is your responsibility as a responsible citizen of the country to pay your taxes. However, it is also critical to understand the various types of taxes in place in the country.

All taxes in India can be broadly classified into two types:

A. Direct and

B. Indirect taxes.

Let us take a closer look at what these two types of taxes mean.

A. Direct Tax

According to the Indian tax system, direct taxes are those that are levied directly on an individual's or taxpayer's income. For example, the government imposes income tax, which you pay directly to the government. These taxes are not transferable to another entity or person. In other words, a direct tax is actually paid by the person who is legally obligated to pay it. He cannot shift the tax burden to others. In other words, both the impact (the initial burden of the tax) and the incidence (the ultimate or final burden of the tax) fall on the same person.

In India, the CBDT (Central Board of Direct Taxes), which is overseen by the Department of Revenue, is in charge of direct tax administration. In addition, the department is involved in planning and advising the government on the implementation of direct taxes.

The following are some of the most common types of direct taxes used in India:

- **Income Tax**: Income tax is the most common type of direct tax in India. It is levied on the income you earn in a fiscal year based on the Income Tax department's income tax slabs. Individuals and businesses pay the tax directly to the IT department. Individual taxpayers can also take advantage of several tax breaks provided by various sections of the IT Act.
- **Securities Transaction Tax**: If you trade stocks, each transaction includes a small component known as the securities transaction tax. You must pay this tax regardless of whether or not you profited from the trade. This tax is collected by your broker and passed on to the securities exchange, which then pays it to the government.
- **Corporate Tax**: Companies incorporated or operating in India must pay taxes to the government. They must pay taxes on the profits made by the business. Companies, unlike individuals, are required to pay tax at flat rates prescribed by the government.
- **Capital Gains Tax:** Every time you make a capital gain, you must pay capital gains tax. This capital gain could result from the sale of a home or from an investment. You will be required to pay either LTCG (Long-Term Capital Gains) tax or STCG (Short-Term Capital Gains) tax depending on the capital gains and the length of time you held the investment.

There are some key benefits of direct taxes such as -

- **Equitable:** In direct tax, the individual who earns less income pays less, while the individual who earns more income pays more, bringing equality and relief to the less earner.
- **Reduces Inequalities:** The tax money collected by the government from higher-income earners will be used to help those in need, thereby reducing inequalities.
- **Curbs Inflation:** Inflation is

controlled by the government through the increase and decrease of the direct tax rate. If there is inflation, increasing the direct tax rate will affect the buyer's purchasing power, thereby helping to control inflation.

Direct taxes also have some disadvantages

- **Burdensome**: Taxpayers are considered a burden because they are required to pay direct taxes such as income tax in a single lump sum every year. Furthermore, the documentation process is generally difficult and time-consuming.
- **Possibility of tax evasion**: While the government has made tax evasion very difficult, there are still many fraudulent practices that individuals and businesses can use to avoid or pay less taxes than they should.
- **Restrains investments:** Investments are restricted because of the imposition of direct taxes such as securities transaction tax and capital gains tax. Direct taxes, in this sense, limit investment.

B. Indirect Taxes

While income and profits are taxed directly, goods and services are taxed indirectly. The primary distinction between direct and indirect taxes is that while direct taxes are paid directly to the government, indirect taxes are generally collected through an intermediary. It is then the intermediary's responsibility to pass on the received tax to the government. In contrast to direct taxes, indirect taxes are not based on an individual's income. Everyone pays the same tax rate. In India, the CBIC (Central Board of Indirect Taxes and Customs) is primarily in charge of indirect taxes. CBIC, like CBDT, is part of the Department of Revenue.

The phrase "indirect tax" has several different meanings. In the common meaning, an indirect tax is one that is collected from the person who will ultimately bear the economic burden of the tax through an intermediary such as a retail store, such as sales tax, a specific tax, value-added tax (VAT), or goods and services tax (GST) such as the consumer.

After that, the intermediary files a tax return and sends the tax proceeds to the government along with the return. In this sense, an indirect tax is distinguished from a direct tax, which is collected directly by the government from the persons (legal or natural) upon whom it is imposed.

The following are some of the most important types of indirect taxes in India:

- **Goods and Services Tax (GST):** GST subsumed up to 17 different indirect taxes in India, including Service Tax, Central Excise, State VAT, and others. It is a single, all -encompassing indirect tax imposed on all goods and services in accordance with the tax slabs established by the GST council. One of the most significant advantages of GST is that it largely eliminated the previous tax regime's cascading or tax-on-tax effect.
- **Customs Duty**: When you buy something that must be imported from another country, you must pay customs duty on it. You must pay customs duty on the product regardless of whether it arrived in India by air, land, or sea. The purpose of imposing this indirect tax is to ensure that all products

entering India are taxed.

- **Value Added Tax (VAT):** A VAT is a type of consumption tax levied on goods as their value rises throughout the supply chain. The state government imposes it, as does the VAT percentage on various goods. While GST has largely replaced VAT, it is still levied on certain products, such as those containing alcohol.

Some significant benefits of indirect taxes are listed below –

- **Equal contribution:** Indirect taxes ensure that every individual pays some amount to the state, no matter how small. It also reaches people in lower income brackets who are not subject to direct taxes.
- **Non-evadable:** These taxes are included in the price of a commodity. As a result, an individual can only avoid indirect tax if he or she does not purchase the taxed commodity.
- **Convenience**: In contrast to direct taxes, which are generally paid in one lump sum, indirect taxes such as GST are paid in small amounts. When you buy a product or service, a small amount of GST is already included in the price, making it easier for taxpayers to pay.
- **The collection is easy:** One of the most significant distinctions between direct and indirect taxes is how they are collected. In contrast to direct taxes, there are no documents or complicated procedures to pay indirect taxes. You must pay the tax at the time you buy a product or service.

Indirect taxes are accompanied by some drawbacks.

- **Regressive:** Indirect taxes are widely acknowledged to be regressive. While they ensure that everyone pays taxes regardless of income, they are not equitable. People of all income levels are required to pay the same rate of indirect taxes.
- **Makes products and services more expensive**: When an indirect tax is added to the cost of goods and services, they become more expensive. Cigarettes, high-end bikes, premium cars, and other items, for example, are subject to GST at a rate of 28%. Sometimes indirect taxes may also bring inflationary pressure in this sense.
- **Lacks of civic consciousness:** Consumers are generally unaware of the tax they are paying because indirect tax is added to the price of the product or service. This is in contrast to direct taxes, where the taxpayer is fully aware of the taxes he or she is paying.

As you can see, both direct and indirect taxes have advantages and disadvantages, but both are vital to the economy. While taxes are widely regarded as an unnecessary burden, it is through taxes that the government constructs the nation, invests in defence, healthcare, and infrastructure, launches welfare initiatives, and prospers. Our dream of seeing our country become a global superpower will be realised only if citizens continue to pay their taxes honestly.

2. Non-Tax Revenue

Non-Tax Revenue is the revenue obtained by the government from sources other than taxes. The government's non-tax revenues are derived from public income received through administration, commercial enterprises, gifts, and grants. Thus, non tax revenue includes:

A. Administrative revenue

B. Profit from state enterprises

C. Gifts and grants

Let us discuss them in detail.

A. Administrative Revenues

Public authorities can raise funds through fees, fines and penalties, and special assessments under public administration.

- **Fees**: The government or public authorities charge fees for providing a service to the beneficiaries. It includes court fees, passport fees, and so on. Similarly, licence fees are charged by the controlling authority to confer permission for something, such as a driving licence fee, an import licence fee, a liquor permit fee, and so on.
- **Fines and Penalties**: As a form of punishment, fines and penalties are imposed and collected from lawbreakers. In this case, the primary goal of these levies is to prevent the commission of crimes and the violation of national laws.
- **Special Assessments**: Special assessments involve charging property owners for specific public projects or services that directly benefit their properties. That is when the government undertakes certain types of public improvements, such as road construction, drainage, and street lighting, it may provide a special benefit to those who own properties nearby. These special assessments are known as "betterment levies" in India. A betterment levy is imposed on land when its value is increased by the public authority in an area constructing social overhead capital such as roads, drainage, street lighting, and so on.

B. Profit from state Enterprises

Profits from government-owned enterprises are also a significant source of revenue these days. Railways, for example, are managed by the central government. Surpluses from railway earnings are normally credited to the central budget's revenue budget. Profits from the state transportation corporation and other public enterprises can also be significant sources of revenue for state governments' budgets. Similarly, other commercial ventures in the public sector, such as Hindustan Machine Tools, Bokaro Steel Plant, State Trading Corporation, and so on, can generate profits to help support the central budget.

C. Gifts and Grants

These accounts for a very small portion of total government revenue. Patriotic individuals or institutions may frequently make gifts to the state. These are entirely voluntary donations. Gifts are meaningful, especially during times of war or emergency. Grants from one government to another, on the other hand, have become more important in modern times. Local governments receive grants from state governments, and state governments receive grants from the federal government. The federal government provides grants-in-aid to state governments to help them carry out their responsibilities. Foreign aid is defined as grants made by one country's government to another country's government. Typically, poor countries receive aid from developed countries in the form of military aid, economic aid, food aid, technological aid, and so on.

In conclusion, public revenue is critical to the operation of a country's finances. They are the government's primary source of revenue, and it is from this revenue that the government meets its expenditures.

4.2.2 Public Expenditure

Meaning of public expenditure

In the field of public finance, the idea of public expenditures is strategically important. The effectiveness of public spending in the nation's economic field was completely disregarded by economists and policymakers in the 19^{th} century, who paid little attention to public spending. The majority of the government's responsibilities were in the areas of infrastructure, justice, police, and weaponry. They also held the opinion that government spending is entirely unnecessary and that private citizens should use their money instead of the government. As a result of the overall change in the situation over time, the complexity of economic activity, and the failure of the market to deliver the expected results, economists are now paying more attention to public spending.

Public expenditures, often known as government spending, are all forms of expenses made by public bodies, such as the central government, state governments, and local governments, in order to meet the collective requirements of the nation's citizens or to advance the economic and social well-being of society. That is, Public expenditures are made to provide public goods, provide public services, build public infrastructure, transfer funds for social security, subsidies merit-based services, and maintain public utilities. These include education, public health, social security, irrigation, the public distribution system, roads, railroads, etc. Loans and grants made to government agencies or to other governments may also be regarded as public expenditures. It is often categorised as a final expenditure outlay and other times as public consumption, public investment, and transfer payment.

Governments use the money they have gathered in taxes to establish public services at various levels of government such as centre, state, and local. Care should be made to avoid duplicate counting when adding up the costs of two levels of government where grants are supplied from a higher level to lower level governments, grants being financial disbursement to be effected as real expenditure at the lower level. Similarly, expenses like interest payments on debt that a government incurs must be properly considered in the classification scheme used. Public expenditure is escalating frequently in developed, developing, and undeveloped nations as government activity is expanding.

Due to two factors, public spending became an essential component of modern welfare-oriented governance.

1. The state's economic activity has greatly increased.

2. The type and scope of public spending have a significant impact on the nation's production, distribution, and overall economic success.

4.2.2.1 Types of Public Expenditure

The types of public expenditure imply the systematic arrangement of various types of state outlays on some scientific and economic basis in order to understand the effect and nature of each type of expenditure on the other. The major categories of government spending are as follows.

1) Revenue Expenditure and Capital Expenditure

Revenue expenditure of the government includes all current administrative expenditures, including law enforcement and public commercial undertakings such as railways, post and telegraph, and grant-in-aid to states. In general, revenue expenditure is defined as any expenditure that does not result in the creation of assets. The greater the revenue account, the greater the fiscal deficit in the system.

Capital expenditures are incurred when constructing durable or long-lasting assets such as highways, multipurpose dams, irrigation projects, and purchasing land, buildings, machinery, equipment, and so on. They are one-time expenditures in the form of capital investments. Such expenditures are expected to boost the economy's productive capacity.

2)Productive Expenditure and Unproductive Expenditure

Productive expenditure is defined as government spending that results in the creation of income-generating tangible assets. The more tangible the government can create, the more it will help the economy produce more output and income in the future.

Unproductive expenditure is one that is incurred while providing the service. Defence, interest payments, expenditure on law and order, public administration, justice, and war expenditures...etc. fall into the category of unproductive expenditures because they do not directly contribute to the economy's productive capacity.

3) Plan Expenditure and Non-Plan Expenditure

Plan expenditures are the budgeted expenditure in the form of new investment in the financial plans. Plan expenditures include both current development and investment expenditures.

Non-plan expenditure falls outside of the plan for which an annual allocation is made in the union budget. Because these expenses are unpredictable, contingent, and unforeseen, they must be budgeted for annually rather than over a five-year period. Civil administration, law and order, subsidies, grants to states, defence, interest payments, maintenance expenditure, and so on account for the majority of these expenditures.

4) Non-Transfer Expenditure and Transfer Expenditure

Non-transfer expenditures are incurred when purchasing or using goods and services. These include defence, education, and public health spending, among other things. Capital asset investment expenditures are also non-transfer expenditures because the government receives capital goods and assets in exchange for them.

Transfer expenditures are those expenses for which there is no corresponding transfer of real resources, such as goods or services. These include payments for old age pensions, unemployment benefits, sickness benefits, interest on public debt, and subsidies.

5) Development Expenditure and Non-Development Expenditure

Development expenditure is the portion of revenue expenditure that directly or indirectly contributes to the country's development. It includes spending on the upkeep and operation of social and community services, as well as physical infrastructure. For example, the upkeep of educational and public health infrastructure such as schools, hospitals, irrigation systems, and power grids.

Non-development expenditure is the portion of revenue expenditure that does not directly contribute to economic development. They include expenditures for the upkeep of defence establishments, administrative expenses, interest payments, payment of old-age pensions, and so on.

To conclude, the welfare criterion has significantly transformed the role of the state, leading to a continuous and considerable increase in the scale of government activities. Modern states not only perform traditional functions more efficiently and on a larger scale but also continually take on new responsibilities. Factors like larger social security expenditures, modernisation of agriculture, industrial sector development, rural development programs, nationalisation of industries and trade, rapid population growth, massive defence expenditures, frequent elections in a democratic setup, economic planning, urbanisation's impact, educational expenditures, and high inflation contribute to the mounting public expenditure in India. As the nation faces diverse challenges and aspirations, prudent fiscal management becomes crucial to effectively allocate resources and fulfil the evolving needs of the society.

Recap

- Public revenue - income earned by the government from various sources
- Sources of public revenue including taxes, borrowing, fines, fees, gifts, grants, and donations
- Prof. Hugh Dalton identified two major sources of public revenue: taxes (compulsory) and prices (voluntary)
- Taxation - primary source of revenue for modern governments
- Taxes in India are broadly classified into Direct (e.g., Income Tax, Corporate Tax) and Indirect (e.g., GST, Customs Duty).
- Non-Tax Revenue - revenue from various sources other than taxes, like administrative revenue, profits from state enterprises, gifts, and grants
- Public expenditure - government expenses for public needs and social well-being

Objective Questions

1. What is the main objective of public finance?
2. What type of expenditure results in income-generating assets?
3. What type of tax is imposed directly on individuals or businesses?
4. What type of expenditure includes costs for maintaining defence establishments?
5. What is the term for government spending on infrastructure development?
6. What are the sources of non-tax revenue for the government?

7. What type of tax is imposed on goods and services rather than individuals?
8. What is the term for expenses incurred by the government on a day-to-day basis?

Answers

1. Welfare
2. Productive expenditures
3. Direct tax
4. Unproductive expenditures
5. Capital expenditure
6. Administrative revenue, State enterprises profits, Gifts, Grants
7. Indirect tax
8. Revenue expenditure

Assignments

1. Discuss how governments use various revenue sources, including taxes and non-tax revenue, to fund different types of public expenditure.
2. Compare the different tax and non-tax revenue sources in financing public expenditure.
3. Examine the various types of public expenditure and their contribution to inclusive growth and development.

Suggested Readings

1. Tyagi, BP (1994): *Public Finance,* Jain Prakash Nath and Company Meerut
2. Kriparani, Kaveri, K, SudhaNaik, U K and Girija (2000): *Public Finance- Fiscal policy*, S Chand, New Delhi.

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Unit 3
Public Debt

Learning Outcomes

After learning this unit, the learner will be able to:

- familiarise the concept of public debt
- identify the objective of public debt
- distinguish between various types of public debt

Prerequisites

If your current income is not enough to cover your expenses, what would you do? For example, if you want to buy a bike or scooter but don't have the money, or if you want to work or study abroad but lack the funds, you might consider borrowing money to meet these needs. Individuals handle their financial shortfalls in this way. Governments borrow money in a similar manner when their spending is higher than their income. When the money the government collects is not enough to cover its expenses, it borrows money from various sources. The money raised through borrowing is considered public income in a broader sense. However, debt is not actually income because it must be paid back with interest. Instead, it is a public expense. When governments borrow money by issuing loans or borrowing from banks, people, other countries, or international organizations, public debt is created. It is important to note that public borrowing, like taxes, is not always the first choice for the government to raise money. Borrowing is not seen as a "compulsory" method unless there are special circumstances. In this unit, we will explore the importance of public borrowing, its goals, different types, and where governments can borrow from.

Keywords

Public Debt, Revenue, Expenditure, Productive Debt, Unproductive Debt

Discussion

4.3.1 Public Debt

The debt owing by the central or state governments is known as public debt. It is also referred to as national debt (exclusively for central government) and government debt. By contrast, the gap between government receipts and expenditures in a specific year, or the rise in debt during that year, is referred to as the annual government deficit. One way to fund government operations is through debt, but it is not the only option. Governments can monetise their debts by printing money, which eliminates the need to pay interest. Instead of actually erasing government debt, this practice just lowers interest expenses. Moreover, this method may create inflationary pressure in the economy since it leads to increase in the money supply. Governments typically borrow money by issuing bills and securities. Sometimes, less creditworthy nations borrow money directly from supranational organisations or foreign financial institutions like International Monetary Fund (IMF), Asian Development Bank (ADB), International Finance Corporation (IFC) and World Bank.

Government debt is an indirect debt owed by the people because the government receives a large portion of its funding from the public. Both domestic and international borrowing can increase the public debt. Public debt raised domestically is referred to as internal debt, whereas loans floated internationally are referred to as external debt. Government debt that has been issued in a foreign currency is typically referred to as sovereign debt. By the period of time until payments are due is another typical way to divide public debt. Debt that is short term is typically defined as lasting less than a year and long term as lasting longer than ten years. Between these two lines, medium-term debt lies. A broader definition of government debt may include all government liabilities, such as future pension payments and payments for goods and services contracted but not yet paid for by the government.

4.3.2 Meaning and Objectives of Public Debt

The term "public debt" refers to a government's borrowing from within or outside the country, from private individuals or associations of individuals, or from banking and non-banking financial institutions. In simple terms, the total amount borrowed by the government to meet its development expenses, including external debt, internal debt, and total liabilities, is referred to as public debt.

Prof. Hugh Dalton opines, "public debt is a way of collecting income from public officers".

According to Prof. J.K. Mehta, "public debt is a comparatively modern incident and it would come in practical form with the development of democratic governments".

Adam Smith says, "public debts create the conditions of war and extra expenditure."

Philip E. Taylor defines, "the debt is the form of promises by the treasury to pay to the holders of these promises a principal sum and in most instances interest on the principal. Borrowing is resorted to provide funds for financing a current deficit."

In the words of Prof. Findlay Shirras, "National debt is a debt which a state owes to its subject or to the nationals of other countries".

Thus, public debt refers to the government's borrowings to cover the excess expenditures over actual receipts. Governments can borrow both internally and externally, which is known as internal debt and external debt, respectively.

4.3.2.1 Objectives of Public Debt

In the earlier period, the government followed a policy of non-intervention in the economic system as they followed the classical ideas of economic thought. However, in the modern era, particularly after the "Great Depression" of the 1930s, followed by the Keynesian ideas, public authorities began to take a keen interest in the country's socio-economic development. Economic activity is rapidly expanding, and it is impossible to manage all of these projects without resorting to public borrowing. The following are the critical objectives and significance of public debt. Let us examine them.

- **Bridge the Revenue and Expenditure Gap:** The goal of public debt is typically to close the gap created by a mismatch between proposed expenditure and expected revenue. When the government's income decreases due to increased administrative expenses or unexpected events such as floods, famine, earthquakes, and communicable diseases, the government's income decreases because they must spend it to cover these problems.
- **Combat Recession and Depression:** People do not want to invest their money during recession and depression. The government may borrow money from the general public and invest it in a variety of projects. As a result, employment and output levels remain constant.
- **Curb Inflation and Maintain Economic stability:** Any government's primary objective is to maintain economic stability by controlling both inflation, a continuous rise in general price level and deflation, a continuous fall in general price level. If the economy's stability is threatened by cyclical fluctuations, the government may resort to borrowing to correct the situation.
- **Finance Development Plans:** There is never enough money in a developing economy. The government cannot hide behind high taxes. But making arrangements for development plans is also crucial in order to eradicate poverty from the nation. The only option in this situation is to take on public debt. To conduct financial transactions, the government therefore collects debts from citizens, foreign governments, or both.
- **Finance Public Enterprises:** In order to arrange financing for independently operating commercial firms, the government also incurs debt.
- **Create Social Overheads:** Governments take out loans in order to improve the country's infrastructure. Rapid growth in the industrial and agricultural sectors necessitated the construction of vital infrastructure such as roads, railways, and bridges.
- **Expand Education and Health Services:** The government incurs debt to construct and expand education, health, and similar services.
- **Finance War:** The government may incur debt to fund its self-defence efforts. With rising worldwide pressure and the threat of nuclear war, the government needs a lot of money to protect itself from foreign attacks, pay for self-defence services, and prepare for modern decoration.
- **Cover Unexpected Expenses:** Sometimes the government issues loans to meet unexpected events such as famines, floods, earthquakes, war, tsuna-

mis, communicable diseases and so on. COVID-19, which we all experienced, is the best example for the same. Public loans can assist in securing the necessary funds at the right time to meet such large expenses.

