RKDF University, Bhopal

Open Distance Learning (ODL) Material

Faculty of Commerce

Semester-III

Subject - Applied Economics

Syllabus

Unit	Topics	No. of Lectures
I	Historical Background of Applied Economics, Concept of Applied Economics, Scope, Nature and Importance, Its Limitations Difference between Micro and Macro economics, National Income-Concept, Gross National Product, Net National Product & Gross Domestic Product Net Domestic Product, Methods of Measurement of National Income and Problem related to that.	18
II	Income and Consumption Relationship- Principles of Determination of Income Classical and Keynes's Theory, Solution of short term and long term consumption function, Consumption function in Indian economy	18
III	Value of money- Concept and determinants of value of money, Quantity theory of money, Theory of Fisher and Cambridge, Theory of demand and supply of money, Theory of value of money, Theory of liquidity of money, Keynes's Money income theory.	18
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	development and its Determining factors, economic and non-economic factors affecting economic growth, classical and modern theories of economic development, stages of economic development of Keynes and Rostow, strategy of balanced and unbalanced development.	
V	Changes in the value of money- Money Inflation, Money deflation, inflation and narrative inflation, demand driven inflation, cost growth inflation, Stagflation, effects of Money Inflation & Money deflation in the Indian Economy.	18
Keyword/Tag: **Income, Consumption, Savings, Investment, Employment, Money, Inflation, Deflation.**		

UNIT-I

HISTORICAL BACKGROUND OF APPLIED ECONOMICS

Applied economics involves the application of economic theory and principles to real-world situations and problems to inform decisions and policy-making. Historically, applied economics has evolved alongside the development of economic thought, adapting to address practical issues in various fields such as agriculture, industry, labor, and finance.

1. **Classical Economics (18th and 19th Centuries)**:
   - Pioneered by economists like Adam Smith, David Ricardo, and John Stuart Mill.
   - Focused on the principles of free markets, competition, and the role of government.
2. **Marginal Revolution (Late 19th Century)**:
   - Introduced by economists such as William Stanley Jevons, Carl Menger, and Léon Walras.
   - Emphasized marginal utility and the determination of prices through supply and demand.
3. **Keynesian Economics (20th Century)**:
   - Developed by John Maynard Keynes during the Great Depression.
   - Highlighted the role of government intervention and fiscal policy in managing economic cycles.
4. **Modern Developments**:
   - Includes various schools of thought such as monetarism, new classical economics, and behavioral economics.
   - Utilizes advanced statistical and econometric methods to analyze data and inform policy.

Concept of Applied Economics

Applied economics bridges the gap between theoretical economic concepts and real-world application. It involves using economic theories, models, and data analysis to solve practical problems and make informed decisions in various sectors, including business, healthcare, public policy, and finance.

Scope, Nature, and Importance of Applied Economics

Scope:

- **Sectoral Analysis**: Agriculture, industry, services.
- **Policy Formulation**: Tax policies, trade policies, monetary policies.
- **Business Decisions**: Market analysis, pricing strategies, investment decisions.
- **Social Issues**: Poverty, unemployment, healthcare.

Nature:

- **Interdisciplinary**: Integrates concepts from economics, statistics, and other fields.
- **Empirical**: Relies heavily on data analysis and empirical evidence.
- **Practical**: Focused on solving real-world problems and improving decision-making processes.

Importance:

- **Informs Policy**: Provides evidence-based recommendations for policymakers.
- **Enhances Efficiency**: Helps businesses and governments allocate resources more efficiently.

- **Solves Social Issues**: Addresses problems like poverty, inequality, and unemployment.
- **Economic Planning**: Assists in forecasting and economic planning at various levels.

Limitations of Applied Economics

- **Data Limitations**: Incomplete or inaccurate data can lead to incorrect conclusions.
- **Complexity of Real-world Issues**: Simplified models may not capture all aspects of complex economic phenomena.
- **Bias and Assumptions**: Models and analyses can be influenced by the biases and assumptions of the economists.
- **Dynamic Nature of Economics**: Economic conditions and variables are constantly changing, making it difficult to predict future trends accurately.