- **Establish Socialist Society:** In order to build a socialist society, the government currently nationalises business and industry and runs it on its own. However, running contemporary businesses requires a significant amount of funding, which the government can only secure by taking on debt.
- **Manage the Revenue Lag:** If tax revenue that the government receives is accessible at the end of the year, while spending begins at the beginning, then, at the start of the year, the government borrows money to finance its spending and then repays the debt when it receives tax revenue at the end of the year.
- **Make Favourable Public Verdict:** The government is forced to take on debt when the populace is unable to pay taxes. Even when the public is more capable, the government occasionally does not raise taxes since the general consensus is still positive (populist measures).
- **Carry out Research and Development:** The government also incurs debt to fund research activities in areas such as space, defence, biotechnology, medical-oriented tests, innovations and discoveries, agricultural, and industrial fields in order to increase production and productivity.

Public debt is one of the most important aspects of public finance and is considered an essential component of all economies around the world. Rapid growth in public expenditure as part of the government's welfare-oriented activities resulted in public revenue deficits. Public debt is used to compensate for a lack of public revenue. But a responsible approach to public debt management is essential to create an environment conducive to sustainable growth, social progress, and a higher quality of life for the people. In the case of India, the public debt management policy is centred on maintaining a long-term sustainable debt structure at the lowest possible cost.

4.3.3 Types of Public Debt

The structure of public debt varies by country due to factors such as the types of markets in which loans are floated, the terms of repayment, the rate of interest offered on bonds, the purpose of borrowing, and so on. Because of these differences in criteria, public debt is divided into several categories. The following are the various types of public debt:

1. Internal and external debt
2. Short term and long term loans
3. Funded and unfunded debt
4. Voluntary and compulsory loans
5. Redeemable and irredeemable debt
6. Productive or reproductive and unproductive debt/deadweight debt
7. Marketable and non-marketable debt

Let us discuss them in detail.

1. Internal and External Debt

Internal debt refers to government loans issued within the country. Individuals, banks, and other business entities make loans to the government. Government uses both money market and capital market instruments to borrow money internally.

External debt, on the other hand, refers to the government's borrowing from abroad or internationally. The government incurred external debt from foreign commercial banks, international institutions such as the International Monetary Fund (IMF), World Bank, and Asian Development Bank (ADB), as well as foreign governments and individuals. The government should exercise caution in the case of external debt because repayment of these debts necessitated massive foreign exchange reserves.

2. Short term and Long term Loans

Debts are also classified based on the duration of time they are taken out. Short-term debts are those with maturities ranging from three months to nine months. The majority of the government's debt is held in short-term interest-bearing securities such as Treasury Bills (T-Bills), money market instruments issued by the Government of India, available in three tenors: 91 days, 182 days, and 364 days or central bank advances like Ways and Means Advances (WMA), short-term advances made by the RBI to the centre and state governments to cover any shortfalls in receipts and payments. The interest rates on these debts are comparatively moderate. These debts are repaid within the one-year time frame required to finish the debt's tenure.

Long-term debts are incurred by the government over a long period of time, typically five or more years. Normally, the government makes long-term loans for development purposes. The time for returning it is not fixed. Long-term debts have a higher rate of interest. When the debt was paid off, the debtor received regular interest.

3. Funded and Unfunded Debt

Funded debts are of a long-term nature. Those debts may be paid off after a considerable amount of time, usually more than a year. However, there is no guarantee that it will be possible to pay off these debts within a year. In other words, funded debts are those that are redeemable after a year or are not redeemable at all. Furthermore, the debt is known as funded debt because the government maintains a separate fund for the repayment of such debt.

Contrarily, unfunded debts are those that are settled within a short span of time, typically a maximum one-year maturity. Unfunded debts are therefore short-term loans. Due to their short duration of three to six months and never exceeding a year, Treasury bills are considered unfunded debt. In most cases, these debts are used to narrow temporary budget gaps. Unlike funded debts, the government does not maintain a separate fund for the repayment of the unfunded debts. Since repayment of unfunded debt is made out of public revenue, it is referred to as a floating debt. The interest rate on these loans is lower than that of funded debts.

4. Voluntary and Compulsory Loans

A democratic government raises loans on a voluntary basis for its citizens. Thus, loans made to the government by individuals out of their own free will and ability are referred to as voluntary loans. Normally, public debt, by nature, is voluntary.

Compulsory loans are not a popular method of debt today. However, in times of emergency such as war, natural disasters, etc., the government may compel or put pressure on people to lend. That is why these are known as forced or compulsory loans. Government can also use compulsory loans to assist in the condition of depression, so that work power from people's hands can be reduced and rising rates can be stopped.

5. Redeemable and Irredeemable debt

Redeemable debts are loans that the government promises to repay at some point in the future. In other words, the government promised to pay the principal amount plus interest in the case of redeemable debt. The interest on this debt is paid irregularly. These are also known as terminable debts.

Irredeemable debts, on the other hand, are those in which the government never repays the principal amount and instead regularly pays the interest rate on the debt. Redeemable public debt is preferred for obvious reasons. If the government makes irredeemable loans, society will be saddled with the burden of perpetual debt. These debts are also referred to as terminable debts. Their maturity period is not fixed.

6. Productive or Reproductive and Unproductive debt/deadweight debt

Public debt can be classified as productive or reproductive debt and unproductive or deadweight debt based on the purposes of the loans.

Productive debts are those that are used for projects that generate revenue for the government. Or productive debt refers to a loan issued by the government to increase the economy's productive capacity. More specifically, the government produces debt for development activities such as the agriculture and irrigation, industrial sector, mines, power, construct road, railway, education and so on. By absorbing the income from these projects, the government can easily repay the principal and interest rate. Furthermore, productive loans have the potential to increase output and generate more productive employment in the country. As a result, productive debt never puts pressure on the government or the taxpayer. Productive debts are also known as reproductive debts.

Unproductive debts, on the other hand, do not generate any income. These loans do not contribute to the economy's productive capacity because they do not create any productive assets. Debts incurred to finance a war, for example, are ineffective. In this case, debt repayment is extremely difficult and places a significant burden on the government and taxpayers. Unproductive debts are also referred to as dead weight debts.

7. Marketable and Non-marketable Debt

Securities and other debt instruments issued by the government during the borrowing process are generally bought and sold on the open market. These are referred to as marketable public debt because they can be traded on the open market. An important feature of marketable debt is that the government can easily sell such securities in the market. Treasury bills, promissory notes, and other similar instruments are the examples for marketable debts.

Certain types of public debts, such as postal savings, pension funds, national defence certificates, and so on, are not marketable; they cannot be bought and sold on the open market. These are non-marketable government debts.

Recap

- Public debt: Debt owed by central or state governments
- Components of public debt: Includes external debt, internal debt, and total liabilities
- Internal debt: Government loans issued within the country from individuals, banks, and businesses

- External debt: Government borrowing from abroad, foreign banks, international institutions, foreign governments, and individuals
- Short-term debts: Maturities ranging from three to nine months, e.g., Treasury Bills, Ways and Means Advances
- Long-term debts: Incurred over five or more years
- Funded debts: Long-term nature; unfunded debts are settled within one year
- Voluntary loans: Government borrows from individuals willingly
- Forced/compulsory loans: Government compels people to lend during emergencies
- Redeemable debts: Government promises repayment in the future
- Irredeemable debts: No principal repayment; regular interest payments
- Productive debts: Used for projects generating revenue
- Unproductive debts: Do not generate income
- Marketable public debts: Securities issued and traded in the open market
- Non-marketable government debts: Certain types not traded on the open market, e.g., postal savings, pension funds, national defence certificates

Objective Questions

1. What is the debt owed by the central or state governments known as?
2. From whom can a government borrow to finance its expenses?
3. What type of debt is incurred within the country from individuals and banks?
4. Where does external debt come from?
5. What are loans made to the government out of free will called?
6. In emergencies, what type of loans may the government compel people to provide?
7. What do you call debts used for projects generating revenue for the government?
8. What type of debts do not generate any income for the government?
9. Name the public debts that are bought and sold on the open market.
10. What is the term for debt instruments issued by the government during borrowing?

Answers

1. Public debt
2. Individuals, institutions, or banks
3. Internal debt
4. Abroad or internationally
5. Voluntary loans
6. Forced or compulsory loans
7. Productive debts
8. Unproductive debts

9. Marketable public debts
10. Securities

Assignments

1. Discuss the importance of managing public debt for a government's fiscal health.
2. Compare and contrast internal and external public debt.
3. Describe the role of public debt in financing development projects. Provide examples of productive and unproductive debts, and explain how governments can use public debt strategically to promote economic growth and social welfare.

Suggested Readings

1. Tyagi, BP (1994): *Public Finance*, Jain Prakash Nath and Company Meerut
2. Kriparani, Kaveri, K, SudhaNaik, U K and Girija (2000): *Public Finance- Fiscal policy*, S Chand, New Delhi.

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Unit 4
Budget

Learning Outcomes

After reading this unit, the learner will be:

- introduced to the concept of budget
- familiarised with the classifications of budget
- aware of the concept of fiscal policy

Prerequisites

Imagine you are saving money for a vacation. You plan how much you'll spend on transportation, lodging, food, and activities. In the same way, the government creates a public budget to plan how much money it will allocate for various areas like education, healthcare, infrastructure, and defense. To ensure the effeactive use of funds within a specific timeframe, the government creates a public budget. A public budget is a detailed plan that outlines how a government intends to allocate and spend its resources over a set period. This budget includes not only expenditures but also revenues and potential borrowing. It serves as a tool that helps the government make decisions about funding for public services and infrastructure, such as healthcare, education, defense, and social welfare. Additionally, the public budget plays a crucial role in maintaining economic stability. In this unit, we will explore how governments create and implement public budgets. We will also look at different types of budgets and how they impact both the economy and citizens' lives. Understanding the public budget will help you see how governments manage resources and plan for future growth.

Keywords

Budget, Capital Budget, Revenue Budget, Deficit, Surplus Budget, Revenue Deficit, Fiscal Deficit, Fiscal Policy

Discussion

4.4.1 Budget

The term "budget" is derived from the French word "bougette," which means "small bag" or "container of records and accounting." A budget is a plan for accounting. It is a formal course of action that is monetary in nature. It could be interpreted as a statement of anticipated revenue and expenses under particular operating assumptions. It serves as a quantitative blueprint for action and a quantified roadmap for upcoming tasks.

By coordinating various activities, every organisation is able to accomplish its goals. Effective planning of these operations is critical for the achievement of goals, The term "budgets" is frequently used to describe these detailed plans. More than an accounting exercise, a budget is a management tool for short-term planning and control.

Meaning and definition of budget

According to Prof. Rene Stourn, "a budget is a document containing a preliminary approved plan of public revenue and expenditure".

Bastable stated that, "a budget is at once a report on estimates and proposals, that it is the instrument by which all the processes of financial administration are correlated and coordinated".

According to Crown and Howard, "a budget is a predetermined statement of management policy during a given period which provides a standard for comparison with the results actually achieved".

Prof. Hugh Dalton says that, "the normal thought of balanced budget is that there is a gain in the income in a time period or it is not less in comparison of expenditure".

In Prof. Taylor's words," budget is the most important financial plan of the government. Budget, presents combine the sured income and proposed expenditure's estimate for budget year".

In the view of Keller & Ferrara, "a budget is a plan of action to achieve stated objectives based on predetermined series of related assumptions".

According to G.A. Welsh, "a budget is a written plan covering projected activities of a firm for a definite time period".

This unit discusses the public budget. Budget has got many definitions. "Budget is a document containing a preliminary approved plan of public revenue and expenditure"; "A budget is at once a report on estimates and proposals, that it is the instrument by which processes of financial administration are correlated and coordinated"; "It is a statement of the estimated receipts and expenses during the fixed period ; it is a table giving the amount of the receipts to be realised and the expenses to be incurred; furthermore an authorisation or command given by the proper authorities to incur the expenses and collect the revenues"

In the Constitution of India, budget is referred to as 'annual financial statement' though the word budget is never used in the document. Article 112 of the Constitution of India deals with the provisions of budget. " The budget is a statement of the estimated receipts and expenditure of the Government of India during the financial year from April 1st to May 31st of the following year". Along with the statement of receipts and expenditure, the budget in India contains following documents:

i. Statement of Capital and Revenue receipts

ii. Different ways to generate revenues

iii. Statement of expenditure

iv. Final statement of receipts and expenditure of preceding financial year. Details of surplus and deficit in the financial year and the reasons for it

v. Proposals for tax reforms, new programmes and schemes, prospects of spending programmes

In India, we had two budgets viz. general budget and railway budget. Railway budget was started in 1921, but subsumed to the general budget in August 2016.

4.4.2 Significance of Budget

The budget, in its most basic form, had been present in almost all monarchies throughout history. There have been written documents pertaining to the existence of the state treasury, accountants, and auditors hired by monarchs to safeguard the royal treasury. In modern industrial economies, the budget is the primary tool for carrying out government economic policies. Here, the legislators play an important role in the management of public finances. The taxes and revenues collected by the government through various means are to be used for the development and welfare of the society. With the advent of the welfare state, it became critical that government funds be used wisely to improve the living conditions of society in general, and the marginalised sections in particular.

Every country strives to raise its people's standard of living and eliminate issues such as poverty, illiteracy, unemployment, income inequality, and so on. Budgetary measures assist the government in meeting these objectives. A government budget is the means by which the government controls its expenditure and revenue which provides an overview of the government's fiscal policy. The public can see how much the government spent in the previous fiscal year and on what items. The budget also includes itemised receipts, which reveal the sources of revenue for these expenditures. Budgets aid in the stability and control of the government's finances, as well as providing accountability through financial reporting.

The following points will assist you in comprehending the significance of the government budget:

1. **Allows Planning:** The process of planning is very important to achieve any purpose. Governments have many purposes or goals that need to be achieved. Certain goals may be for the entire economy and certain for the particular section of the society or sectors of the economy. Budget by showing a statement of revenue and expenditure together with the tax proposals and schemes & programmes implemented portrays a preliminary plan for the course of action to be done in the particular financial year.
2. **Ensures Better Collecting of Receipts:** Budgets show the past trend of revenue collection since it is mandatory to keep the statement of receipts of the previous financial year in current budget. The previous data shows an idea of the cost of collecting revenue receipts with the actual amount of revenue collected. This helps in framing a revenue collection method in the current year from the experiences of the previous year.
3. **Ensures Efficiency in Expenditure:** Budget contains physical targets that shows the amount of money to be spent in various schemes and projects introduced in the budget. This places a check of the utilisation of funds allotted generally for these schemes. A

proper utilisation of funds also helps in efficient implementation of the programmes which will result in the successful completion of the schemes.

4. **Consider Time:** Budget has a general time frame for the working of all programmes and schemes mentioned in it. This time frame helps the implementing agencies to keep a check on the time factor related to the implementation of the project. It also helps the monitoring agencies to see the improvement in the implementation of the programmes.
5. **An Account of Past Experience:** Budget is prepared on the basis of experiences from the past. Revenue collection methods, tax reforms, schemes and programmes for the society, tax reduction are prepared from the past experience. Even, the changes in the presentation of budget in the Parliament and sequence of the presentation is drawn out of the previous experience of how well a budget presentation is captured.
6. **Macroeconomic Stabiliser:** Budget is an important tool of fiscal policy which act as a macroeconomic stabiliser in the times of depression. Budget presented during the time of low economic activity includes schemes and programmes that boost the economy. Schemes will be framed in such a way that it increases the consumption and investment in the economy and thereby generates aggregate demand. The most important way of boosting the economy is through pump priming of money.
7. **Allows Reallocation of Resources:** In a welfare state, governments try to bring equal distribution of resources or allocation of resources in a way that it benefits economically and socially vulnerable groups of people. Schemes and programmes are introduced in the budget to affect the trickle down of money and resources to the grass root level of the economy.

Governments resort to production of goods and services that are usually not produced by the private sector, and beneficial to its vulnerable sections of the society. Welfare schemes introduced via the budget may have a similar idea.

In the case of subsidies and concessions in tax rate introduced in the budget, these are meant to enhance investment and production in the economy. Subsidies given in the agricultural sector, MSMEs, Khadi groups encourage production in these sectors. Governments also try to reduce the investment and production of harmful goods such as intoxicants, polluting goods by imposing higher taxes.

Therefore, charging subsidies and taxes helps in allocating resources in a more equitable and beneficial manner.

8. **Reduce Disparity:** Taxes imposed in the budget are mostly progressive ones. Tax proposals can be made to tax high income groups and spend them on social security schemes to benefit the poor sections of the society. Concentrating wealth in the hands of a few is against the provisions of a welfare state. The Directive Principles of State Policy have provisions against concentration of wealth. Tax reforms must be formulated considering this.
9. **Management of Public Undertakings:** Budget mentions about public undertaking while introducing schemes since they are under the purview of the government. Take the case of big public enterprises such as the Indian Railway, Power Plants etc. The policies related to these undertakings are introduced in

the budget. Since public undertakings have a large role in benefiting the lives of people, schemes related to these enterprises take a part in the budget proposals.

10. **Role in Stabilising Economy:** Budget has a role in ensuring stability in the economy. Being a tool of fiscal policy, schemes and tax proposals affect the inflationary and deflationary pressures in the economy. During the time of inflation, a government manages surplus budget policy, and during the time of deflation, the government tries deficit budget policies. This ensures stability in the economy.
11. **Accountability:** Formation of budget itself serves public accountability. Budget portions related to various ministries/departments are prepared in general by the same Ministries/ Departments itself. ministries/departments know more about the needs and requirements of the sectors dealt by them, they could create better proposals. The allocation details prepared by the ministries/departments are evaluated at the governmental level to see appropriateness of the amounts with requirements. A second stage scrutiny of funds is done at legislative level when a budget is introduced in the Parliament. Different stages of enactment of budget, and various cut motions ensures accountability in fund allocation.
12. **Reduction of Poverty and Unemployment:** Reducing poverty and unemployment requires establishing job possibilities for the unemployed and giving the impoverished the most social benefits possible. In reality, the main goal is to promote social welfare. Every Indian should have access to basic necessities including food, clothing, shelter, as well as respectable medical treatment and educational opportunities. These are all prime objectives of every budget.
13. **Economic Growth:** It is determined by a country's rate of investment, savings, and capital formation. As a result, the budgetary plan focuses on allocating adequate funds for public sector investment while increasing the overall rate of investment and savings. A budget allows the government to control how various industries are taxed. Investment and expenditure are two of the most important economic development factors in a country. The government can encourage people to save and invest more by offering tax breaks and subsidies.
14. **Reducing Regional Disparities:** Regional imbalances or disparities exist due to large differences in per capita income, literacy rates, health and education services, levels of industrialization, and other factors. Regions can be states or regions within a state. India has massive imbalances on a number of fronts. Government budgeting attempts to reduce regional disparities through the implementation of tax and public spending, as well as encouraging the establishment of manufacturing units in underdeveloped areas and other productive budget proposals.
15. **Healthcare Financing:** Governments mobilise funds through public budgets and other channels, making a significant contribution to healthcare financing. Healthcare finance has been accomplished by pooling resources for health development, coordinating resource distribution, and obtaining health services from a variety of sources.

16. **Financing Education:** The National Education Policy places a strong emphasis on early learning for all children, a revised curriculum that places an early emphasis on basic literacy and numeracy skills, a move away from rote learning, and a new evaluation system that assesses learning abilities rather than memorisation. In India, approximately one million public schools get government money, with just a small portion going to government-aided institutions. The budget of the government includes a sizable amount for the management and modernisation of the educational system.

Budgets do not guarantee 100% success in economic stability, but they do help to avoid failure. A budget is a tool for transforming a broad concept into a specific, actionable, and aspirational goal. Budgeting entails developing a strategy for how the government will spend the money. Creating a spending plan enables the government to know ahead of time if it will have enough money to complete the tasks at hand. It also functions as a device that identifies and focuses on the development of marginalised people. Budgeting establishes a yardstick to examine success or failure in achieving goals, as well as providing appropriate improvement measures.

4.4.3 Classification of the Budget

Remember that a budget is a yearly projection of the government's anticipated receipts and outlays for the fiscal year. There are two different types of budgets: balanced budget and unbalanced budget. Depending on whether estimated receipts are equal to, less than, or greater than estimated receipts. The unbalanced budget is classified into two: surplus budget and deficit budget. Each type is described below.

4.4.3.1 Balanced Budget:

A balanced budget is one where the government's estimated receipts, i.e, revenue and capital, equal the government's estimated outlays. For the purpose of simplicity, let us assume that the only source of income is a lump sum tax. The amount of tax will then be assumed to be equal to the amount of expenditure in a balanced budget.

Mathematically, Balanced Budget means,

Estimated Government Receipts = Estimated Government Expenditure

Adam Smith promoted a balanced budget, contending that public spending should never exceed public receipts. However, Keynes and other economists disagree with the balanced budget approach. They contend that under a balanced budget, overall spending, both public and private, is below what is required to maintain full employment.

Government spending should therefore be increased in order to bridge the gap between what is required for full employment and what is actually done. A balanced budget is the best course of action to bring the economy from near full employment to full employment equilibrium.

4.4.3.2 Unbalanced Budget:

A budget is considered to be unbalanced when estimated government expenses are either lower or higher than estimated government receipts. It could have a surplus or a deficit budget.

1. Surplus Budget

A budget is referred to as a surplus budget when government revenues exceed government expenses. In other terms, a budget that is in surplus means that revenue from the government exceeds spending.

It can be represented as,

Surplus Budget = Estimated Govt. Receipts > Estimated Govt. Expenditure

A budget surplus demonstrates that the government is pulling more money out of the economy than it is injecting. Thus, overall demand tends to decline, which aids in lowering the price level. Therefore, a surplus budget is the proper budget during periods of high inflation that result from excessive demand. But a surplus budget should be avoided in times of deflation and recession. However, in the current world, governments rarely adopt balanced budgets and surplus budgets.

2. Deficit Budget:

A budget is said to be in deficit when estimated expenditures exceed estimated government receipts. In a deficit budget, therefore, the government's predicted revenue is lower than its anticipated spending.

It can be represented as,

Deficit Budget = Estimated Govt. Expenditure > Estimated Govt. Receipts

Popular democratic governments today employ deficit budget plans to meet the growing needs of the people. It should be noted that Keynes had argued in favour of a deficit budget to address the issue of underemployment and unemployment. The government bridges the deficit gap either by borrowing money or by withdrawing from its reserves. A deficit budget therefore indicates a rise in the government's liabilities and a decrease in its reserves. A deficit budget is an effective strategy to fight recession when the economy is in an equilibrium of underemployment brought on by insufficient demand.

A deficit budget brings certain advantages, particularly for developing economies. For example, it accelerates economic growth, makes it possible to implement welfare programmes for the people, and combats deflation by preventing price declines.

At the same time, the deficit budget has some drawbacks, including the inducement of wasteful and unproductive government spending, the chances for political and financial instability, and it weakens the confidence of foreign investors.

4.4.4 Revenue Account and Capital Account

It is vital that the government generates revenue and incurs expenditures in our emerging economy. That is valid to state that the government expenditure is necessary to accelerate the nation's development. So let us explore some related ideas, such as revenue accounts and capital accounts.

4.4.4.1 Revenue Account

A revenue account is one that has a credit balance. The revenue account or revenue budget is concerned with the government's current financial transactions that are recurring in nature. The revenue budget consists of the government's revenue receipts and the expenditures met from these revenues.

Revenue account includes all of the government's revenue receipts, also known as current receipts. These receipts include tax revenues and other government revenues. Tax revenues include the revenue earned by the government authorities by levying direct and indirect taxes and duties. Income tax, corporate tax, and other direct taxes are examples. Excise duties, customs duties, and Goods and Service Tax (GST) are examples of indirect taxes. Other sources of revenue include interest, dividends, profits from public sector units, fees, fines, penalties as well as revenue from government estates and receipts from government commercial enterprises, miscellaneous items, and so on. We have already discussed the same in Unit 2.

Revenue expenditure includes expenses that are not used to create assets or repay liabilities. These primarily include the government's current expenses. The government incurs the revenue expenses for a short term to run day-to-day operations. For example, paying salaries, giving grants are instances of revenue expenditure. It is further classified as plan and non-plan expenditure. However, this classification is not used in the current budget.

4.4.4.2 Capital Account

A capital account is one that includes both capital receipts and capital payments. A capital budget is a statement of the government's estimated capital receipts and payments for the fiscal year. It is made up of both capital receipts and capital expenditures. It essentially includes both the government's assets and liabilities.

Capital receipts are loans or capital raised by governments through various means. The government's capital account has an impact on a country's expenditure ratio. The capital account balance indicates whether the country is a "net exporter" or "net importer" of capital.

They can also raise funds from the general public through market loans. They could also borrow from banks or other institutions using Treasury Bills, also known as T-Bills. Loans are also obtained from outside sources such as foreign governments or international organisations. We have already seen these methods in Unit 3. Disinvestment in public sector units or other assets is another method of raising capital.

A capital expense or capital expenditure refers to the cost of purchasing assets by the government or a business organisation. Fixed assets such as machinery, equipment, or property are purchased with capital funds. Purchasing and selling assets is an essential component of running a business. It is beneficial in expanding business operations in order to generate future capital and secure financial assets for future use. For the government, capital expenditures are typically met with borrowed funds with the goal of increasing tangible assets of a material nature or reducing recurring liabilities such as building construction, irrigation projects, and so on. It entails improving assets and decreasing liabilities. It can do so through loan repayment, where the loan represents a liability, and thus repaying the loan reduces liability.

4.4.5 Fiscal Deficit

Every time the government borrows money to spend more than it earns, it is covering up a shortfall in income compared to spending. The fiscal deficit refers to the difference between the two. It can occur as a result of a significant increase in the capital expenditure required to create long-term assets or to provide financial assistance to poor farmers, labourers, and other vulnerable sections of society. These deficits are financed by the government borrowing money from the capital markets. They can do so by issuing bonds or by borrowing from the central bank. Every year, a large fiscal deficit suggests that the government has been spending beyond its means. Economists must monitor fiscal deficits to determine how much the government spends more than it earns.

We'll now look at the components that make up the government's total income in the form of revenue receipts and non-tax revenues. The components of revenue receipts are income tax, GST and taxes of

Union Territories, custom duties, union excise duties, corporation tax, and so on. The non-tax revenue sources include interest received as a result of loan recovery, union territory receipts, profits and dividends, grants from external sources etc. The income generated from all of these sources is then spent by the government on capital expenditure, revenue expenditure, interest payments, and grants-in-aid (for the creation of capital assets), and is referred to as total expenditure.

The fiscal deficit is calculated by subtracting the total income from the total expenditures incurred by the government. Taxes, non-debt capital receipts, and other forms of revenue, excluding borrowings, are included in the government's total income. That is,

Fiscal Deficit = Total Government Expenditure (Revenue and Capital Expenditure) - Total Government Income (loan recovery, revenue and non-revenue receipts)

In simple words, the fiscal deficit is the difference between the government's total revenue and total expenditure. It represents the total amount of borrowing required by the government. Borrowings are not included in the total revenue calculation.

For instance, if a country's GDP is 200 lakh crore and the difference between total income and total expenditure is 20 lakh crore with total expenditure greater than total income, the fiscal deficit is 10%.

In general, fiscal deficits occur as a result of either a revenue deficit or a significant increase in capital expenditure. Capital expenditure is incurred to create long-term assets such as factories, buildings, and other construction. A deficit is typically financed by borrowing from the country's central bank or raising funds from capital markets through the issuance of various instruments such as treasury bills and bonds.

Simple representation of deficits are given below

Note:

Fiscal deficit = Total expenditure – Total receipts excluding borrowings

Budget deficit = Total expenditure – total revenue

Revenue deficit = Total revenue expenditure – Total revenue receipts

Primary deficit = Fiscal deficit - Interest payments

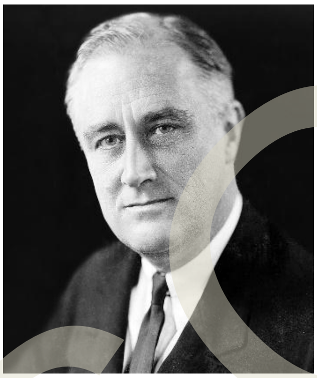
The fiscal deficit represents the government's borrowing needs for the fiscal year. A larger fiscal deficit implies that the government will borrow more. The size of the fiscal deficit indicates the amount of government spending for which the government must borrow money.

4.4.6 Fiscal Policy

Monetary policy and fiscal policy are the two main tools available to policymakers when they want to affect the economy.

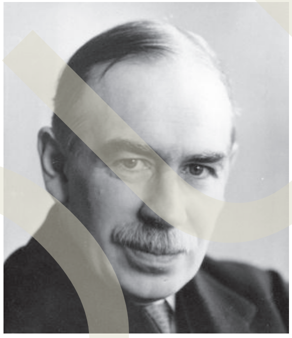
Fiscal policy is the term used to describe the plans or measures the government makes to affect the overall level of economic activity. A country's budget, taxes, spending, and borrowing are part of its fiscal policy. Fiscal policy is the use of government revenue collection through different methods and government expenditure or spending to impact the economy. Public revenue, Public Expenditure, Public debt, and budget are the major instruments through which the fiscal policy is implemented by the government. During the recent global economic crisis due to COVID-19 pandemic, governments stepped in to support financial systems, jump-start growth, and mitigate the impact of the crisis on vulnerable groups through expansionary fiscal policy.

During the 1930s Great Depression, unemployment in the United States reached 25%, and millions of people stood in bread lines for food. The misery seemed to last forever. President Franklin D. Roosevelt made the decision to implement an expansionary fiscal policy. Soon after taking office, he announced his New Deal. It established new government agencies, the Works Progress Administration (WPA) jobs programme, and the Social Security programme, which is still in operation today. These spending efforts, along with his continued expansionary policy spending during World War II, helped pull the country out of the Great Depression.



Franklin D. Roosevelt (1882 – 1945)

Determining whether a government will spend more or less than it collects is a matter of fiscal policy. Prior to the Great Depression of the 1930s and the unemployment crisis of the 1920s in Great Britain, a laissez-faire approach to government prevailed and it was widely believed that the government should follow a balanced budget strategy. Following the stock market crash and the Great Depression, policymakers pushed for governments to become more involved in the economy. The intentional use of fiscal tools to achieve economic objectives is largely a result of John Maynard Keynes' theoretical contribution to macroeconomics, particularly during the Great Depression of the 1930s due to the severity of these disturbances. These theories revolved around the idea that fiscal policy should be used "countercyclically," or that the government should use its economic power to counteract the cycle of economic expansion and contraction.



J. M. Keynes (1883 – 1946)

Briefly stated, Keynes's rule was that the budget should be in deficit during periods of low economic activity and in surplus during periods of economic expansion frequently accompanied by high inflation. Recently, countries reduced the size and function of government, with markets playing a larger role in the allocation of goods and services, but when the global financial crisis led to global recession, many countries returned to more active fiscal policy.

4.4.6.1 Objectives of Fiscal Policy

With the government's increased involvement in economic development initiatives, fiscal policy in India has recently become more significant. Depending on the conditions in a nation, fiscal policy has a variety of goals.

The following are the broader objectives of fiscal policy.

1. Plan for the optimum utilisation of resources and achieve full employment.
2. Maintain economic stability by reducing inflationary pressures in the economy.
3. Stabilise the growth rate of the economy.
4. Maintain equilibrium in the balance of payments.
5. Mobilise adequate resources for financing various programmes and projects adopted for economic development.
6. Reallocation of resources of the economy from less productive uses to more productive and socially more desirable uses.
7. Accelerate capital formation by increasing the level of aggregate investment and savings.
8. Encourage necessary private sector development through financial incentives.
9. Poverty alleviation and generation of employment opportunities to lessen unemployment.
10. Reduction of the degree of disparity in the wealth and income distribution and promotion of social justice.
11. Elimination of regional and sectoral imbalances.
12. Maximisation of socio-economic welfare of the people.

The Government of India has been formulating its fiscal policy with a thorough consideration of the components of revenue, expenditure, and public debt in order to achieve all the aforementioned goals.

4.4.6.2 Types of Fiscal Policy

There are two main types of fiscal policy: expansionary and contractionary.

Expansionary fiscal policy is said to be in effect when the government increases spending while decreasing tax rates to boost economic growth. This increases consumption as purchasing power rises. Businesses gain easy access to credit and thus invest in new projects, increasing the nation's GDP. The contractionary fiscal policy is said to be in effect when the government reduces spending while increasing taxes in the country. As a result of such a move, there is a fall in money available in the market. It causes a decrease in purchasing power, which leads to decreased consumption. When there is less capital available for business, the economy contracts, causing unemployment. Contractionary policy is used to keep inflation under control.

Depending on the situation of the country at the time, the central government may implement either expansionary or contractionary fiscal policies. An expansionary fiscal policy where government spending exceeds tax collection, is typically implemented during economic downturns. For example, during a recession, the government may reduce tax rates or increase spending in order to stimulate demand and economic activity. Contrarily, contractionary fiscal policy is implemented to offset the economy's inflationary tendencies. Here, the government increases tax rates while purposefully cutting back on public spending to combat inflation and stabilise the economy.

The role of the State in regulating economic activity and preserving the highest levels of economic growth is crucial and is widely acknowledged now. A free market without any government regulation in the modern world is not advisable. In recent decades, the government has started using more and more tools to foster economic stability and quick economic growth, including taxes, public spending, budgeting, and debt management. Fiscal policy is regarded as one of the most important instruments of the government's economic policies. It is essential to the country's socio-economic development. The recent COVID-19 pandemic shocks demonstrated the need for smart fiscal policy to guide the economy during a volatile period.

Every government in the world adopted some sort of fiscal strategy, some encouraged consumption while others concentrated on the supply side of the economy.

Recap

- Budget: Annual financial statement of revenue and expenditure estimates for a fiscal year
- Balanced budget: Estimated receipts equal estimated outlays
- Unbalanced budget: Estimated expenses are either higher or lower than estimated receipts
- Surplus budget: Revenues exceed expenses
- Deficit budget: Expenses exceed revenues
- Revenue account: Records income transactions like taxes, fees, fines, and state-owned enterprise profits
- Current revenue: Revenue from regular operations (e.g., taxes on income and sales)
- Capital revenue: Revenue from asset sales (e.g., land or buildings)
- Capital account: Records capital transactions (e.g., infrastructure investments, asset purchases)
- Capital receipts: Inflow of funds from capital transactions (e.g., asset sales or borrowing)
- Capital expenditure: Outflow of funds for capital transactions (e.g., infrastructure investments)
- Fiscal deficit: Difference between total expenditures and total revenue in a period (year)
- Fiscal policy: Use of government spending, taxation, and borrowing to influence the economy
- Essential tools of fiscal policy: Public revenue, public expenditure, public debt, and budget
- Expansionary fiscal policy: Increase spending or decrease taxes to stimulate economic growth and demand
- Contractionary fiscal policy: Reduce spending or increase taxes to curb economic growth and demand

Objective Questions

1. What is an annual financial statement with revenue and expenditure estimates for a fiscal year?
2. Name the type of budget when estimated receipts equal estimated outlays?
3. Name the type of budget when estimated expenses are either higher or lower than estimated receipts?

4. Name the type of budget when revenues exceed expenses?
5. Name the type of budget when expenses exceed revenues?
6. What term refers to the income earned by the government from various sources, such as taxes, fees, fines, and profits from state-owned enterprises?
7. What term encompasses the government's spending on goods and services, such as education, healthcare, infrastructure, defence, and social welfare?
8. What is the term used to describe the difference between the government's total expenditures and its total revenue in a particular period, usually a year?
9. Name the essential tools of fiscal policy.
10. What are the tools used to influence the economy through fiscal policy?
11. What type of fiscal policy involves increasing government spending or decreasing taxes to stimulate economic growth and boost aggregate demand?
12. What type of fiscal policy involves reducing government spending or increasing taxes to curb economic growth and aggregate demand?

Answers

1. Budget
2. Balanced
3. Unbalanced
4. Surplus budget
5. Deficit budget
6. Public revenue
7. Public expenditure
8. Fiscal deficit
9. Revenue, Expenditure, Debt, Budget
10. Spending, Taxation, Borrowing
11. Expansionary fiscal policy
12. Contractionary fiscal policy

Assignments

1. Describe the concept of fiscal policy and its significance in the management of a country's economy.
2. Compare and contrast a balanced budget and an unbalanced budget.
3. Assess the role of public revenue and public expenditure in fiscal policy.

Suggested Readings

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BLOCK - 05

Economic Growth and Development

Unit 1
Growth and Development

Learning Outcomes

After completing this unit, learners will be able to:

- differentiate between economic growth and economic development
- understand the role of key economic indicators in assessing development
- discuss the Sustainable Development Goals (SDGs) and their significance

Prerequisites

Imagine a village where people work hard to produce crops, build homes, and provide for their families. The village is growing steadily, and people are enjoying a better quality of life each year. However, as more crops are harvested, the land starts to wear out, and pollution begins to affect the river nearby. People start to realise that while they are producing more, their environment is suffering. This sparks a question: How can they continue to grow, but in a way that does not harm the environment for future generations? The villagers come together to find a solution that balances growth with protection of the land and water. This story reflects the broader challenge faced by many societies today: how to grow economically while also caring for the environment.

As economies grow, so do their impacts on the world around them. Growth often brings higher living standards, more jobs, and improved infrastructure. But growth must be managed carefully to ensure that it does not lead to problems such as pollution or depletion of natural resources. The balance between growth and environmental, and the role of policies that drive that development is key in shaping a better future for all.

Keywords

Economic Growth, Economic Development, Sustainable Development, Sustainable Development Goals (SDGs), Pollution, Environmental Protection, Climate Change

Discussion

5.1.1 Growth and Development

Economic growth refers to the increase in the monetary value of all goods and services produced within an economy over a specific period. It is a quantitative measure that focuses on expanding economic activities, often assessed using indicators like GDP (Gross Domestic Product) and GNP (Gross National Product). The growth rate measures the percentage change in economic output over a given time, reflecting the economy's capacity to produce goods and services, create jobs, and generate income. A positive growth rate indicates economic expansion, often resulting in more jobs, improved living standards, and better opportunities. In contrast, a negative growth rate can lead to economic challenges such as job losses and decreased income. Economic growth is a primary goal for most nations as it helps improve living conditions and supports investments in key areas like education, healthcare, and infrastructure.

Economic development takes a broader perspective. It focuses on improving the well-being and standard of living of people in a society. Unlike economic growth, which measures only output, development includes factors like better healthcare, education, technology, and poverty reduction. Economic development involves targeted programmes and policies that aim to reduce poverty, create jobs, and promote equity. It is assessed using both quantitative and qualitative measures, such as the Human Development Index (HDI), which includes indicators like life expectancy, literacy rates, and income levels.

Table 5.1.1 Differences Between Economic Growth and Economic Development:

Aspect	Economic Growth	Economic Development
Definition	Increase in goods and services	Improvement in living standards and overall well-being
Span	Short-term	Long-term
Measurement	Quantitative (e.g., GDP, GNP)	Quantitative + Qualitative (e.g., HDI)
Scope	Narrow (economic focus)	Broad (includes social and cultural aspects)
Changes Expected	Mainly quantitative	Quantitative and qualitative

According to Kindleberger, "Economic growth means more output, while economic development implies both more output and changes in the technical and institutional arrangement by which it is produced and distr• Economic growth: Increase in economic value ibuted. Growth may well involve not only more output derived from greater amounts of inputs but also greater efficiency, i.e., an increase in output per unit of input. Development goes beyond this to imply changes in the composition of output and in the allocation of inputs by sectors."

While economic growth is about increasing the production of goods and services, economic development is about improving the quality of life for all. Both concepts are key in shaping policies that support sustainable and inclusive progress.

5.1.2 Indicators of Development

Economic indicators are essential tools for understanding a country's development. These indicators measure various aspects of economic performance, helping to track a nation's progress. Key economic indicators include GDP, GNP, national debt, trade balance, credit rating, and wealth distribution. These provide insights into economic growth and help create strategies for sustainable and inclusive development.

The key economic indicators are as follows:

1. **Gross Domestic Product (GDP):** GDP measures the total value of goods and services produced within a country in a year. It includes private consumption, investments, government spending, and net exports (exports minus imports). While useful, GDP has limitations—it does not account for unpaid work like caregiving or activities that harm the environment.
2. **Gross National Product (GNP):** GNP includes GDP and adds income earned by residents from abroad. It also subtracts income earned within the country by foreigners. This gives a broader view of economic activity.
3. **National Debt:** National debt is the total borrowing by the government that is yet to be repaid. While borrowing can help fund development, excessive debt can create challenges for future generations.
4. **Trade Balance:** The trade balance shows the difference between a country's exports and imports. A trade surplus means exports are greater than imports, while a trade deficit occurs when imports exceed exports. This balance helps to understand a country's trade relationships.
5. **Credit Rating:** A credit rating evaluates a country's ability to repay loans. It is based on financial history and current financial status. Credit ratings influence interest rates and borrowing opportunities.
6. **Wealth Distribution:** Wealth distribution examines how wealth is shared among individuals or groups in a society. It reflects economic disparities and helps design policies for equitable development.
7. Real Per Capita Income: Real per capita income is calculated by dividing the total GDP by the population. It compares living standards across countries but does not con-

sider income inequality or other development factors like education and health.

8. **Human Development Index (HDI):** HDI measures a country's progress using three factors: life expectancy, education levels, and income per person. It helps identify areas needing improvement, particularly in less-developed countries.

Economic indicators are tools for assessing a country's development and identifying areas for improvement. They provide an understanding of economic performance, guiding policymakers in formulating strategies for sustainable growth. For effective development planning, a combination of economic, social, and environmental considerations is essential, ensuring inclusive growth that benefits all sections of society.

5.1.3 Sustainable Development

Sustainable development focuses on economic growth while protecting the environment for future generations. It recognises the negative impacts of economic activities, such as land degradation, pollution, and deforestation, and aims to balance these with the benefits of growth. The concept, as stated in the Brundtland Report, is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

The key principles of sustainable development are:

- **Balancing Present and Future Needs:** Ensuring that current needs are met without harming the environment or depleting resources needed by future generations.
- **Reducing Human Impact:** Limiting harmful activities to minimise environmental damage.
- **Promoting Responsible Technology:** Using technology that is efficient and does not waste resources.
- **Sustainable Consumption:** Balancing resource use with conservation, especially for renewable resources.
- Reducing Pollution: Adopting practices that minimise air, water, and soil pollution.

9. **Managing Natural Resources Wisely:** Using resources carefully to maintain ecological balance.