Difference Between Micro and Macro Economics

Microeconomics:

- **Focus**: Individual units like households, firms, and industries.
- **Topics**: Demand and supply, price determination, consumer behavior, production costs.
- **Objective**: Understand the decision-making process of individuals and firms.

Macroeconomics:

- **Focus**: Economy as a whole.
- **Topics**: National income, inflation, unemployment, economic growth, fiscal and monetary policies.

- **Objective**: Understand and manage aggregate economic phenomena.

National Income-Concept

National Income refers to the total value of goods and services produced by a country within a specific period, usually a year. It includes the income earned by residents and businesses, both domestically and abroad.

Gross National Product (GNP):

- Total market value of all final goods and services produced by the residents of a country, including income earned abroad.

Net National Product (NNP):

- GNP minus depreciation (the loss of value of capital goods).

Gross Domestic Product (GDP):

- Total market value of all final goods and services produced within a country's borders, regardless of the nationality of the producers.

Net Domestic Product (NDP):

- GDP minus depreciation.

Methods of Measurement of National Income

1. **Production (Output) Method**:
   - Calculates the total value of output produced by different sectors of the economy.
2. **Income Method**:
   - Sums up all incomes earned by individuals and businesses in the country, including wages, rents, interests, and profits.

3. **Expenditure Method**:
   - Totals the expenditures made on final goods and services by households, businesses, government, and foreigners (exports minus imports).

Problems Related to Measurement of National Income

- **Non-market Transactions**: Excludes non-market activities like household labor and volunteer work.
- **Informal Economy**: Difficulty in accounting for informal or unreported economic activities.
- **Data Collection**: Inaccurate or incomplete data can lead to errors.
- **Price Changes**: Adjusting for inflation and changes in price levels over time.
- **Double Counting**: Ensuring that intermediate goods are not counted multiple times.
- **Externalities**: Not accounting for environmental degradation or depletion of natural resources.

Understanding and applying these concepts allows economists and policymakers to analyze economic performance, make informed decisions, and address various economic challenges effectively.

UNIT-II

Income and Consumption Relationship

The relationship between income and consumption is a fundamental concept in economics, exploring how changes in income levels affect consumer spending. This relationship is essential for understanding economic activity, planning fiscal policies, and analyzing the overall health of an economy.

Principles of Determination of Income

Classical Theory of Income Determination

Classical Economics emphasizes the self-regulating nature of markets, where full employment is the norm, and any deviations are temporary.

1. **Say's Law**: Supply creates its own demand, meaning all income generated from production will be spent on consumption or investment.
2. **Price-Wage Flexibility**: Prices and wages adjust to ensure that markets, including the labor market, clear. Unemployment is seen as a temporary phenomenon due to wage rigidity.
3. **Savings-Investment Equality**: Savings always equal investment, mediated by interest rates. If savings increase, interest rates fall, encouraging investment.

Assumptions:

- Full employment of resources.
- Perfect competition in markets.
- No government intervention required.

Keynesian Theory of Income Determination

Keynesian Economics introduced by John Maynard Keynes, challenges classical economics, especially during economic downturns.

1. **Effective Demand**: Aggregate demand (total spending) determines the level of income and employment, not aggregate supply.
2. **Consumption Function**: Consumption depends on disposable income, with a portion saved. Represented as C=a+bYdC = a + bY_dC=a+bYd, where aaa is autonomous consumption, bbb is the marginal propensity to consume (MPC), and YdY_dYd is disposable income.
3. **Investment**: Influenced by interest rates and marginal efficiency of capital, not just by savings.
4. **Multiplier Effect**: Initial changes in spending lead to greater overall changes in income.

Assumptions:

- Involuntary unemployment is possible.
- Prices and wages are sticky.
- Government intervention can help manage demand and stabilize the economy.

Short-term and Long-term Consumption Functions

Short-term Consumption Function:

- Describes the relationship between current income and consumption.
- **Keynesian View**: In the short term, consumption increases with income but at a decreasing rate (MPC < 1). Represented by C=a+bYC = a + bYC=a+bY, where bbb (MPC) is constant but less than 1.