Sustainable development connects economic growth, social well-being, and environmental protection. It emphasises cooperation between governments, businesses, and individuals to tackle challenges like climate change, biodiversity loss, and poverty. Global efforts, such as the Sustainable Development Goals (SDGs), aim to achieve a fairer and greener world by focusing on issues like clean energy, healthcare, education, and environmental conservation.

5.1.3.1 Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs) are 17 global objectives created by the United Nations (UN) in 2015. They aim to promote sustainable development by balancing economic, social, and environmental needs. The 2030 Agenda for Sustainable Development, which was adopted by all UN member countries, highlights the need for cooperation among all nations to achieve these goals. The SDGs focus on issues like poverty, health, education, equality, economic growth, climate change, and environmental protection.

Initiatives Leading to the SDGs:

1. **Agenda 21 (1992):** A plan from the Earth Summit to promote global sustainable development.
2. **Millennium Development Goals (MDGs) (2000):** Eight goals aimed at reducing global poverty by 2015.
3. **Johannesburg Declaration (2002):** A commitment to poverty eradication and environmental protection.
4. **Rio+20 (2012):** A conference that laid the groundwork for the SDGs.
5. **2030 Agenda for Sustainable Development (2015):** A global plan, which includes the 17 SDGs, to improve the world by 2030.

The 17 SDGs:

1. **Poverty Eradication**:Reducing extreme poverty worldwide.
2. **Zero Hunger:** Ensuring everyone has enough food.
3. **Good Health and Well-being:** Improving access to healthcare and promoting healthy lifestyles.
4. **Quality Education:** Providing inclusive and fair education for all.
5. **Gender Equality:** Promoting equality between men and women.
6. **Clean Water and Sanitation:** Ensuring everyone has access to clean water and sanitation.
7. **Affordable and Clean Energy**: Promoting clean, renewable energy.
8. **Decent Work and Economic Growth:** Supporting economic growth and creating decent jobs.
9. **Industry, Innovation, and Infrastructure:** Building sustainable industries and infrastructure.
10. **Reduced Inequalities:** Reducing inequalities between countries and within them.
11. **Sustainable Cities and Communities:** Building cities that are inclusive and sustainable.
12. **Responsible Consumption and Production:** Using resources efficiently and sustainably.
13. **Climate Action:** Taking steps to fight climate change.
14. **Life Below Water:** Protecting marine life and oceans.
15. **Life on Land:** Protecting ecosystems on land, preventing desertification, and conserving biodiversity.
16. **Peace, Justice, and Strong Institutions:** Promoting peaceful societies and strong institutions.
17. **Partnerships for the Goals:** Strengthening global partnerships for development.

Fig. 5.1.1 Sustainable Development Goals Source : United Nations Website

The United Nations Department of Economic and Social Affairs (UNDESA) supports the implementation and monitoring of the SDGs, helping countries work together to achieve them.

Recap

- Economic growth is the increase in the monetary value of goods and services produced within an economy
- Economic development is broader and focuses on improving people's well-being and living standards
- GDP and GNP are key measures of economic growth; GDP focuses on domestic production, while GNP includes international income
- Sustainable development aims to balance economic growth with environmental protection
- The Sustainable Development Goals (SDGs) set global targets for improving the world, focusing on issues like poverty, health, and climate action

Objective Questions

1. What is the percentage change in economic output over time known as?
2. Which indicator measures the total value of goods and services produced within a country?
3. What does GNP include that GDP does not?
4. Which index measures life expectancy, education levels, and income per person?

5. What type of development aims to meet the needs of the present without compromising future generations?
6. What is the term for a country's total borrowing that is yet to be repaid?
7. What is the difference between a country's exports and imports called?
8. What does a credit rating evaluate?
9. What is used to compare living standards across countries by dividing GDP by the population?
10. What global initiative aims to address poverty, health, education, and environmental protection?
11. What is the measure of economic output used to assess economic growth?
12. How many Sustainable Development Goals (SDGs) are there?

Answers

1. Growth Rate
2. GDP
3. Income from abroad
4. HDI
5. Sustainable Development
6. National Debt
7. Trade Balance
8. Loan Repayment Ability
9. Real Per Capita Income
10. SDGs
11. GDP
12. 17

Assignments

1. Compare and contrast economic growth and economic development.
2. Discuss the key indicators in measuring a country's development.
3. List the 17 Sustainable Development Goals (SDGs) and explain the importance of each one.
4. Describe in detail about sustainable development.

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Unit 2
Income Inequality and Development

Learning Outcomes

After completing this unit, learners will be able to:

- understand the nature of income inequality
- knows the significance of the Lorenz Curve and Gini Coefficient
- discuss the Kuznets Inverted U-Hypothesis

Prerequisites

Imagine a small village where the wealthiest family owns a large portion of the land, while many others struggle to make ends meet. The divide between the rich and the poor in this village grows wider each year. This scenario reflects a common issue in many societies—income inequality. As the village grows, some families continue to accumulate more wealth, while others are left behind. This imbalance in income distribution is not just an economic concern, but also a social one, affecting the quality of life and opportunities for many individuals. Income inequality has always been a topic of interest for economists and policymakers. In every society, there are groups of people whose incomes are significantly higher than others. This creates a sense of unfairness, leading to debates about what can be done to address the issue. Inequality often arises from various factors, such as differences in education, job opportunities, and even social background. These differences may seem unavoidable, but they can have far-reaching effects, impacting not just the individuals involved but society as a whole.

As economies grow and develop, they face new challenges related to income distribution. Some countries experience rapid economic growth, while others struggle to catch up. The effects of this growth are often uneven, leading to increased income disparity. However, there are solutions to mitigate these gaps. Governments, through policies and initiatives, play a key role in reducing inequality by creating opportunities and providing social safety nets.

Keywords

Economic Inequality, Income Inequality, Lorenz Curve, Gini Coefficient, Kuznets Inverted U-Hypothesis

Discussion

5.2.1 Inequalities in Income Distribution

Inequality can be divided into two main types: economic inequality and social inequality. Economic inequality mainly refers to income inequality, which is the difference in income levels among people. It leads to differences in living standards, nutrition, and overall quality of life. Income inequality is often shown by how income is distributed among different sections of the population. This is considered unfair when a small group holds a large share of the wealth. Factors like gender, education, and social status contribute to income inequality. In India, income inequality has increased since the 1980s, with the top 10% earning a much larger share of the total income. Social inequality includes issues like unequal access to education, healthcare, and political power. These problems often arise from circumstances beyond individual control but can be improved with government policies or social movements. There are two types of social inequality:

- **Horizontal inequality**: Differences among culturally defined groups (like ethnic or religious groups). If not addressed, it can lead to social unrest.
- **Vertical inequality**: Differences among individuals or households, affecting societal issues like poverty, economic growth, and crime. Reducing both types of inequality is important for creating a fairer society.

The factors influencing income inequality include:

- **Technological Advancements**: New technologies create jobs that require higher skills, leaving those in traditional industries behind.
- **Global Economic Trends**: Globalisation leads to competition, which can reduce wages, especially for low-skilled workers.
- **Labour Union Influence**: Declining unionisation weakens workers' bargaining power, affecting wages and benefits.
- **Educational Disparities**: Unequal access to quality education contributes to income gaps.
- **Discriminatory Practices**: Biases based on race, gender, or ethnicity limit opportunities for some groups, deepening inequality.

The strategies to reduce income inequality are as follows:

- **Redistribution strategies:**

1. Progressive Taxation: Higher taxes for those with higher incomes can fund social programs.
2. Social Safety Nets: Programs like unemployment benefits help those in need.
3. Earned Income Tax Credit (EITC): Provides additional income to low-

wage workers.

4. Minimum Wage Increases: Raising the minimum wage helps low-income workers.

- **Opportunity Enhancement Measures**:

1. Investments in Education: Funding education for all promotes equal opportunities.
2. Skills Training Programs: Helps workers gain skills for better jobs.
3. Universal Basic Income (UBI): Providing a regular income to everyone, though debated, can reduce inequality.
4. Anti-Discrimination Policies: Strengthening policies against workplace discrimination ensures fairness.

- **Strengthening Labour Market Institutions**:

1. Supporting Labour Unions: Helps workers secure better wages and benefits.
2. Corporate Regulation: Regulating executive pay and company income distribution can reduce inequality.

- **Taxation for Wealth Redistribution**:

3. Inheritance Taxes: Taxing inherited wealth can prevent the concentration of wealth in a few families.
4. Wealth Taxes: Taxing the rich directly can help address wealth inequality.

Inequality, whether economic or social, remains a significant challenge in many societies. Addressing both vertical and horizontal inequalities is key for building a more just and equitable society. By combining policies that promote fair labour practices and inclusive growth, societies can move towards reducing inequality and sustainable development for all.

5.2.2 Lorenz Curve

The Lorenz Curve help us understand how income is distributed in a society. These tools are important for studying income inequality, a key issue for governments worldwide. The Lorenz Curve, developed by Max Lorenz in 1906, shows income distribution in a country. It compares the actual income distribution to a perfectly equal distribution, which is represented by a straight 45-degree line. The further the Lorenz Curve is from the 45 degree line, the greater the inequality in income.

In the Lorenz Curve, the X-axis represents the cumulative percentage of the population, and the Y-axis shows the cumulative percentage of income. If the Lorenz Curve is far from the diagonal line, it indicates high income inequality. In the figure below, we can compare two countries, Country A and Country B. If the Lorenz Curve of Country A is closer to the diagonal line, it means Country A has less income inequality compared to Country B.

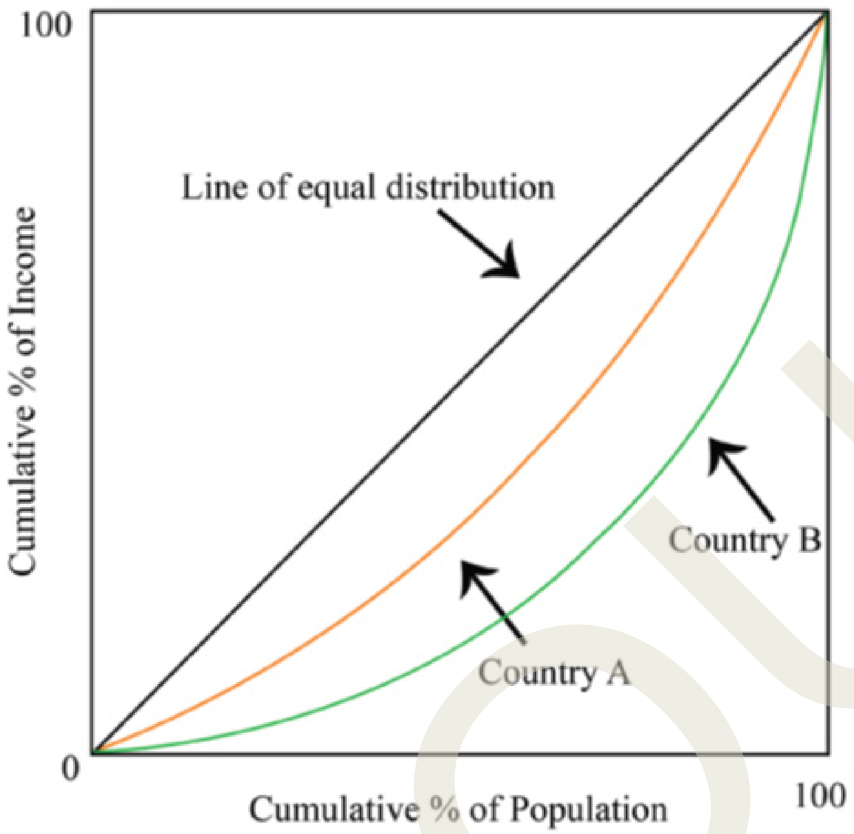

Fig 5.2. 1 Lorenz Curve

The limitations of the Lorenz curve are that it does not provide exact numbers for income inequality, which makes it hard to compare different countries or regions directly. And, when Lorenz Curves intersect, it is difficult to say which country has more inequality, so a numerical measure is often needed.

The Gini Coefficient is another tool that uses the Lorenz Curve to provide a single number representing income inequality. A higher Gini coefficient indicates more inequality. By using the Lorenz Curve and Gini Coefficient, policymakers can make better decisions to create more equitable societies.

5.2.3 Gini Coefficient

The Gini Coefficient is a common way to measure income inequality, showing how unevenly income is distributed within a country. Unlike methods that look at how far incomes deviate from the average; the Gini Coefficient focuses on comparing all possible pairs of incomes. It calculates the total of all "two-person inequalities" in income. The Gini Coefficient was developed by the Italian statistician C. Gini in 1921. In a Lorenz curve diagram, a more curved line indicates higher inequality.

To calculate the Gini Coefficient, we look at the area between the line of perfect equality (the 45º diagonal) and the Lorenz curve. The Gini Coefficient is the ratio of this area to the total area below the line of perfect equality (BD as shown in the figure given below)

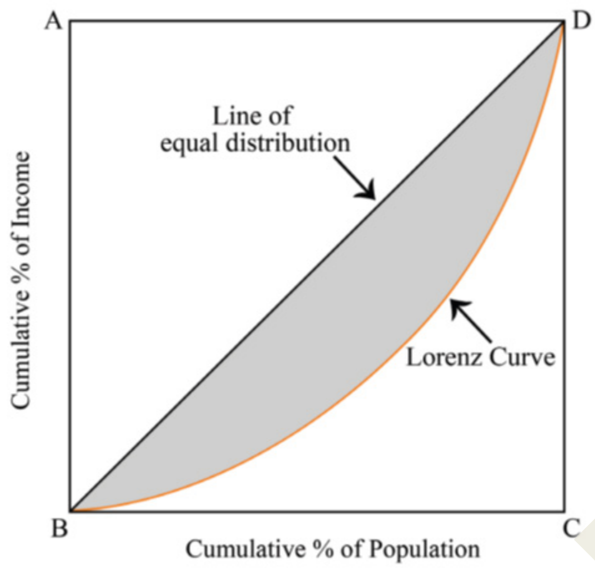

Fig: 5.2.2 Gini Coefficient

The Gini Coefficient ranges from 0 (perfect equality) to 1 (perfect inequality). A value between 0.5 and 0.7 suggests high inequality, while values between 0.2 and 0.5 show a more equal income distribution.

Understanding the Gini Coefficient helps policymakers assess income inequality, which is essential for creating policies that promote fair and inclusive economic growth.

5.2.4 Kuznets' Inverted U-Hypothesis

Kuznets' Inverted U Hypothesis looks at the relationship between national income and income inequality. It suggests that as an economy develops, income inequality first increases, then decreases after reaching a peak. This pattern forms an inverted "U" shape. Kuznets based his theory on a ratio that compares the income of the richest 20% to the poorest 60% of the population. Kuznets found that developing countries tend to have higher income inequality than developed ones. As economies grow, income inequality rises at first, then begins to fall. This trend is confirmed by studies using the Gini Coefficient, a measure of income inequality. Lower-income countries tend to have higher Gini coefficients, indicating more inequality, while richer countries have lower Gini coefficients, showing more equal income distribution.

The table given below shows the Gini Coefficient in cross section of countries. Based on the table, the findings of Kuznets' Inverted U Hypothesis are:

- In lower-income countries (less than \$100 per capita), the Gini Coefficient was 0.419, indicating moderate inequality.
- As income increased to the \$101–\$200 category, the Gini Coefficient rose to 0.468, showing more inequality.
- At higher income levels (e.g., \$501 to \$1000), the Gini Coefficient started to fall, indicating a decrease in inequality as the economy grew.

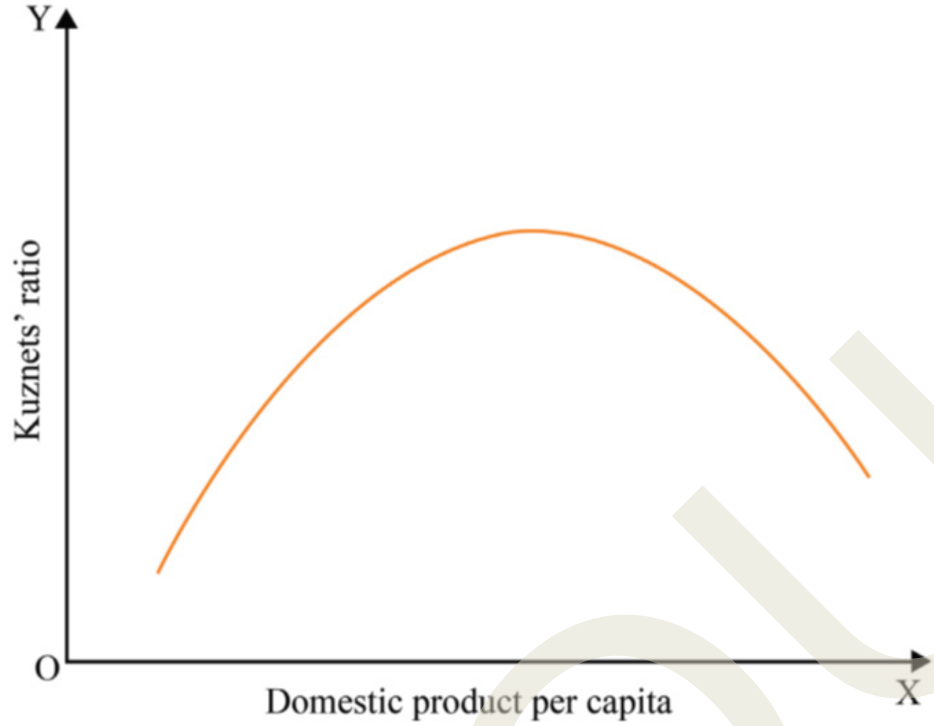

Fig 5.2. 3 Kuznets' Inverted U Hypothesis

Table 5.2.1 Gini Coefficient in Cross Section of Countries

Income Category (1965 US$)	Average Gini Coefficient
Less than $100	0.419
$101 to $200	0.468
$201 to $300	0.499
$301 to $500	0.494
$501 to $1000	0.438
$1001 to $2000	0.401
$2001 and higher	0.365

Paukert's study, using data from 46 countries, supports Kuznets' hypothesis. It showed that as GDP per capita increased, income inequality rose, then decreased once GDP became higher. Montek Singh Ahluwalia's research also supports this theory, showing that as per capita GNP increases, income inequality first rises and then falls. However, some countries, especially in East Asia (e.g., Japan, South Korea), grew economically without much increase in inequality. These countries focused on education and infrastructure, which helped reduce poverty despite fast economic growth. While Kuznets' theory is useful, it is important to note that each country's experience is different. Economic policies, investments in education, and other factors can influence how income inequality changes with growth.

Recap

- Economic inequality is the difference in income levels, leading to disparities in living standards and quality of life
- Income inequality is often displayed by the distribution of wealth, such as the top 10% controlling a significant portion of the national income
- Social inequality includes unequal access to education, healthcare, and political power, contributing to systemic issues
- Factors like technology, globalisation, educational disparities, and discrimination influence income inequality
- Strategies to reduce inequality include progressive taxation, social safety nets, and investments in education and skills training
- The Lorenz Curve and Gini Coefficient are used to visualise and measure income inequality
- The Kuznets Inverted U-Hypothesis suggests that income inequality increases during early stages of economic development but decreases later

Objective Questions

1. What is the measure of income inequality using the Lorenz Curve?
2. Who developed the Gini Coefficient?
3. What does the Gini Coefficient value of 0 indicate?
4. What does the Gini Coefficient value of 1 indicate?
5. What does progressive taxation aim to do?
6. What is the impact of declining labour union influence on wages?
7. What is the role of education in reducing income inequality?

Answers

1. Gini Coefficient
2. C. Gini
3. Perfect equality
4. Perfect inequality
5. Redistribute wealth
6. Decreases bargaining power
7. Promotes equal opportunities

Assignments

1. Explain the factors influencing income inequality in society.
2. Discuss the strategies to reduce income inequality.
3. Discuss the Lorenz Curve in measuring income inequality.
4. Explain Gini Coefficient.
5. Explain the concept of the Kuznets Inverted U-Hypothesis.

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Unit 3
Classical Theories of Economic Development

Learning Outcomes

After completing this unit, learners will be able to:

- understand the principles of the classical theory of economic development
- discuss Ricardian theory of development
- explain Malthus's theory on economic development
- know Marx's theory of development

Prerequisites

Imagine you are living in a time when the world is changing rapidly. Societies are starting to grow, trade is flourishing, and new industries are emerging. You start to wonder, "How do economies grow? What makes a nation rich, and why do some nations develop faster than others?" In the past, thinkers like Adam Smith, David Ricardo, and Thomas Malthus tried to answer these very questions, shaping the way we understand economic development today.

Adam Smith, often called the father of economics, believed that wealth was the result of hard work and the efficient use of resources. He thought that if people could freely pursue their interests, economies would naturally thrive. David Ricardo, building on Smith's ideas, introduced concepts about how different groups—workers, capitalists, and landowners—affect the economy. Meanwhile, Thomas Malthus looked at a different angle, focusing on the balance between population growth and the ability to produce food.

Karl Marx, who had a more critical view of capitalism. Marx saw the growth of economies as something that could lead to inequality and class struggles. According to him, capitalism would eventually collapse under its contradictions, but not without causing major social and economic rise along the way.

Keywords

Classical Economics, Capital Accumulation, Division of Labour, Free Trade, Stationary State, Population Growth, Surplus Value, Capitalism, Class Struggle, Reserve Army

Discussion

5.3.1 Classical Theory

The study of Political Economy has long focused on the issues of economic development. Early thinkers introduced different theories to explain how economies grow and what factors affect growth. These theories also suggested policies to speed up economic progress. The classical school includes economists like Adam Smith, David Ricardo, and T.R. Malthus. While they shared similar views on many economic issues, they did not agree on all points. Their main focus was on understanding the economy as a whole. Let us explore the classical theories in detail.

5.3.1.1 Adam Smith's Theory

Adam Smith is considered the founder of the classical school of economics. His famous work, 'An Inquiry into the Nature and Causes of the Wealth of Nations', aimed to explain how economies grow and why capitalism develops. The key ideas in his theory are:

- **Capital Accumulation:** Adam Smith believed that wealth is a measure of a country's prosperity. To increase wealth, a nation must produce more, which requires more capital. More savings would lead to more capital, and capital accumulation is crucial for economic growth. Saving more and spending less is essential for a country's future prosperity.
- **Division of Labour:** Smith argued that dividing work into specialised tasks increases production. When workers focus on one task, they become more skilled. This leads to higher output and promotes trade, expanding the market for goods. A larger market is important for a nation's economic development.
- **Increasing Returns:** Smith introduced the idea that increasing productivity leads to higher output and income. As production scales up, the cost per unit decreases, making the economy more efficient. This growing efficiency results in more jobs, higher wages, and expanded output.
- **Natural Law:** Adam Smith believed in allowing individuals to freely pursue their economic activities. Government intervention should be minimal as it limits personal freedom. He argued that natural laws, which are just and moral, should guide economic actions, leading to social welfare and progress.
- **Laissez-faire:** Smith supported the idea of laissez-faire, meaning the government should not restrict individual economic actions. With less

interference, people can save more, produce more, and contribute to economic growth. This policy helps increase savings, investment, and development.

- **Free Trade:** According to Smith, division of labour leads to trade, which expands markets. Governments should not interfere with trade, as barriers reduce the earnings of producers and harm economic growth. Free trade encourages savings, capital accumulation, and overall economic progress.
- **Trade Cycle:** Economic growth is not always steady. There are periods of growth (upswing) and decline (downturn). During the upswing, saving, capital accumulation, wages, and income rise, leading to industrial expansion. However, as income increases, the population also grows, which slows down further growth. Smith did not offer a solution to prevent the economy from stagnating.

Adam Smith believed capital accumulation was the key driver of economic growth. Savings lead to capital formation, which increases production. Laissez-faire policies allow individuals to save and invest, while the division of labour boosts productivity and trade. Free trade supports these processes, leading to steady economic growth until the economy reaches a stationary state.

5.3.1.2 David Ricardo's Theory

David Ricardo is well-known for refining classical development theory. Although he built on Adam Smith's ideas, he focused more on income distribution and foreign trade. His thoughts on development are outlined in his book Principles of Political Economy and Taxation (1817). The fundamental consepts of

- **Capital Accumulation:** Ricardo identified capitalists and labourers as key agents of production. Capitalists save from their profits and invest in capital formation. They earn profit through investment and taking risks. Labourers, on the other hand, are the largest group in production. They are employed by capitalists and paid wages. The wage rate depends on the number of workers. If there are many workers, wages will be lower, and if there are fewer workers, wages will increase. The population of workers grows or shrinks based on the wage rate. If wages are enough to provide a comfortable life, the population will increase. Ricardo used agricultural profit to explain the relationship between wages, profits, and capital accumulation. The productivity of land determines agricultural profit, which in turn influences industrial profit. There is an inverse relationship between wages and profits: higher wages mean lower profits, and lower wages mean higher profits. Capital is important for development, and it is largely accumulated by capitalists. They save from their net revenue (after paying wages and maintenance). The development process starts when this saved capital is reinvested into productive ventures, which leads to increased production.

- **Behaviour of Rent, Wages, and Profits:** Ricardo examined how national income is divided between wages, profits, and rent. He believed that in the long run, wages would settle at a subsistence level (the minimum needed for survival). Profits depend on wages, and higher wages lead to lower profits. As the population grows, demand for agricultural products rises. However, because inferior land is used for farming, the output does not increase enough to meet demand, causing prices to rise. This leads to higher wages in money terms, but real wages remain at subsistence level. As a result, the rate of profit falls, creating an inverse relationship between population growth and profits.
- **Stationary State:** A stationary state occurs when there is no further increase in output. This happens when profits are squeezed between wages and rent, which rise due to diminishing returns from land. In this state, capital accumulation stops, and economic development halts. In Ricardo's model, as employment and output increase, profits decrease and eventually disappear. When profits fall to zero, capital accumulation ceases, leading to a stationary state.

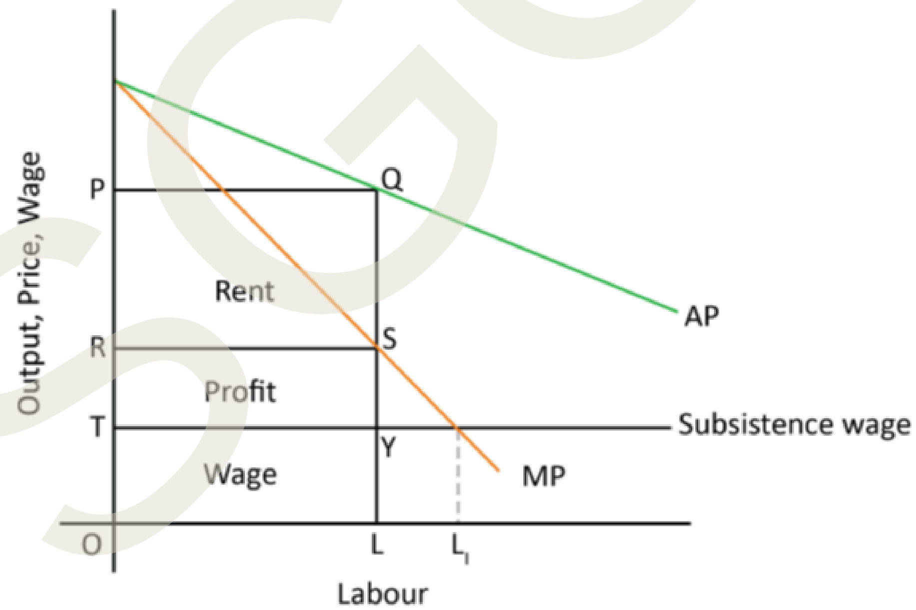

Fig. 5.3.1 Ricardian Growth Model

In the Ricardian Growth Model, the horizontal axis represents the employment of labour, while the vertical axis represents output, price, and wages. When a certain number of labour units (OL) are employed, the total output produced is shown as OPQL. Rent is determined by the difference between the Average

Product (AP) and the Marginal Product (MP) of labour working on the land, and it is represented by the area PQRS. Wages are denoted by the area OTYL, and profit is calculated by subtracting rent and wages from total output, represented by the area TRSY. As output increases, the Marginal Product (MP) of labour falls to the subsistence wage level (L1), causing profits to disappear. When profits reach zero, capital accumulation halts, indicating the economy has reached a stationary state, where no further growth occurs.

- **International Trade:** Ricardo believed that international trade could help break the stationary state and promote economic growth. He supported free trade, as it allows specialisation in production, making use of resources in the most efficient way. This leads to lower costs and increased profits for capitalists, which can be reinvested into the economy.

Ricardo's theory of comparative advantage suggests that countries should specialise in producing goods they can produce most efficiently, which boosts trade and economic development.

5.3.1.3 Thomas Malthus'Theory of Development

Classical economists were generally pessimistic about economic development, focusing on problems like rapid population growth, declining profits, and rising food prices. Thomas Malthus was one of the most prominent pessimists. His views focused on two main ideas: the theory of population and effective demand.

Malthus believed that the population grows faster than food production. According to him, while population grows geometrically (1, 2, 4, 8, 16, etc.), food production increases only arithmetically (1, 2, 3, 4, 5, etc.). This means that over time, the population would outstrip the Earth's ability to provide enough food.

Theory of Population: Malthus argued that in the long run, the population would grow faster than the resources needed to sustain it. As the population increases, the country's per capita income could fall to basic survival levels. Any increase in income would lead to more births, which would push the income back down to subsistence levels. This cycle is called the "low-level equilibrium trap."

To control population growth, Malthus suggested two types of checks:

1. **Preventive checks** - Methods like contraception to limit population growth.
2. **Positive checks** - Natural calamities like famines, epidemics, or disasters, which reduce population numbers.

Malthus also believed that effective demand, or the demand for goods and services, must grow in line with production to maintain profitability and encourage investment. He believed the savings of landlords and the investments of capitalists were essential to economic development.

5.3.2 Marxian Theory of Economic Development

Karl Marx, in his book *Das Kapital* (1867), predicted that capitalism would eventually collapse. Classical economists, like Adam Smith and David Ricardo, believed that the rate of profit on capital would fall as the economy developed, but they had different reasons for this. Smith argued that competition led to falling profits, while Ricardo believed it was due to diminishing returns from land and the conflict between rent and wages. Marx, however, believed capitalism would not end in a stationary state, but through crises caused by overproduction and social rise.

Marx's ideas on development and crisis in capitalism can be summarised as follows:

1. **Materialistic Interpretation of History**: Marx believed that all historical events were influenced by economic conditions. He argued that production is essential for human survival, and over time, societies passed through different stages: primitive communism, slavery, feudalism, and capitalism. In the first stage, resources were shared by the community, while in later stages, societies were divided into two classes: the dominant and the oppressed. The dominant group controls the means of production, and this creates tension and conflict. Economic conditions determine the structure of society, meaning the way people live and work is shaped by their economy.
2. **Theory of Class Struggle:** Marx argued that society is divided into two groups: the rich (capitalists) and the poor (workers). These two groups have conflicting interests. Capitalists control the means of production, while workers sell their labour. The exploitation of workers increases when new technologies and production methods are introduced. Marx saw class struggle as the driving force behind social change, leading to revolution and the establishment of socialism. In this new order, economic conditions improve, and workers become satisfied with their conditions.
3. **Theory of Surplus Value**: Marx built on Adam Smith's labour theory of value, which states that labour is the source of a commodity's value. In a capitalist society, workers produce goods, but they are paid less than the value of what they produce. The difference is called surplus value, which the capitalists keep as profit. Marx believed this surplus value should go to the workers, and its accumulation is a key factor in capitalist growth. The more surplus value there is, the more the capitalist can invest, which helps the economy grow.
4. **The Concept of the Reserve Army:** Capitalists aim to maximise profits, and technological advancements increase surplus value. However, these advancements can also lead to surplus labour – more workers than needed – which Marx referred to as the "reserve army" or "relative surplus population." This reserve army of unemployed workers helps keep wages low, benefiting capitalists. As a result, capitalists can increase surplus value, which fuels capital accumulation and economic development.
5. **Economic Development Under Capitalism:** Economic development in Marx's theory is driven by capital accumulation, which depends on surplus value. To increase surplus value, capitalists have three options:
    - Increase working hours
    - Lower wages below subsistence levels
    - Improve productivity through technological advancements

Marx favoured the third option, as it ensures long-term growth. The first two are short-term measures. By introducing new technologies, the capitalist system can raise surplus value and drive economic growth.

Karl Marx's analysis of capitalism highlights the contradictions within the system that lead to its eventual collapse. Through his concepts of class struggle, surplus value, and the reserve army of labour, Marx explains how capitalism exploits workers and creates economic instability. He believed that technological progress and capital accumulation drive economic development, but these same forces ultimately lead to crises and social rise. While his predictions of capitalism's collapse may not have fully materialised, his work continues to influence discussions on inequality, exploitation, and economic change.

Recap

- Adam Smith emphasised capital accumulation, division of labour, and free markets for economic growth
- Smith believed that savings and capital investment were essential for economic prosperity
- Ricardo expanded on Smith's ideas, focusing on income distribution and the effects of population growth on wages and profits
- Ricardo's theory highlighted the inverse relationship between wages and profits and introduced the idea of a stationary state
- Malthus believed population growth would outpace food production, leading to poverty and economic stagnation
- Malthus also focused on the importance of maintaining effective demand to sustain economic growth
- Marx argued that capitalism's contradictions, such as class struggle, would eventually lead to its collapse
- Marx's theory of surplus value explained how capitalists exploit workers and accumulate wealth
- Marx believed technological advancements and capital accumulation were key drivers of economic development

Objective Questions

1. Who is considered the founder of the classical school of economics?
2. According to Adam Smith, what is necessary for economic development?
3. David Ricardo is best known for which concept?
4. According to David Ricardo, what happens to profits when wages increase?
5. What is the stationary state in Ricardo's theory?
6. According to Karl Marx, what creates social conflict?
7. In Marxian theory, who controls the means of production?
8. What does Marx's concept of surplus value refer to?
9. What is the 'reserve army of labour' according to Marx?

Answers

1. Adam Smith
2. Capital accumulation
3. Comparative advantage
4. Decrease
5. Zero profits
6. Inequality
7. Capitalists
8. Exploitation
9. Unemployed workers

Assignments

1. Explain Adam Smith's theory of economic development.
2. Discuss Ricardo's concept of the economic development.
3. Explain Malthus's theory of population and economic development.
4. Explain Marx's theory of surplus value.
5. Describe the concept of the reserve army in Marx's theory of capitalism.

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BLOCK - 06

Indian Economy

Unit 1
An Overview on Indian Economy

Learning Outcomes

After completing this unit, the learner will be able to

- identify the major characteristics of the Indian economy
- get an awareness about the major challenges faced by the Indian economy
- get familiar with the role and functions of NITI Ayog

Prerequisites

During the colonial era, India's economic and social conditions stagnated due to exploitative British policies, as described by economist Dadabhai Naoroji in *Poverty and Un-British Rule in India*. He introduced the concept of the "Drain of Wealth," explaining how British extraction of India's resources impoverished the nation by diverting its surplus to Britain and stifling local development. This legacy of poverty and underdevelopment posed challenges for post-independence policymakers.

After independence in 1947, the government focused on combating poverty and economic distress by establishing the Planning Commission in 1950. The Commission aimed to boost national income, foster growth, and reduce poverty through Five-Year Plans focused on industrialisation, infrastructure, agriculture, and social welfare. While it helped India progress, central planning proved inadequate for adapting to a rapidly changing global economy. In 2015, the Planning Commission was replaced by NITI Aayog, promoting cooperative federalism and decentralised development.

India has since experienced significant growth in sectors like IT, manufacturing, and services, becoming one of the world's largest economies. However, challenges such as income inequality, environmental sustainability, and equitable growth persist.

Keywords

Agriculture, GDP, Dual Economy, Population, , NITI Aayog

6.1.1 Characteristics of the Indian Economy

The Indian economy is the sixth-largest economy in the world by nominal GDP and the third-largest by purchasing power parity. India has a diverse economy with agriculture, manufacturing, and services being the major sectors. Agricultural sector is the largest employer in the country, with around half of the population engaged in it. The manufacturing sector has been growing rapidly in recent years, especially in the areas of textiles, automobiles, and electronics. The services sector is the fastest growing sector and contributes the most to the country's GDP. India's economy has been growing at an average rate of around 7% in the last few years. However, the country faces various challenges such as poverty, unemployment, and inequality. The government has launched various schemes and initiatives to address these challenges, including the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), which guarantees 100 days of wage employment to every rural household. The Indian economy is characterised by several features that distinguish it from other economies. Here are some of the key characteristics of the Indian economy:

1. **Agriculture is a Significant Contributor:** India is primarily an agrarian economy with around 50% of the workforce engaged in agriculture. Agriculture and allied sectors contribute around 15% of India's Gross Domestic Product (GDP). However, with the growth of other sectors such as manufacturing and services, the share of agriculture in GDP has been declining.
2. **Diverse Industrial Base:** India has a diverse industrial base, including both traditional and modern industries. Some of the traditional industries are textiles, jute, and handicrafts, while modern industries include automobiles, pharmaceuticals, and IT services. India has also been promoting the growth of small and medium enterprises (SMEs) to foster entrepreneurship and create more job opportunities.
3. **Service Sector Dominance:** The service sector is the largest contributor to India's GDP, accounting for over 50% of the economy. The sector includes IT and IT-enabled services, tourism, healthcare, education, and financial services, among others. India is also known for its skilled workforce in the service sector, with a large number of professionals working in IT and other knowledge-based services.
4. **Dual Economy:** India has a dual economy characterised by the existence of both organised and unorganised sectors. The organised sector includes large businesses and industries that are registered and have formal employment relationships with their workers. The unorganised sector, on the other hand, consists of small businesses and informal workers who have limited social security and legal protection.
5. **Demographic Dividend:** India has a young and growing population, with a median age of around 28 years. This demographic dividend presents an opportunity for India to capitalise on its youthful workforce and drive economic growth. However, it also poses a challenge to provide education, healthcare, and employment opportunities to the growing population.
6. **Regional Disparities:** India is a diverse country with significant regional disparities in terms of economic development. Some regions, such as Maharashtra and Karnataka, are more developed, while others, such as Bihar and Uttar Pradesh, lag behind its overall developments. The

government has been implementing policies to reduce these regional disparities and promote balanced growth across the country.

These are some of the key characteristics of the Indian economy that make it unique. While India has made significant progress in recent years, there are also several challenges that need to be addressed to achieve sustained and inclusive growth.

6.1.2 Major Challenges Facing Indian Economy

There are several major challenges facing the Indian economy, some of which are:

1. Unemployment: One of the major challenges facing the Indian economy is unemployment. According to the Centre for Monitoring Indian Economy (CMIE), the unemployment rate in India reached a record high of 14.7% in April 2020 due to the COVID-19 pandemic. Even before the pandemic, the unemployment rate was hovering around 6-7% in recent years. This is a serious concern as the country has a large and growing population, with a significant number of people entering the workforce every year.

2. Poverty: Despite recent economic growth, poverty remains a significant challenge in India. According to the World Bank, 134 million people in India were living in extreme poverty in 2016. This represents about 10% of the population, which is still a significant number. Poverty is particularly acute in rural areas and among marginalised communities.

3. Income inequality: Income inequality is a major challenge facing the Indian economy. According to Oxfam, in 2019, India's richest 1% held more than four times the wealth held by 953 million people who make up- the poorest 70% of the country's population. The COVID-19 pandemic has further exacerbated this inequality, with the richest in the country getting richer, while many of the poor have lost their livelihoods.

4. Low Agricultural Productivity: Agriculture is the backbone of the Indian economy, and it employs a significant portion of the population. However, low agricultural productivity is a major challenge facing the Indian economy. Inefficient irrigation practices, lack of access to credit, and inadequate infrastructure are some of the reasons for low agricultural productivity.

5. Climate Change: Climate change is a global phenomenon, and India is one of the most affected countries. The country is facing increasing incidents of extreme weather events such as floods, droughts, and cyclones, which affect agriculture and infrastructure.

6. Infrastructure: Infrastructure development is a key driver of economic growth, and India needs to focus on building world-class infrastructure. India ranks 63rd among 190 countries in the World Bank's Ease of Doing Business report of the year 2022 and one of the main reasons is inadequate infrastructure.

7. Healthcare: Healthcare is another area that needs urgent attention in India. The country spends only about 1.3% of its GDP on healthcare, which is one of the lowest in the world. The pandemic has exposed the weaknesses in the healthcare system, and India needs to invest more in this sector.

8. Education: Education is the foundation of any economy, and India needs to focus on providing quality education to its citizens. According to the Annual Status of Education Report (ASER) 2020, only 60% of the children in the age group of 6-14 years can read a simple text in their language.

9. Corruption: Corruption is a major challenge facing the Indian economy. India ranks 86th out of 180 countries in the Corruption Perceptions Index 2020. Corruption affects economic growth, and it also leads to social inequality.

10. Public Debt: Public debt is a major concern for the Indian economy. According to the Reserve Bank of India (RBI), the country's public debt is estimated to be around 90% of GDP in 2021-22. High public debt leads to higher interest payments, which can reduce the government's ability to spend on important areas such as healthcare and education.

11. Digital Divide: The digital divide is another major challenge facing the Indian economy. According to a report by the Internet and Mobile Association of India (IAMAI), only 34% of the Indian population has access to the internet. The digital divide can lead to social inequality and hamper economic growth.

12. Financial inclusion: India faces major challenges in terms of financial inclusion, with a large proportion of the population excluded from formal financial services. According to the World Bank, only 34% of the Indian population aged 15 and above had an account at a financial institution in 2017. This is a major challenge as it limits access to credit and other financial services.

13. Environmental degradation: India faces major environmental challenges, including air pollution, water pollution, and deforestation. According to the State of Global Air 2021 report, 1.67 million people died in India due to air pollution in 2019. This is a major challenge as it affects the health and productivity of the population.

These are only a few of the major challenges confronting the Indian economy. To solve these difficulties, politicians, industry, and civil society must work together to implement policies and programmes that address these issues and promote sustainable and equitable economic growth.

6.1.3 Role of NITI Aayog

NITI (National Institution for Transforming India) Aayog is a policy think-tank of the Government of India that was established in 2015 to replace the Planning Commission. The Planning Commission was set up in 1950 to oversee and coordinate the country's economic and social development policies. However, over the years, the Planning Commission came under criticism for its centralised approach and for not adapting to the changing economic scenario. The Government of India, therefore, decided to replace the Planning Commission with a more flexible and dynamic institution that could better address the challenges faced by the country in the 21st century. The key role of NITI Aayog is to provide strategic and technical advice to the government on various policy issues related to economic and social development and to monitor and evaluate the implementation of programes and schemes. NITI Aayog also collaborates with various stakeholders, including academia, civil society, industry, and international organisations, to bring together diverse perspectives and expertise in policy formulation.

6.1.3.1 The Objectives of NITI Aayog

The main objectives of NITI Aayog are:

1. To serve as a think-tank of the Government of India and provide inputs to the central and state governments on policy matters.

2. To provide a platform for cooperative federalism by involving states in policy formulation and decision-making.

3. To promote and encourage the involvement of the private sector and civil society in policy formulation and implementation.