Long-term Consumption Function:

- Incorporates expectations about future income, wealth, and life-cycle hypothesis.
- **Permanent Income Hypothesis (Milton Friedman)**: Consumption depends on permanent income rather than current income. Individuals smooth consumption over their lifetime.
- **Life-Cycle Hypothesis (Franco Modigliani)**: Individuals plan their consumption and savings behavior over their lifetime. Consumption is based on expected lifetime income.

Consumption Function in the Indian Economy

Indian Context:

- **Income Disparity**: Significant variation in income levels across different sections of society affects aggregate consumption patterns.
- **Rural vs Urban Consumption**: Different consumption behaviors due to varied income levels and access to markets.
- **Cultural Factors**: Social norms, traditions, and cultural factors significantly influence consumption habits.
- **Government Policies**: Subsidies, social welfare programs, and tax policies directly impact disposable income and consumption.

Key Observations:

- High propensity to consume at lower income levels.
- Significant portion of income spent on necessities in rural areas.
- Increasing middle class leading to higher discretionary spending in urban areas.

- Impact of demonetization (2016) and GST implementation (2017) on consumption patterns.
- Recent trends indicate rising consumption in technology, health, and education sectors.

Challenges:

- Informal economy: A large portion of the Indian economy is unorganized, making accurate measurement difficult.
- Data availability: Reliable and timely data on income and consumption is often lacking.
- Economic shocks: Events like the COVID-19 pandemic have profound impacts on income and consumption patterns.

Summary

Understanding the relationship between income and consumption is crucial for economic analysis and policy formulation. Classical and Keynesian theories provide foundational frameworks, with Keynesian economics offering a more dynamic approach to dealing with economic fluctuations. In the Indian context, various socio-economic factors influence consumption patterns, highlighting the need for tailored economic policies to manage and stimulate growth effectively.

UNIT-III

VALUE OF MONEY: CONCEPT AND DETERMINANTS

Value of Money: The value of money refers to its purchasing power, i.e., the quantity of goods and services that can be purchased with a unit of currency.

Determinants of Value of Money:

1. **Supply of Money**: The amount of money circulating in an economy.
2. **Demand for Money**: The desire to hold money as opposed to spending it.
3. **Price Level**: The average of current prices across the entire spectrum of goods and services produced in the economy.
4. **Economic Output**: The total production of goods and services in an economy.
5. **Interest Rates**: The cost of borrowing money, influencing the supply and demand for money.

Quantity Theory of Money

The Quantity Theory of Money (QTM) posits that there is a direct relationship between the quantity of money in an economy and the level of prices of goods and services sold. The most common formulation is:

MV=PQMV = PQMV=PQ

Where:

- MMM = Money supply
- VVV = Velocity of money (the rate at which money circulates in the economy)
- PPP = Price level

- QQQ = Output of goods and services

Theory of Fisher and Cambridge

Fisher's Equation of Exchange

Irving Fisher formalized the Quantity Theory of Money with the equation:

MV=PTMV = PTMV=PT

Where:

- TTT = Total transactions in the economy

Key Points:

- The velocity of money (V) and the total transactions (T) are assumed to be constant in the short term.
- Any change in the money supply (M) directly affects the price level (P).

Cambridge Cash-Balance Approach

The Cambridge approach, developed by economists like Alfred Marshall and Arthur Pigou, focuses on the demand for money as a store of value rather than just a medium of exchange. The equation is:

Md=kPYM_d = kPYMd=kPY

Where:

- MdM_dMd = Money demanded
- kkk = Fraction of income people wish to hold as cash
- PPP = Price level
- YYY = Real income

Key Points:

- People hold money for transactions and precautionary purposes.
- The demand for money is related to income and the average level of prices.

Theory of Demand and Supply of Money

Demand for Money:

- **Transactions Motive**: Holding money to make everyday purchases.
- **Precautionary Motive**: Holding money for unexpected needs.
- **Speculative Motive**: Holding money to take advantage of future investment opportunities.

Supply of Money:

- Determined by the central bank (e.g., Federal Reserve, European Central Bank) and the banking system.
- Controlled through monetary policy tools like open market operations, reserve requirements, and interest rates.