4.To monitor and evaluate the implementation of government policies and programs.

5. To provide technical and financial support to states and union territories for planning and capacity building.

6. To promote innovation, entrepreneurship, and technology development in various sectors of the economy.

7. To promote sustainable development and ensure social, economic, and environmental justice.

8. To engage with international organisations and promote international cooperation in various fields.

9. To provide a platform for dialogue and exchange of ideas between various stakeholders including government, industry, academia, and civil society.

These objectives reflect the broader aim of NITI Aayog. It was set up with the objective of providing a platform for cooperative federalism, where the central government and the state governments could work together in partnership to achieve the common goal of economic development. In short, it is a non-constitutional, non-statutory body that is responsible for formulating and implementing strategic policies and programs for the government of India.

6.1.3.2 The Administrative Structure of NITI Aayog

The administrative structure of NITI Aayog includes:

- Governing Council: It is the highest body of NITI Aayog, chaired by the Prime Minister of India. It comprises of Chief Ministers of all the states and Union Territories with legislature and Lt. governers of other Union territories.
- Regional Councils: NITI Aayog has set up five regional councils to address specific regional issues and facilitate cooperative federalism. These councils cover:
  - a. Northern Region
  - b. Southern Region
  - c. Eastern Region
  - d. Western Region
  - e. North Eastern Region
- Full-Time Members: NITI Aayog has full-time members who are responsible for driving policy and programme implementation in key sectors. They are appointed by the Prime Minister of India.
- Part-Time Members: NITI Aayog has part-time members who bring domain knowledge and expertise to the organisation. They are appointed by the Prime Minister of India.
- CEO: The CEO is the head of NITI Aayog and is responsible for implementing the policies and programmes approved by the Governing Council. The CEO is appointed by the Prime Minister of India.
- Vice Chairman: The Vice Chairman

of NITI Aayog is responsible for providing strategic direction to the organisation and supporting the CEO in implementing policies and programmes. The Vice Chairman is appointed by the Prime Minister of India.

- Departments: NITI Aayog has various departments that are responsible for policy formulation, research, and program implementation. Some of the departments include Agriculture and Rural Transformation, Education and Skill Development, Health and Nutrition, and Sustainable Development Goals.

6.1.3.3 NITI Aayog Hubs

NITI Aayog has established several hubs across India to encourage innovation and entrepreneurship. These hubs focus on various sectors such as healthcare, education, agriculture, and energy. The following are some of the notable NITI Aayog hubs:

Atal Innovation Mission (AIM) - AIM is an initiative launched by NITI Aayog to promote innovation and entrepreneurship among Indian youth. It aims to set up tinkering labs in schools, colleges, and universities to provide a platform for students to experiment and create innovative solutions.

Women Entrepreneurship Platform (WEP) - WEP is an initiative launched by NITI Aayog to promote women entrepreneurship and provide a platform for networking, funding, and mentorship.

National Nutrition Mission (NNM) - NNM is an initiative launched by NITI Aayog to address malnutrition in India. It aims to reduce stunting, undernutrition, and low birth weight by 2022.

SATH Program - SATH stands for 'Sustainable Action for Transforming Human Capital'. This programme was launched by NITI Aayog to transform the education and healthcare sectors in selected states of India.

Aspirational Districts Programme - This program was launched by NITI Aayog to improve the socio-economic status of 115 identified districts in India. The programme focuses on improving the performance of these districts in areas such as health, education, and agriculture.

India Innovation Index - NITI Aayog has launched the India Innovation Index to rank states and union territories based on their innovation capabilities and performance. This index aims to promote innovation across India and provide a framework for states to improve their innovation ecosystems.

6.1.3.4 Key Roles of NITI Aayog

The following are some of the key roles of NITI Aayog:

1. Formulating National Development strategies: NITI Aayog is responsible for formulating long-term and short-term plans and policies for the country's economic and social development. The institution works closely with government ministries and departments to identify key areas that require policy interventions, and develops strategies to address these issues.

2. Monitoring and Evaluating Policy Implementation: NITI Aayog monitors the implementation of various government schemes and programmes, and evaluates their impact on the ground. It provides regular feedback to the government on the progress made, and suggests mid-course corrections wherever necessary.

3. Promoting Innovation and Entrepreneurship: NITI Aayog is responsible for promoting innovation and entrepreneurship in the country by identifying and nurturing startups and other innovative enterprises. It provides mentorship, funding, and other support to help these ventures grow and succeed.

4. Collaborating with States and other Stakeholders: NITI Aayog works closely with state governments, industry associations, civil society organisations, and other stakeholders to develop policies and programmes that are aligned with the country's development goals. It promotes a collaborative approach to policy-making, with a focus on inclusive and sustainable development.

5. Building Capacity and Knowledge: NITI Aayog is also responsible for building capacity and knowledge among government officials and other stakeholders. It conducts training programmes, workshops, and seminars to enhance the skills and knowledge of policymakers, and provides access to relevant research and data to support evidence-based decision-making.

In conclusion, NITI Aayog plays a crucial role in shaping India's economic and social development agenda. With a focus on cooperative federalism, innovation, and sustainable development, NITI Aayog is working towards addressing the major challenges facing the Indian economy and accelerating its growth. NITI Aayog has undertaken several initiatives and programs to promote entrepreneurship, digitalisation, and skill development, which will help in creating job opportunities and boosting economic growth. Going forward, it is essential for NITI Aayog to continue its efforts towards achieving inclusive and sustainable growth, addressing regional disparities, and improving the overall standard of living in India. By working closely with state governments, private sector, civil society, and, other stakeholders, NITI Aayog can play a pivotal role in shaping India's economic future.

Recap

- Indian economy: 6th largest by nominal GDP, 3rd largest by purchasing power parity
- Diverse economy: Agriculture, manufacturing, services are major sectors
- Agrarian economy: 50% workforce engaged in agriculture, contributes 15% to GDP
- Diverse industrial base: Traditional and modern industries
- Service sector dominance: Over 50% contribution to GDP
- Dual economy: Co-existence of organised and unorganised sectors
- Demographic dividend: Young and growing population, median age around 28 years
- Challenges: Unemployment, Poverty, Income inequality etc
- NITI Aayog: Policy think-tank providing strategic advice to the government
- Hubs for innovation: Encouraging entrepreneurship in healthcare, education, agriculture, and energy

Objective Questions

1. What is the rank of the Indian economy by nominal GDP?
2. What is the rank of the Indian economy by purchasing power parity?
3. Which sector is the largest contributor to India's GDP?
4. What is the name of the policy think-tank established by the Government of India in 2015 to replace the Planning Commission?
5. How many people in India were living in extreme poverty in 2016, according to the World Bank?
6. What was the record high unemployment rate in India in April 2020 due to the COVID-19 pandemic, as per CMIE?
7. How many people died in India due to air pollution in 2019, as per the State of Global Air 2021 report?
8. Name the initiative launched by NITI Aayog to promote innovation and entrepreneurship among Indian youth.
9. Name the initiative launched by NITI Aayog to promote women entrepreneurship and provide a platform for networking, funding, and mentorship.

Answers

1. Sixth
2. Third
3. Service sector
4. NITI Aayog.
5. 134 million.
6. 14.7%.
7. 1.67 million.
8. Atal Innovation Mission (AIM)
9. Women Entrepreneurship Platform (WEP)

Assignments

1. Discuss the key characteristics of the Indian economy.
2. Analyse the major challenges facing the Indian economy.
3. Evaluate the role and significance of NITI Aayog as a policy think-tank in the Indian economy. Also, discuss the functions and responsibilities of NITI Aayog.

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Unit 2
Demographic Features of the Indian Economy

Learning Outcomes

After completing this unit, the learner will be

- aware of the population size and composition of India
- familiar with the concept of demographic transition
- able to identify major demographic indicators and changes in their trends over the years

Prerequisites

Population refers to the total number of living beings—humans, animals, or plants—within a specific geographic area. It applies to various environments, from cities to forests, and is dynamic, changing over time due to factors like birth rates, migration, death, and emigration. Understanding these changes is crucial for effective resource management. For example, population growth in a city increases demands for services such as healthcare and housing, while in ecosystems, growth in animal populations requires careful resource management. Population studies help with resource planning and sustainable development, guiding decisions on infrastructure, energy, and social services.

The United Nations (2019) defines population as the total number of individuals in a specific area at any given time, a widely accepted definition across disciplines like demography and economics. The World Health Organisation (WHO) highlights the importance of social and cultural factors, such as age or economic status, in population analysis. The U.S. Census Bureau defines population as all individuals within the country, regardless of citizenship status, helping to inform political, social, and economic decisions, including resource allocation and social services.

Keywords

Population, IMR, CMR, MMR, Rural, Urban, Demographic Transition

Discussion

6.2.1 Population, size , and composition

Population refers to the total number of individuals living in a specific geographic area or region at a given time. It can refer to various levels of aggregation, such as a country, a city, a state or province, a neighbourhood, or a specific group of people sharing certain characteristics, such as age, gender, ethnicity, or occupation. Population is a fundamental concept in various fields of study, such as demography, sociology, economics, public health, and environmental studies, as it can have important implications for social, economic, and environmental processes and outcomes. The study of population involves analysing the distribution, composition, characteristics, and dynamics of populations, including birth and death rates, migration patterns, fertility rates, and age and gender structures.

6.2.1.1 Population in India

According to the most recent United Nations Population Fund estimates, India's population in 2023 stands at 142.86 crore. India has surpassed China, which has 142.57 crore people, to become the world's most populous country. India's population has been growing rapidly over the last few decades, but the rate of growth has been slowing down in recent years. According to the World Bank, the annual population growth rate in India has decreased from 2.2% in the 1970s to around 1.1% in recent years.

The large population in India presents both challenges and opportunities for the country. One of the biggest challenges is ensuring that there are enough resources to meet the needs of such a large population. For example, the Indian government has had to focus on ensuring that there is enough food, clean water, healthcare, and education for all its citizens. The country has implemented various policies and programmes to address these challenges, such as the National Rural Health Mission and the National Rural Employment Guarantee Act.

However, the large population also presents opportunities for economic growth. With such a large domestic market and labour force, India has the potential to become a major economic power. In recent years, the country has made significant strides in this regard, with a growing middle class and a rapidly expanding economy.

6.2.1.2 Size of Population in India

The size of population refers to the total number of individuals living in a particular geographic area or region at a given point in time. It is an important indicator of the demographic and social characteristics of a particular region or country. The size of population can be measured at various levels of aggregation, such as national, regional, local, or even specific groups of people sharing certain characteristics, such as age, gender, ethnicity, or occupation.

The size of the population can have important implications for social, economic, and environmental processes and outcomes. For example, a large and rapidly growing population may put pressure on the resources, infrastructure, and public services, while a declining or aging population may have implications for workforce availability, economic growth, and social welfare. Therefore, understanding the size and dynamics of population is an important area of study for various fields, such as demography, sociology, economics, public health, and environmental studies.

Here is the table showing the size of India's population over the past few decades, based on various census data of India.

Table 6.2.1 Size of Indian Population

Year	Population
1951	361 million
1961	439 million
1971	548 million
1981	683 million
1991	846 million
2001	1.03 billion
2011	1.21 billion
2021*	1.39 billion

(*estimated. Census 2021 has been postponed due to the COVID-19 pandemic outbreak.)

Note: The most recent United Nations Population Fund estimates place India's population in 2023 at 142.86 crore. India has surpassed China to become the world's most populous country, with 142.57 crore inhabitants.

6.2.1.3 Population Composition in India

Population composition refers to the distribution of individuals in a population by various demographic characteristics such as age, gender, race, ethnicity, education, occupation, and other relevant factors. Understanding population composition is important for analysing social, economic, and political trends and outcomes, as well as for making policy decisions and planning for future needs and demands.

Age and gender are two important demographic characteristics that makeup population composition. Age composition refers to the distribution of individuals in a population by age groups, such as children, youth, adults, and the elderly. Gender composition refers to the distribution of individuals by male and female genders. Other demographic characteristics such as education, occupation, and ethnicity also contribute to population composition.

Population composition can also change over time due to various factors such as changes in birth and death rates, migration patterns, and social and economic changes. For example, an ageing population can lead to increased demands for healthcare and social services, while a highly educated population may contribute to economic growth and development.

Age wise Composition of the Population in India

The age- wise composition of the population in India refers to the distribution of the population in different age groups. The following table shows the age wise composition of the population in India for the various census data from 1951 to 2011. The data is presented in three age groups: 0-14 years, 15-59 years, and 60 years and above.

Table 6.2.2 Age wise Composition of Population in India

Year	0-14 years (%)	15-59 years (%)	60 years and above (%)
1951	41.9	53.6	4.5
1961	44.5	51.7	3.8
1971	45.6	50.7	3.7
1981	41.2	54.1	4.7
1991	35.0	60.0	5.0
2001	31.8	63.3	4.9
2011	29.0	64.3	6.7
2021*	25.5	66.3	8.2

*estimated

The percentage of the population in each of these age groups has changed significantly over the years. In 1951, for example, 41.9% of the population was in the 0-14 years' age group, while 53.6% were in the 15-59 years' age group, and only 4.5% were 60 years and above. Over time, there has been a decrease in the percentage of the population in the 0-14 years' age group and an increase in the percentage in the 60 years and above age group.

One of the main reasons for this change is the decrease in the fertility rate, which has led to a decrease in the proportion of children and an increase in the proportion of older people. Additionally, improvements in healthcare and living standards have led to increased life expectancy, which has also contributed to the increase in the proportion of older people in the population. In summary, the table above provides a snapshot of how the population has shifted from a higher percentage of children to a higher percentage of older people over time.

Gender wise Composition of Population in India

The gender wise composition of the population refers to the distribution of the population in a given area or country, based on gender. It shows the percentage or proportion of males and females in the population. Here is a table showing the gender-wise composition of population in India from 1951 to 2021 using the various census data.

Table 6.2.3 Gender wise Composition of Population in India

Year	Male (%)	Female (%)
1951	50.6	49.4
1961	50.8	49.2
1971	51.2	48.8
1981	51.6	48.4
1991	52.0	48.0
2001	51.8	48.2
2011	50.8	49.2
2021*	50.3	49.7

*estimated

As per the table, the proportion of males in the population has been slightly higher than that of females, but the gap has been decreasing gradually over the years. In 1951, for instance, 50.6% of the population was male, while 49.4% were female. Over time, the percentage of males has slightly decreased, and the percentage of females has slightly increased.

The gender wise composition of the population is an essential demographic indicator that provides insights into the distribution of males and females across different age groups and regions. It plays a crucial role in policy formulation and planning, such as education, healthcare, social welfare, and employment. The gender wise composition of the population is particularly relevant in the context of gender issues, including gender-based violence, gender inequality, and women's empowerment.

In summary, the table above shows how the proportion of males and females in the population has changed slightly, with the percentage of males decreasing and the percentage of females increasing gradually over time. Moreover, for the first time, information on homes headed by a member of the Transgender Community and members living in the family will be collected in India's ongoing census statistics.

Rural-Urban Composition of Population in India

Rural-urban composition of the population refers to the distribution of people living in rural and urban areas of a country or region. Rural areas are generally characterised by a low population density, agriculture-based livelihoods, and relatively less developed infrastructure, while urban areas are characterised by a high population density, diverse economic activities, and more developed infrastructure. Here is the rural-urban composition of the population in India from 1951 to 2021.

Table 6.2.4 Rural-Urban Composition of the Population in India

Year	Rural Population (%)	Urban Population (%)
1951	82.7	17.3
1961	84.1	15.9
1971	80.5	19.5
1981	75.0	25.0
1991	72.2	27.8
2001	72.2	27.8
2011	68.8	31.2
2021*	64.9	35.1

*estimated

As you can see from the table, the rural-urban composition of the population in India has been changing over the years. While the majority of the population lived in rural areas in the past, there has been a gradual shift towards urbanisation in recent decades. The proportion of the urban population has been steadily increasing, while the proportion of the rural population has been declining.

The rural-urban composition of the population has important implications for policy and planning in India. It highlights the need for policies and programmes that are tailored to the specific needs of people living in rural and urban areas. For example, there may be different priorities for rural and urban development, such as improving agricultural productivity in rural areas and developing infrastructure in urban areas. Understanding the rural-urban composition of the population is, therefore, crucial for policymakers and planners to ensure that resources are allocated effectively to promote balanced regional development and improve the welfare of the population.

6.2.2 Demographic Transition in India

Demographic transition refers to the shift from high birth and death rates to low birth and death rates that typically occurs as countries undergo economic and social development. The demographic transition model is often used to describe this process, which consists of four stages.

In India, the demographic transition has been underway for several decades. India's population has grown significantly over the years, and it is currently the most populous country in the world. However, India's birth rate has been declining steadily, while the death rate has also been decreasing, leading to an increase in life expectancy.

The demographic transition in India can be described using the four stages of the demographic transition model:

1. The high stationary phase: In the early 20th century, India had a high birth rate and a high death rate, resulting in a relatively stable population size.

2. The early expanding phase: After India gained independence in 1947, the death rate began to decline due to improvements in healthcare and nutrition. However, the birth rate remained high, leading to a rapid increase in the population size.

3. The late expanding phase: In the 1970s and 1980s, the Indian government implemented policies to control population growth, such as the family planning program. This led to a decline in the birth rate, while the death rate continued to decline, resulting in a further increase in the population size.

4. The low stationary phase: In recent years, India has entered the fourth stage of the demographic transition, where the birth rate has declined to the point where it is close to the death rate. The population size is expected to stabilise in the coming decades.

The demographic transition in India has significant implications for the country's economy, society, and environment. A decline in the birth rate can lead to a demographic dividend, where the working-age population grows faster than the dependent population, potentially boosting economic growth. However, it can also lead to an ageing population, which poses challenges for healthcare and social security systems. Understanding the demographic transition is, therefore, crucial for policy makers to develop effective policies and programmes that address the changing needs of the population.

6.2.3 Major Demographic Indicators

Demographic indicators are statistical measures that describe the characteristics of a population, including its size, composition, growth rate, and, distribution. These indicators provide valuable information for understanding population dynamics, trends, and patterns, and can help policymakers and planners make informed decisions about resource allocation, policy formulation, and programme implementation.

Some of the major demographic indicators include population size, growth rate, age structure, sex ratio, fertility rate, mortality rate, and migration rate. Each of these indicators provides unique insights into different aspects of the population, such as its size, age distribution, gender balance, reproductive behaviour, and movement patterns.

Let us have a look at major demographic indicators of India over the years such as Sex ratio, Literacy rate, Birth and Death Rates, Population growth rate, Infant Mortality Rate (IMR), Child Mortality Rate (CMR), Maternal Mortality Rate (MMR), Life Expectancy, Fertility Rate, and Morbidity Rate.

6.2.3.1 Sex Ratio

Sex ratio refers to the ratio of males to females in a population, and it is usually expressed as the number of males per 100 females. Sex ratio can vary by age group and geographic location and can be influenced by social, cultural, and economic factors. Here is the table showing the sex ratio of India from 1951 to 2021 using various census data.

Table 5.2.5 Sex Ratio in India

Year	Sex Ratio (Females per 1000 Males)
1951	946
1961	941
1971	930
1981	934
1991	927
2001	933
2011	943
2021*	934

*estimated

As per the table, the sex ratio in India has fluctuated over the years. The sex ratio of a country is an important indicator of gender balance and can be influenced by social, cultural, and economic factors. The decline in sex ratio in India over the years is a cause for concern and has led to efforts to promote gender equality and combat gender based discrimination. As per the Census 2011 data of India, Kerala has the highest sex ratio of 1084 and Haryana has the lowest sex ratio of 879. The importance of sex ratio lies in its impact on several aspects of a society, including:

1. **Gender Equality:** A skewed sex ratio, with fewer females than males, indicates a preference for male children in a society. This can lead to discrimination against women and girls and contribute to gender inequality.

2. **Economic Development:** A balanced sex ratio is critical for economic development, as it ensures that both men and women can participate equally in the workforce. When women are educated, employed, and have access to resources, they can contribute significantly to the economic growth of a country.

3. **Social Stability:** A skewed sex ratio can lead to social instability, as it can result in a surplus of unmarried men who may be more likely to engage in criminal activities and violence.

4. **Public Health:** Sex ratio is also an important indicator of public health, as it can indicate the prevalence of sex-selective abortions, female infanticide, and other forms of discrimination against women and girls.

5. **Demographic Trends:** Sex ratio can also provide insights into demographic trends, such as ageing populations, migration patterns, and changes in family structures.

In conclusion, sex ratio is an important indicator of the demographic composition of a population, and it has significant implications for gender equality, economic development, social stability, public health, and demographic trends. It is essential for policymakers and society to ensure that sex ratio remains balanced and that all individuals, regardless of gender, have equal opportunities to participate in social, economic, and political activities.

5.2.3.2 Literacy Rate

Literacy rate refers to the percentage of individuals in a population who can read and write with understanding. It is a crucial indicator of human development and social progress.

Here is a table showing the literacy rate of India from 1951 to 2021.

Table 6.2.6 Literacy Rate in India

Year	Literacy Rate (%)	Male Literacy Rate (%)	Female Literacy Rate (%)
1951	16.67	24.95	9.93
1961	24.02	34.44	12.95
1971	29.45	39.5	18.6
1981	36.23	46.9	24.8
1991	52.21	63.9	39.3
2001	64.84	75.3	53.7

2011	74.04	82.14	65.46
2021*	81.3	87.7	74.7

*estimated

As per the table, the overall literacy rate in India has consistently increased over the years. The male literacy rate has always been higher than the female literacy rate, but the gap has been reducing gradually.

It is also worth noting that the increase in female literacy rate has been much faster than that of male literacy rate. For example, in the decade between 2001 and 2011, while the overall literacy rate increased by around 10%, the female literacy rate increased by around 12.5% while the male literacy rate increased by only around 7.5%. The latest projected literacy rate for 2021 is 81.3%, which indicates that there has been further progress in improving literacy in the country. However, despite the progress made, there are still significant gender and regional disparities in literacy rates that need to be addressed.

The importance of literacy rate can be explained in the following ways:

Economic Development: A high literacy rate is essential for the economic development of a country. It provides a skilled workforce, which is necessary for a country to develop industries, businesses, and services. This leads to higher levels of productivity, increased job opportunities, and improved living standards.

Social Development: Literacy helps individuals to access information and participate in social, cultural, and political activities. It promotes social development by empowering people to make informed decisions, participate in community activities, and engage in discussions on important issues.

Health: Literacy is linked to better health outcomes, as it helps individuals to access and understand health information, make informed decisions about healthcare, and adopt healthy behaviours.

Gender Equality: Literacy is essential for promoting gender equality. It helps to reduce gender disparities in education and employment opportunities, and empower women to participate in decision-making processes.

Democracy: Literacy is essential for the functioning of a democratic society. It allows citizens to read and understand political information, participate in elections, and hold governments accountable.

In conclusion, literacy rate is an important indicator of the level of education and development of a country. It plays a crucial role in economic, social, health, and political development. Governments and societies should work towards increasing literacy rates by providing access to quality education and promoting awareness of the benefits of literacy.

6.2.3.3 Birth Rate

Birth rate is a demographic indicator that measures the number of live births per 1,000 population in a given time period. It is an important indicator of population growth and can reflect the fertility trends in a population.

In India, the birth rate has been gradually declining over the years due to various factors such as increased education, urbanisation, and access to family planning methods. Here is a table showing the birth rate of India from 1951 to 2021:

Table 6.2.7 Birth Rate in India

Year	Birth Rate (per 1,000 population)
1951	40.8
1961	41.4
1971	37.2
1981	32.4
1991	29.5
2001	24.8
2011	21.8
2021*	19.0

*estimated

As we can see from the table, the birth rate in India has declined from 40.8 per 1,000 population in 1951 to 19.0 per 1,000 population in 2021. This indicates a significant decrease in the number of births per 1,000 population over the years. It is important to note that this decline has not been uniform across different states and regions in India. Some states still have high birth rates, while others have achieved replacement level fertility or even below it.

The decline in birth rate is often associated with the demographic transition, which is the process of moving from high birth and death rates to low birth and death rates as a result of social and economic development. In India, the demographic transition is still ongoing, and the birth rate is expected to continue to decline in the coming years. However, it is important to ensure that this decline does not result in an ageing population or other demographic imbalances, and that adequate measures are taken to address the needs of the population at all stages of the demographic transition.

6.2.3.4 Death Rate

Death rate is another important demographic indicator that measures the number of deaths per 1,000 population in a given time period. It is also a crucial indicator of population growth, and can reflect the mortality trends in a population.

Here is a table showing the death rate of India from 1951 to 2021:

Table 5.2.8 Death Rate of India

Year	Death Rate (per 1,000 population)
1951	27.4
1961	25.1
1971	20.8
1981	14.9
1991	10.4
2001	8.4
2011	7.1
2021*	6.3

*estimated

As we can see from the table, the death rate in India has declined from 27.4 per 1,000 population in 1951 to 6.3 per 1,000 population in 2021. This indicates a significant decrease in mortality rates over the years. This decline can be attributed to various factors such as improved healthcare facilities, better sanitation, and increased access to education.

It is important to note that the decline in death rate has also contributed to population growth in India, along with the decline in birth rate. The demographic transition is an ongoing process in India, and it is expected that the death rate will continue to decline in the coming years.

However, it is also important to address the health needs of the population and ensure that adequate healthcare facilities are available to all, especially in rural areas and among disadvantaged communities. This can help further reduce the mortality rates and improve the overall health of the population.

6.2.3.5 Population Growth Rate

The population growth rate is an important demographic indicator that measures the percentage increase in the population over a specific time period. It is calculated as the difference between the birth rate and the death rate, divided by the initial population size (No).

Here is a table showing the population growth rate of India from 1951 to 2021:

Table 6.2.9 Population growth rate in India

Year	Population Growth Rate (%)
1951	1.9
1961	2.2
1971	2.2
1981	2.1
1991	2.1
2001	1.9
2011	1.6
2021*	1.0

*estimated

As we can see from the table, the population growth rate in India has declined significantly over the years. This decline can be attributed to various factors such as increased awareness about family planning, better healthcare facilities, and higher education levels among women.

However, despite the decline in population growth rate, India still has a large and growing population. According to the UN Population Fund's annual State of World Population report, India's mid-2023 population stands at 1,428 million, marginally ahead of China's 1,425 million. It is expected that the population will continue to grow, albeit at a slower pace, in the coming years.

5.2.3.6 Infant Mortality Rate (IMR)

Infant Mortality Rate (IMR) is a key demographic indicator that measures the number of deaths of infants (under one year of age) per 1,000 live births in a given year. It is an important indicator of the overall health status and well-being of a population, and reflects the quality of maternal and child health services, as well as the social and economic conditions in a country.

Here is a table showing the Infant Mortality Rate (IMR) of India from 1951 to 2021:

Table 6.2.10 Infant Mortality Rate in India

Year	Infant Mortality Rate (per 1000 live births)
1951	146
1961	123
1971	104
1981	80
1991	63
2001	58
2011	44
2021*	28

*estimated

As we can see from the table, the Infant Mortality Rate in India has declined significantly over the years. From a high of 146 per 1,000 live births in 1951, it has steadily declined to 28 per 1,000 live births in 2021. This decline can be attributed to various factors such as improved access to healthcare facilities, better nutrition, and increased awareness about maternal and child health.

However, despite the decline, India still has a relatively high Infant Mortality Rate compared to other countries. This highlights the need for continued efforts to improve maternal and child health services, especially in the rural areas where access to healthcare is limited.

Reducing the Infant Mortality Rate is an important priority for India, as it is key to achieving sustainable development and ensuring the well-being of its citizens. This requires a concerted effort from the government, healthcare professionals, and the wider community to provide adequate healthcare services and promote healthy practices.

6.2.3.7 Child Mortality Rate (CMR)

Child Mortality Rate (CMR) is a key demographic indicator that measures the number of deaths of children (under five years of age) per 1,000 live births in a given year. It is an important indicator of the overall health status and well-being of a population, and reflects the quality of maternal and child health services, as well as the social and economic conditions in a country.

Here is a table showing the Child Mortality Rate (CMR) of India from 1951 to 2021:

Table 6.2.11 Child Mortality Rate in India

Year	Child Mortality Rate (per 1000 live births)
1951	264
1961	222
1971	151
1981	120
1991	96
2001	74
2011	56
2021*	38

*estimated

As we can see from the table, the Child Mortality Rate in India has declined significantly over the years. This decline can be attributed to various factors such as improved access to healthcare facilities, better nutrition, and increased awareness about maternal and child health.

However, despite the decline, India still has a relatively high Child Mortality Rate compared to other countries. This shows the need for persistent efforts to improve maternal and child health services, especially in the rural areas where access to healthcare is limited.

Reducing the Child Mortality Rate is an essential priority for India, as it is key to achieving sustainable development and ensuring the well-being of its citizens. This requires a concerted effort from the government, healthcare professionals, and the wider community to provide adequate healthcare services and promote healthy practices.

5.2.3.8 Maternal Mortality Rate (MMR)

Maternal Mortality Rate (MMR) is another important demographic indicator that measures the number of maternal deaths (during pregnancy, childbirth, or within 42 days of delivery) per 1,00,000 live births in a given year. It is an important indicator of the quality of maternal health services and the overall health status of women in a country.

Here is a table showing the Maternal Mortality Rate (MMR) in India from 1990 to 2021:

Table 6.2.12 Maternal Mortality Rate in India

Year	Maternal Mortality Rate (per 100,000 live births)
1990	556
1995	498
2000	437
2005	301
2010	212
2015	174
2020	113
2021*	112

*estimated

As we can see from the table, the Maternal Mortality Rate in India has also declined significantly over the years. The decline in Maternal Mortality Rate can be attributed to various factors such as improved access to healthcare facilities, better maternal and child health services, and increased awareness about maternal health. However, India still has a relatively high Maternal Mortality Rate compared to other countries, highlighting the need for continued efforts to improve maternal health services, especially in the rural areas where access to healthcare is limited.

Reducing Maternal Mortality Rate is a key priority for India, as it is crucial to achieving sustainable development and ensuring the well-being of women. This requires a concerted effort from the government, healthcare professionals, and the wider community to provide adequate healthcare services, promote healthy practices, and empower women with education and economic opportunities.

6.2.3.9 Life Expectancy

Life expectancy is another important demographic indicator that measures the average number of years that a person can expect to live, based on the age-specific mortality rates prevailing in a given population.

Here is a table showing the life expectancy at birth in India from 1951 to 2021:

Table 6.2.13 Life Expectancy in India

Year	Life Expectancy at Birth (in years)
1951	32
1961	41
1971	49
1981	57
1991	62
2001	64
2011	68
2021*	70

*estimated

As we can see from the table, the life expectancy in India has increased steadily over the years. This can be attributed to various factors, such as improved access to healthcare, better sanitation, increased awareness about health and hygiene, and advancements in medical technology.

However, the life expectancy in India still lags behind many developed countries, highlighting the need for continued efforts to improve the health and well-being of the population. This requires a multi-pronged approach that focuses on improving access to healthcare services, promoting healthy lifestyle practices, and addressing the social determinants of health such as poverty, education, and employment.

In short, life expectancy is an important indicator of the overall health and well-being of the population. While India has made significant progress in improving life expectancy over the years, there is still a long way to go to ensure that every citizen can live a long and healthy life.

6.2.3.10 Fertility Rate

Fertility rate is a demographic indicator that measures the number of children born to women of childbearing age (usually defined as 15-49 years old) in a given population. It is expressed as the total fertility rate (TFR), which is the average number of children a woman is expected to have over her lifetime, assuming current fertility patterns persist.

The TFR is influenced by various factors such as cultural norms, socioeconomic status, access to family planning services, and education levels. In general, higher levels of education, greater access to family planning, and better socioeconomic conditions are associated with lower fertility rates.

In India, the TFR has been declining over the past few decades. According to the National Family Health Survey (NFHS)-4 (2015-16), the TFR for India was 2.2, down from 2.7 in NFHS-3 (2005-06). However, there are significant regional variations in TFR, with some states having much higher fertility rates than others.

Fertility rate is an important demographic indicator as it influences population growth and the age structure of the population. High fertility rates can lead to a young population, while low fertility rates can lead to an ageing population. Policymakers and healthcare professionals can use fertility rate data to inform family planning programmes, maternal and child health interventions, and other population policies.

6.2.3.11 Morbidity Rate

Morbidity rate refers to the incidence of illness or disease in a given population. It is an important demographic indicator that reflects the burden of disease and the overall health status of the population.

There are different types of morbidity rates, including the prevalence rate and the incidence rate. The prevalence rate measures the total number of cases of a specific disease in a population at a given point in time, while the incidence rate measures the number of new cases of the disease that occur in the population over a given period of time.

In India, the government collects data on the prevalence of various diseases through its health information systems, surveys, and other data collection mechanisms. However, morbidity data is often incomplete or unreliable due to underreporting, misdiagnosis, and other factors. Nonetheless, the morbidity rate is an important indicator for policymakers and healthcare professionals in understanding the disease burden and developing appropriate interventions to address the health needs of the population.

6.2.4 Demographic challenges in India

India faces a number of demographic challenges that are affecting the country's population and development. Some of the major challenges include:

1. **Rapid Population Growth:** India is the most populous country in the world, and its population is projected to reach 1.7 billion by 2050. Rapid population growth puts pressure on natural resources, infrastructure, and social services.
2. **Ageing Population:** While India has a relatively young population, with over 50% of the population below the age of 25, the proportion of elderly people is also increasing. This demographic shift presents challenges in terms of healthcare, social security, and pension systems.
3. **Gender Imbalance:** India has a significant gender imbalance, with a skewed sex ratio and high levels of female foeticide and infanticide. This results in a shortage of women in the population, which can have negative social and economic consequences.
4. **Urbanisation:** India is experiencing rapid urbanisation, with an increasing proportion of the population living in cities. This puts pressure on urban infrastructure, housing, and social services, and can lead to environmental degradation and social inequality.

5. **Health and Nutrition:** India faces significant challenges in terms of healthcare and nutrition, with high rates of maternal and child mortality, malnutrition, and communicable diseases.
6. **Education and Employment:** Despite progress in recent years, India still faces significant challenges in terms of education and employment. A large proportion of the population is illiterate or undereducated, and there is a shortage of skilled labour in many sectors.
7. **Poverty:** India has a large population living below the poverty line, with significant inequality in income and wealth distribution.
8. **Environmental Degradation:** Rapid industrialisation and urbanisation have led to significant environmental degradation, including air and water pollution, deforestation, and loss of biodiversity.
9. **Migration:** India has a large number of internal migrants, with people moving from rural to urban areas in search of better economic opportunities. This can lead to social and economic challenges in both the places of origin and destination.

These demographic challenges have significant implications for India's development and require concerted efforts from policymakers, civil society, and the private sector to address. The country's fertility rate has been declining in recent years, which could lead to a shrinking workforce in the future. India's population also puts pressure on the country's natural resources and environment. With such a large population, there is a significant demand for food, water, and energy, which can lead to overuse and depletion of resources. Additionally, the large population also contributes to issues such as pollution and climate change.

India's population is a key factor in shaping the country's development and future. While it presents both challenges and opportunities, it is clear that managing the country's population sustainably is an important goal for the country's policymakers and citizens. This will require a focus on addressing the challenges of resource scarcity and demographic change, while also pursuing policies that promote economic growth and environmental sustainability. Strategies to address these challenges include investments in education, healthcare, and infrastructure, as well as efforts to promote gender equality, reduce poverty, and create employment opportunities.

Recap

- Population: Total number of individuals in a specific area at a given time
- India's Population: 142.86 crore (2023), surpassing China as the world's most populous country
- Population Growth: Slowing down, annual growth rate around 1.1%
- Population Size: Total number of individuals in a geographic area at a specific time
- Population Composition: Distribution by age, gender, race, ethnicity, etc
- Gender-wise Composition: Distribution of males and females across age groups and regions

- Rural-Urban Composition: Distribution in rural and urban areas, shift towards urbanisation
- Demographic Transition: Shift from high to low birth and death rates during development
- Birth Rate: Number of live births per 1,000 population in a given time
- Death Rate: Number of deaths per 1,000 population in a given time
- Population Growth Rate: Percentage increase in the population over a specific time
- Infant Mortality Rate (IMR): Deaths of infants (under one year) per 1,000 live births in a year
- Child Mortality Rate (CMR): Deaths of children (under five years) per 1,000 live births in a year
- Maternal Mortality Rate (MMR): Maternal deaths per 100,000 live births in a year
- Life Expectancy: Average number of years a person can expect to live
- Fertility Rate: Number of children born to women of childbearing age
- Total Fertility Rate (TFR): Average number of children a woman is expected to have in her lifetime
- Morbidity Rate: Incidence of illness or disease in a population

Objective Questions

1. What is India's population in 2023?
2. What is the ratio of males to females in a population called?
3. What is the key demographic indicator that measures the number of maternal deaths per 100,000 live births?
4. Which demographic indicator measures the average number of years a person can expect to live?
5. What is the demographic indicator that measures the number of live births per 1,000 population in a given time period?
6. What is the number of deaths per 1,000 population in a given time period called?
7. Which demographic indicator measures the number of deaths of infants under one year of age per 1,000 live births?
8. What refers to the percentage of individuals in a population who can read and write with understanding?
9. What is the key demographic indicator that measures the number of deaths of children under five years of age per 1,000 live births?
10. Which demographic indicator measures the number of children born to women of childbearing age?
11. What is the average number of children a woman is expected to have over her lifetime?

Answers

1. 142.86 crore
2. Sex ratio
3. MMR
4. Life expectancy
5. Birth rate
6. Death rate
7. IMR
8. Literacy rate
9. CMR
10. Fertility rate
11. TFR

Assignments

1. Discuss the demographic transition in India.
2. Examine the Year of the Great Divide and population growth in the demographic history of India.
3. Analyse the demographic indicators in India over the years.
4. Elucidate the demographic challenges facing India's population and development.

Suggested Readings

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Unit 3
Economic Reforms

Learning Outcomes

After completing this unit, learner will be able to

- familiar with the economic crisis and its impact on India
- able to identify the economic reforms implemented since 1991
- aware of the impact of liberalisation, privatisation, and globalisation

Prerequisites

Imagine a nation where a large portion of its workforce is employed in a major automobile factory that supports many local businesses. When global demand for cars drops, the factory faces financial losses and must lay off workers. As these workers lose income, their spending declines, negatively affecting nearby businesses. This triggers a ripple effect, causing further economic decline, rising unemployment, and higher costs of living. The country enters an economic crisis marked by widespread instability.

Economic crises can be triggered by various factors like natural disasters, political instability, or global events. In India during the late 1980s and early 1990s, a combination of rising oil prices, a slowing export sector, and heavy borrowing led to a balance of payments crisis. The government sought assistance from the IMF and implemented reforms, eventually stabilising the economy. Crises like these often lead to long recovery periods, but they can also push economies toward significant transformation and reforms.

Keywords

Economic Crisis, Liberalisation, Privatisation, Globalisation, BOP, Inflation

Discussion

6.3.1 Economic Crisis of 1991

The Economic Crisis of 1991 was a period of great economic turmoil that had a significant impact on India. This crisis was caused by a balance of payment crisis, which was caused by a sharp increase in imports and a fall in exports. One example of the impact of the crisis was the increase in oil prices due to the Gulf War. India was heavily dependent on oil imports, and the increase in prices had a severe impact on the country's economy. This led to a negative balance of payments, with more money leaving the country than coming in.

In fact, the economic crisis of 1991 in India was caused by a combination of factors, including a balance of payment crisis, high inflation, high fiscal deficit, and an inefficient government controlled economy.

Here are some of the main reasons for the crisis with references to support:

1. **Balance of Payment (BOP) Crisis:** The most significant reason for the economic crisis of 1991 in India was the balance of payment crisis. India was importing more than it was exporting, and its foreign exchange reserves were dwindling rapidly. The main reasons for the imbalance were the high cost of crude oil imports and the fall in exports.
2. **High Inflation:** The high inflation rate was another factor that contributed to the economic crisis. Inflation was fuelled by large government subsidies, high taxes, and the government's policy of fixing the prices of many essential goods. This resulted in a black market, which further escalated inflation.
3. **High Fiscal Deficit:** The Indian government's fiscal deficit was very high in the years leading up to the crisis. The government was borrowing heavily to finance its expenses, including subsidies and welfare programs. This led to a high level of public debt, which was unsustainable.
4. **Inefficient Government Controlled Economy:** The Indian economy was heavily regulated and controlled by the government, which led to inefficiencies and corruption. Many industries were reserved for the public sector, which resulted in a lack of competition and inefficiency. This made it difficult for businesses to operate and led to a stagnant economy.

The economic crisis of 1991 in India had serious consequences for the country, including high inflation, high unemployment, and a sharp fall in economic growth.

Here are some of the major consequences of the crisis:

1. High Inflation: Inflation skyrocketed during the crisis, with prices of essential commodities such as food and fuel rising rapidly. This made it difficult for people to afford basic necessities and contributed to the overall economic distress.

2. High Unemployment: Many companies were forced to shut down due to the economic downturn, leaving many people out of work. This resulted in high unemployment rates and further economic hardship for many families.

3. Decline in Economic Growth: The Indian economy experienced a sharp decline in growth during the crisis. GDP growth fell from around 6% in the early 1990 to just over 1% in 1991. This had a severe impact on the overall economic well being of the country.

4. Political Consequences: The economic crisis also had political consequences. The government was forced to seek assistance from the International Monetary Fund (IMF), which required the implementation of significant economic reforms. This resulted in protests and opposition from some political parties and interest groups.

5. Implementation of Economic Reforms: One of the positive consequences of the economic crisis was the implementation of significant economic reforms, including liberalisation of the economy, deregulation of many industries, and allowing foreign investment in certain sectors. These reforms helped to revive the Indian economy and laid the foundation for sustained economic growth in the years that followed.

To address the crisis, the Indian government was forced to seek assistance from the International Monetary Fund (IMF). The IMF provided financial support but required the Indian government to implement a series of economic reforms in exchange. One example of the reforms was the liberalisation of the Indian economy. The government reduced trade barriers and allowed foreign investment in many sectors. This led to increased competition, which helped to boost the economy. Another example was the deregulation of many industries. The government ended the licensing requirements for many industries, which allowed businesses to start up more easily. This led to the growth of new industries and more employment opportunities. In conclusion, the Economic Crisis of 1991 had a significant impact on the Indian economy. However, the reforms that were implemented in response to the crisis helped to revive the Indian economy, leading to a period of sustained economic growth in the years that followed.

6.3.2 Economic Reforms of 1991: Liberalisation, Privatisation and Globalisation

Since gaining independence in 1947, India's economy had followed a policy of a closed and centrally planned economic system. The government tightly regulated industries, controlled foreign trade, and had ownership stakes in many of the country's major companies. This approach was intended to promote self-reliance and protect domestic industries from foreign competition. However, by the early 1990s, India found itself facing a severe economic crisis characterized by balance of payments problems, high inflation, low foreign exchange reserves, and a stagnating economy.

In response to this crisis, the government realized the need for a fundamental shift in economic policies. The Finance Minister, Dr. Manmohan Singh, along with the visionary leadership of Prime Minister P.V. Narasimha Rao, spearheaded a series of transformative reforms in 1991, famously known as the LPG (Liberalisation, Privatisation, and Globalisation) reforms. The key objectives of these reforms were to stimulate economic growth, attract foreign investment, improve efficiency, and reduce the fiscal burden on the government.

The LPG reforms brought about a significant transformation in the Indian economy. Over the years, India witnessed robust economic growth, a surge in foreign direct investment, increased exports, and the emergence of a vibrant private sector. The reforms also paved the way for India's integration into the global economy and facilitated its participation in international trade and investment.

Let us delve into the basic ideas behind each of these reforms in detail.

6.3.2.1 Liberalisation

Liberalisation refers to the process of removing or reducing government regulations and restrictions on economic activities. It is often used in the context of economic policy and can involve the liberalisation of trade, investment, and financial markets.

The Indian government also implemented a policy of liberalisation in 1991, which involved reducing government control over industries, removing licensing requirements, and deregulating many sectors. This helped to promote competition, innovation, and entrepreneurship, which led to increased economic growth and development. For example, prior to liberalisation, India's manufacturing sector was heavily regulated and controlled by the government. However, after liberalisation, new businesses were able to enter the market, which created more competition, and led to improved efficiency and productivity.

Some of the key features of liberalisation in India include:

1. **Trade Liberalisation:** India reduced trade barriers and opened up its markets to foreign competition. This led to an increase in the volume of trade and the integration of India into the global economy.

2. **Privatisation:** The Indian government sold many state-owned enterprises to private investors, which helped to improve efficiency and reduce the fiscal burden on the government.

3. **Deregulation:** Many industries were deregulated, which allowed for greater competition and innovation. This helped to spur growth in industries such as telecommunications and IT.

4. **Financial Liberalisation:** The Indian financial sector was opened up to foreign investment and competition, which led to the development of new financial products and services and greater access to credit.

5. **Foreign Investment:** India encouraged foreign investment by liberalising the rules on foreign investment and reducing restrictions on foreign ownership of Indian companies.

The liberalisation reforms had a significant impact on the Indian economy. They led to an increase in economic growth, foreign investment, and employment opportunities, particularly in the service sector. The reforms also helped to reduce poverty and improve living standards for many Indians. However, the liberalisation process also had some negative consequences, such as the displacement of workers in certain industries and increased inequality. The reforms have been the subject of ongoing debate in India, with some arguing that they have been successful in promoting economic growth and development, while others argue that they have been detrimental to the interests of the poor and marginalised.

6.3.2.2 Privatisation

Privatisation refers to the process of transferring ownership and control of public assets or services from the government to private entities. This can take many forms, such as selling state-owned enterprises, contracting out services to private companies, or leasing public assets to private investors.

Privatisation was a key part of the economic reforms that were introduced in India in 1991 with the aim of liberalising the economy and reducing the role of the state, which involved selling government-owned companies to private investors. This helped to improve the efficiency and productivity of these companies and created new opportunities for private investment. For example, prior to privatisation, many of India's state-owned companies were inefficient and unprofitable. However, after privatisation, these companies were able to operate more efficiently, and some were able to turn a profit.

In India, privatisation has taken many forms, such as the sale of state-owned enterprises, the leasing of public assets to private investors, and the contracting out of services to private companies.

Some of the key areas where privatisation has been implemented in India include:

1. **Telecommunications:** The Indian

government privatised the state-owned telecommunications company, which led to the introduction of new services and technologies and increased competition.

2. Airports: The management and operation of many airports in India have been privatised, which has led to improvements in service quality and efficiency.

3. Power: Many state-owned power generation and distribution companies have been privatised, which has led to greater investment and efficiency in the power sector.

4. Banking: The Indian government has privatised many state-owned banks, which has increased competition and innovation in the banking sector.

5. Insurance: The insurance sector in India has been opened up to private companies, which has led to greater competition and innovation in the industry.

Privatisation in India has had mixed results. While it has led to improvements in some areas, such as telecommunications and airports, it has also been criticized for leading to job losses, increased inequality, and reduced access to services for the poor. It is therefore important to carefully evaluate the costs and benefits of privatisation and to ensure that appropriate regulatory frameworks are in place to protect public interests.

6.3.2.3 Globalisation

Globalisation refers to the increasing interconnectedness and integration of the world's economies, societies, and cultures. It is a process that has been driven by advances in communication, transportation, and technology, which have made it easier for people, goods, and ideas to move across borders.

Globalisation in India integrated the Indian economy with the global economy. The process of globalisation in India began in the 1990s, following the economic reforms of 1991. These reforms included liberalisation of trade policies, privatisation of state-owned enterprises, and deregulation of several industries.

Here are some of the key aspects of globalisation in India:

1. Increase in Foreign Investment: Globalisation led to an increase in foreign investment in India. Foreign investment inflows increased significantly following the economic reforms of 1991. This increased foreign investment helped to finance the current account deficit and increase foreign exchange reserves.

2. Increase in Economic Growth: Globalisation led to an increase in economic growth in India. The liberalisation of trade policies and the opening up of several sectors of the economy to foreign investment created new opportunities for investors. As a result, the Indian economy grew at a faster pace, with GDP growth rates averaging over 6% in the 1990s and 7% in the 2000s.

3. Increased Competition: Globalisation led to increased competition in many sectors of the Indian economy. The opening up of the economy to foreign investment and the entry of multinational corporations created new competition for domestic firms. This increased competition helped to improve the efficiency and productivity of Indian industries.

4. Employment Opportunities: Globalisation led to the creation of new employment opportunities in India. The increase in economic growth and foreign investment created new job opportunities, particularly in the service sector. However, the impact of globalisation on employment has been mixed, with some sectors experiencing job losses.

5. Cultural Exchange: Globalisation has led to a cultural exchange between India and the rest of the world. The growth of the IT and software industries has created new opportunities for Indian professionals to work in other countries. This has also led to an exchange of ideas and culture.

In conclusion, globalisation has had a significant impact on India, leading to increased foreign investment, economic growth, and cultural exchange. However, the impact of globalisation on employment and inequality has been mixed, and there have been debates about the need to balance the benefits of globalisation with social and economic concerns.

6.3.2.4 Other Macroeconomic Reforms Since 1991

In addition to globalisation, liberalisation, and privatisation, India has implemented several other macroeconomic reforms since 1991 to promote growth and stability. Some of these reforms include:

1. Fiscal Reforms: The government introduced fiscal reforms to improve its financial position and reduce the fiscal deficit. These reforms included measures to increase tax revenue, reduce subsidies, and control public expenditure.

2. Financial Sector Reforms: India undertook significant financial sector reforms to modernise and strengthen its banking system. These reforms included the establishment of the Securities and Exchange Board of India (SEBI), the Insurance Regulatory and Development Authority (IRDA), and the Pension Fund Regulatory and Development Authority (PFRDA). These institutions were tasked with regulating their respective sectors and promoting transparency and efficiency.

3. Infrastructure Reforms: India implemented reforms to address infrastructure deficiencies, which had long been a barrier to growth. The government established the National Highways Authority of India (NHAI) to develop and maintain the country's road network, and the National Rural Roads Development Agency (NRRDA) to improve rural connectivity. Additionally, the government introduced Public-Private Partnership (PPP) models to attract private investment in infrastructure projects.

4. Labour Reforms: The government implemented labour reforms to increase the flexibility of the labour market and make it easier for businesses to hire and fire employees. These reforms included amendments to labour laws, which provided more flexibility to employers and allowed them to hire workers on fixed-term contracts.

Together, these reforms helped to transform the Indian economy from a closed and protected economy to a more open, market-oriented, and globally integrated one. The reforms resulted in increased foreign investment, greater competition, and improved productivity, which in turn led to higher economic growth rates and a reduction in poverty.

6.3.2.5 Significance of the Economic Reforms of 1991

The economic reforms of 1991 were significant for India as they marked a turning point in the country's economic history. Prior to 1991, India followed a socialist economic model that emphasised state control and regulation of the economy. However, this model had led to stagnant growth, high inflation, and a balance of payments crisis. The economic reforms of 1991 aimed to address these issues and transform India into a market-oriented economy.

The significance of the economic reforms of 1991 can be understood in several ways:

1. Liberalisation: The reforms led to a significant liberalisation of India's economy, with the removal of many regulatory barriers and restrictions on private enterprise. This created a more favourable business environment, which helped to attract foreign investment and promote domestic entrepreneurship.

2. Globalisation: The reforms also facilitated India's integration into the global economy , opening up new opportunities for trade and investment. This allowed India to benefit from the growth of the global economy and expand its export base.

3. Privatisation: The privatisation of many state-owned enterprises helped to improve their efficiency and reduce the burden on the government. This also led to the emergence of a vibrant private sector, which helped to create jobs and stimulate economic growth.

4. Fiscal Discipline: The reforms also emphasised fiscal discipline, with the government implementing measures to reduce the fiscal deficit and control inflation. This helped to stabilise the economy and promote long-term growth.

Overall, the economic reforms of 1991 were significant for India as they helped to transform the country's economic landscape and promote sustainable growth. However, the implementation of these reforms was not without challenges. Some sections of society were negatively affected by the reforms, particularly those who were dependent on the government for employment and subsidies. Additionally, the reforms were often met with resistance from various interest groups, including labour unions, farmers, and environmentalists.

In conclusion, the macroeconomic reforms implemented in India since 1991 focused on globalisation, liberalisation, and privatisation. These reforms helped to open up the Indian economy to global competition, promote efficiency and productivity, and attract foreign investment. While there were some challenges associated with the implementation of these reforms, overall, they have contributed significantly to India's economic growth and development.

Recap

- Economic crisis is a period of financial hardship, unemployment, and high expens-es
- Causes of economic crises can be natural disasters, political instability, or burst economic bubbles
- The economic crisis of 1991 in India was triggered by a balance of payment crisis due to rising imports and falling exports
- Consequences of the 1991 crisis included high inflation, unemployment, and a sharp decline in economic growth
- Reforms implemented since 1991 in India include globalisation, liberalisation, and

privatisation

- Globalisation means increased interconnectedness and integration of the world's economies and cultures
- Indian economic reform started in the 1990s with liberalisation of trade, privatisation of state-owned enterprises, and industry deregulation
- Liberalisation involves reducing government regulations and restrictions on economic activities
- Privatisation means transferring ownership and control of public assets to private entities
- Privatisation in India aimed to reduce the government's role and involved selling government-owned companies to private investors
- Other reforms introduced in India since 1991 include fiscal, financial, infrastructure, and labour reforms

Objective Questions

1. What are the economic reforms implemented in India in 1991 to stimulate economic growth, attract foreign investment, and reduce the fiscal burden on the government?
2. What is the process through which the government reduced the rules and regulations in the economy ?
3. What refers to the process of integrating the Indian economy with the global economy?
4. What is the transfer of ownership and control of public assets or services from the government to private entities?
5. Who was the Indian Prime Minister in office during the Economic Crisis of 1991?
6. Which government agency was responsible for implementing the reforms in India?
7. Which sector experienced a surge in foreign direct investment (FDI) after the reforms?

Answers

1. Liberalisation, Privatisation, and Globalisation (LPG)
2. Liberalisation
3. Globalisation
4. Privatisation
5. P.V. Narasimha Rao
6. The Ministry of Finance
7. Manufacturing

Assignments

1. Discuss the Economic Crisis of 1991 in India, its causes, and the major consequences it had on the Indian economy.
2. Analyse the significance of the macroeconomic reforms implemented since 1991 in addressing the crisis and promoting economic growth and stability.
3. Evaluate the impact of liberalisation, privatisation, and globalisation on India's economy and its integration into the global market.

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1. Thirlwal, A.P (2011).*Economics of Development*, New York, Palgrave Macmillan.
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Unit 4
Role of Economic Sectors

Learning Outcomes

After completing this unit, the learner will be able to

- able to identify the role of agriculture in the Indian economy
- familiar with the significance of industrial sectors in the country's development
- aware of the role of the service sector in the nation

Prerequisites

The Indian economy is divided into three sectors: primary (agriculture), secondary (industry), and tertiary (services). Each plays a crucial role in the nation's growth.

Agriculture has long been India's economic backbone, with about 58% of the population dependent on it for employment. It includes food grains, cash crops, livestock, poultry, and forestry. While vital for food production and exports, agriculture faces challenges like dependence on monsoons and small landholdings. Efforts to boost productivity and modernise farming continue.

The industrial sector, which includes manufacturing, construction, and mining, has seen rapid growth, transitioning India from an agrarian to an industrial economy. Key industries include textiles, automobiles, steel, and electronics. Despite challenges like outdated infrastructure and regulatory hurdles, the sector remains crucial for job creation and economic expansion.

The services sector, now the largest contributor to India's GDP, has grown rapidly since the 1990s. It includes IT, finance, retail, healthcare, and education. India is a global IT hub, and the sector has fuelled economic modernisation, urbanisation, and exports. However, challenges such as regional disparities and income inequality persist.

As India shifts from an agrarian to a more industrialised and service-oriented economy, agriculture remains important for rural livelihoods, while industry and services drive technological advancement and global competitiveness.

Keywords

Agriculture, industry, service, GDP, infrastructure

Discussion

64.1 Role of Agriculture in the Indian Economy

Agriculture has always played a significant role in the Indian economy. It is the backbone of the Indian economy, and it plays a vital role in the country's development. Even today, it is the primary source of livelihood for around 58% of the Indian population and contributes around 16% of the country's gross domestic product (GDP). The sector also includes livestock, poultry, forestry, and fisheries.

Here are some of the key points that highlight the importance of agriculture in the Indian economy:

1. **Employment:** Agriculture is the largest source of employment in the Indian economy, providing jobs to millions of people in rural areas. Around 54.6% of the total rural workforce is engaged in agriculture and related activities.
2. **Food Security:** Agriculture provides food security to the Indian population by producing staple crops like rice, wheat, and pulses. It ensures that people have access to an adequate and affordable supply of food, which is essential for their health and well-being.
3. **Exports:** Agriculture is a significant contributor to India's exports. India is the world's largest producer of spices, and it also exports a variety of other crops like tea, coffee, fruits, and vegetables. The agricultural exports contribute around 10% to the country's total exports.
4. **Rural Development:** Agriculture plays a crucial role in the development of rural areas, where most of the agricultural activities take place. It provides income and employment opportunities to people living in these areas, which helps in reducing poverty and improving their standard of living.
5. **Input to Industry:** Agriculture is the source of many raw materials for industries like textiles, sugar, and food processing. The industrial sector depends on agriculture to a great extent for raw materials like cotton, sugarcane, and fruits.
6. **Contribution to GDP:** Although agriculture's contribution to the Indian economy has decreased over the years, it still contributes around 16% to the country's GDP. This highlights the importance of agriculture as a significant contributor to the Indian economy.

In conclusion, agriculture plays a crucial role in the Indian economy by providing employment, food security, exports, rural development, input to industry, and contributing to the GDP. As such, the development of agriculture and related activities should be a priority for the Indian government to ensure sustainable growth and development of the country.

6.4.2 Role of Industry in the Indian Economy

The industrial sector (manufacturing) holds a significant role in the Indian economy by contributing more than 30 percent to the country's GDP. The sector provides jobs to millions of people in the country. Industries like Micro, Small, and Medium Enterprises (MSMEs) absorb a lot of skilled manpower in the nation. The industrial sector includes manufacturing, construction, mining, quarrying, etc. The role of industry in the economic development of India can be discussed below.

1. Rapid rise in National Income

Industries play a leading role in the rapid economic growth of a country. This is because the productivity rate in industry is higher than in agriculture. During the financial years 2012 and 2021, the industry contributed 31 percent of GDP according to the economic survey 2023. So, it holds a prominent position in Indian economic development.

2. Employment Generation

Unemployment is a severe problem the country has faced for a long time. Setting up of large and small-scale industries can generate millions of employment opportunities for skilled and semiskilled workers. From the financial year 2012 to 2021, the industrial sector employed over 12.1 crores of people as per the 2023 economic survey.

3. Infrastructure Development

With industrial development, the economic infrastructure like roads, rail, bridges, airports, banking, insurance, etc would also rise and would lead to economic growth. It would further lead to improved quality of life for people.

4. Significance in International Trade

Industrially advanced nations can gain from rapid Industrialisation, by exporting industrial products. In the case of underdeveloped nations, they export agricultural goods and import industrial products. Industrial products are highly valued and would gain larger foreign exchange earnings. A developing country like India, to fill the gap in BOP, would try to adopt import substitution or produce imported goods in the home country. It may help the country to become industrially developed.

5. Better utilisation of raw materials

As compared to agriculture, the industrial sector has a greater capacity to utilise the resources of a country. Industrial production requires training and skills, then the skilled or trained manpower is able to utilise resources efficiently.

6. Balanced Regional Development

The government of India has started many basic and key industries in the backward and untrodden parts of the country since the initiation of five-year plans. This was intended to remove regional disparities among different regions. The Bhilai steel plant in Chhattisgarh, Rourkela in Odisha, Durgapur in West Bengal, etc, helped the development of the regions in which they are located.

7. Improved Standard of Living of the People

As industrialisation creates more employment opportunities, it enables people to gain more income. Through this, they can raise their purchasing power in food and non-food items. This in turn raises the standard of living of the people.

Hence the industrial sector plays a major role in the development of an economy. It provides employment opportunities to people and raw materials to other sectors. Nowadays the government plays an important role to make India a business-friendly state.

6.4.3 Role of the Service Sector in the Indian Economy

The Indian service sector attained tremendous growth after independence. The share of this sector to the country's total income accounts for more than the other two sectors, say, agriculture and industry. The service sector witnessed a growth rate of 8.4

percent in 2022 as compared to 7.8 percent in 2021. This growth rate was driven by major sub sectors such as trade, transport, hotel, storage, communication, tourism, etc. The importance of the service sector can be discussed through the below points.

1. Share on GDP

The service sector plays an important role in improving the economic development of an economy. In the year 2022, the share of this sector towards India's GDP was more than 50 percent. That is among the three sectors, more than half of India's national income comes from the service sector development.

2. Employment Generation

The sector provides employment opportunities in various fields of teaching, banking, insurance, health sector, etc. According to world bank data, in 2010-11, this sector provided employment to 27.5 percent of the population and this increased to 32.33 percent in 2021.

3. Expertise Hub

The service sector is producing a large number of experts in the field of communication, information technology, software development, banking, and consultancy. The number of service providers is increasing day by day. Various public and private organisers are providing commendable shares in both domestic and foreign markets. Reliance Industries, Tata Consultancy Services, State Bank of India, Larsen and Toubro, etc, are the top Indian Multinational Companies in the service sector.

4. Infrastructural Development

The Indian service sector marked a distinguished share in the world. The investments of various service providers are increasing in different fields like transportation, communication, education, medical, logistics, etc. All these areas facilitate the infrastructure development of our nation.

5. Foreign Direct Investment (FDI)

India's air transport, information and broadcasting, telecommunication, tourism, hotels, etc are the main FDI hubs of other nations. FDI plays an important role in the economic development of a nation. By attracting large FDI, the service sector acts as a significant contributor to economic development.

6. Export Promotion

Trade volume from the service sector has been increasing at a fast pace. India was among the top ten service exporter countries in 2021 as per the economic survey 2023. Share of service sector export in the world commercial service export increased from 3 percent in 2015 to 4 percent in 2021. The export growth further registered a growth of 27.7 percent in 2022.

In conclusion, the service sector plays an important role in fostering economic development. It is the leading sector as it contributes more than half of the GDP in the country. It is the largest employment provider in the country, thereby the sector enables people to gain income and improve their standard of living.

Recap

- Agriculture is a significant sector in India's economy, employing around 58% of the population and contributing approximately 16% to GDP
- The sector includes a wide range of crops, livestock, poultry, forestry, and fisheries, and is predominantly rain-fed
- The industrial sector contributes more than 30 percent to the country's GDP
- Industrial sector includes manufacturing, construction, mining, quarrying, etc
- The service sector witnessed a growth rate of 8.4 percent in 2022
- Service sector includes trade, transport, hotel, storage, and communication related to broadcasting
- The service sector contributes more than half of the GDP in the country

Objective Questions

1. What is the primary source of livelihood for millions of people in India?
2. Comment any two sub sectors in agriculture sector?
3. The share of employment in industrial sector as per the latest economic survey?
4. In which state is Bhilai steel plant located ?
5. In which state is Rourkela steel plant located?
6. In which state is Durgapur steel plant located?
7. What is the growth rate of service sector in 2022 as compared to 2021?
8. Mention any two sub sectors in the service sector?
9. What is the share of the service sector in India's GDP in 2022?
10. What is the service export growth in 2022?

Answers

1. Agriculture
2. Live stock, Poultry
3. 12.1 crore
4. Chhatisgarh
5. Odissa
6. West Bengal
7. 8.4%
8. trade, transport

9. 50%
10. 27.7%

Assignments

1. Discuss the significance of agriculture in India's economy and its contribution to GDP and employment.
2. Assess the role of industrial development in Indian economic development.
3. Analyse the growth of the service sector in the Indian economy.
4. Distinguish among the growth of agriculture, industry, and service sectors in India.

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1. Thirlwal, A.P (2011). *Economics of Development*. New York, Palgrave Macmillan.
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Kerala, Pin: 682301
Ph: 04842927436
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Sree Neelakanta Govt. Sanskrit College
Pattambi, Palakkad,
Kerala, Pin: 679303
Ph: 04662912009
email: rcpdirector@sgou.ac.in

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Kollam, Kerala Pin- 691601, email: info@sgou.ac.in, www.sgou.ac.in Ph: +91 474 2966841