Theory of Value of Money

The value of money is primarily determined by the interaction of its supply and demand. An increase in the money supply without a corresponding increase in economic output leads to inflation, reducing the value of money. Conversely, if the money supply grows slower than the economy, deflation can occur, increasing the value of money.

Theory of Liquidity Preference (Keynes)

John Maynard Keynes introduced the liquidity preference theory, explaining the demand for money based on the preference for liquidity. People prefer to hold their wealth in liquid form (money) for three motives:

1. **Transactions Motive**: To facilitate everyday transactions.
2. **Precautionary Motive**: To guard against unexpected expenses.
3. **Speculative Motive**: To take advantage of future changes in interest rates or bond prices.

Keynes's Liquidity Preference Function: Md=L(Y,r)M_d = L(Y, r)Md =L(Y,r)

Where:

- MdM_dMd = Money demanded
- LLL = Liquidity preference function
- YYY = Real income
- rrr = Interest rate

Keynes's Money Income Theory

Keynes's theory suggests that changes in the money supply affect interest rates, which in turn influence investment and aggregate demand. This chain reaction ultimately impacts national income and employment levels.

Key Concepts:

- **Interest Rates**: Lower interest rates increase investment and consumption, boosting aggregate demand and income.
- **Investment Multiplier**: An initial increase in investment leads to a larger increase in overall income due to the multiplier effect.

- **Equilibrium Income**: Determined by the intersection of aggregate demand and aggregate supply.

Summary

The value of money and its determinants are central to understanding economic stability and growth. Various theories, from the Quantity Theory of Money to Keynes's Money Income Theory, provide frameworks for analyzing how money supply and demand interact with economic variables. Understanding these concepts is crucial for effective monetary policy and economic management.

UNIT-IV

Concept of Economic Development and Economic Growth

Economic Growth:

- Refers to the increase in a country's output of goods and services over time.
- Measured by the growth rate of Gross Domestic Product (GDP) or Gross National Product (GNP).
- Quantitative change; focuses on a rise in real per capita income.

Economic Development:

- Broader concept than economic growth.
- Includes improvements in living standards, reduction in poverty, inequality, and unemployment, and enhancements in health, education, and environmental quality.
- Qualitative change; focuses on structural changes in the economy, improvement in institutions, and socio-economic progress.

Determining Factors of Economic Development

Economic Factors:

1. **Natural Resources**: Availability, quality, and utilization of natural resources.
2. **Capital Formation**: Investments in physical and human capital.
3. **Technological Progress**: Innovations, research and development, and the diffusion of technology.
4. **Labor Force**: Quantity, quality, and productivity of the labor force.

5. **Infrastructure**: Availability and quality of infrastructure such as transportation, communication, and energy.

Non-Economic Factors:

1. **Political Stability**: Governance, political institutions, and law and order.
2. **Social Factors**: Education, health, and social cohesion.
3. **Cultural Factors**: Values, traditions, and social norms.
4. **Legal and Institutional Framework**: Property rights, regulatory environment, and the effectiveness of institutions.

Economic and Non-Economic Factors Affecting Economic Growth

Economic Factors:

1. **Capital Accumulation**: Investments in machinery, buildings, and infrastructure.
2. **Human Capital**: Education, training, and health of the workforce.
3. **Technological Advancement**: Innovations and improvements in production processes.
4. **Trade**: Export and import activities, access to international markets.

Non-Economic Factors:

1. **Social Infrastructure**: Healthcare, education, and social services.
2. **Political Environment**: Stability, policies, and governance.
3. **Cultural Attitudes**: Work ethic, risk-taking behavior, and attitudes towards innovation.
4. **Geographical Factors**: Climate, topography, and location.

Classical and Modern Theories of Economic Development

Classical Theories:

1. **Adam Smith**: Emphasized the role of free markets, division of labor, and capital accumulation.
2. **David Ricardo**: Focused on comparative advantage and the benefits of trade.
3. **Thomas Malthus**: Highlighted the potential limits to growth due to population pressure on resources.

Modern Theories:

1. **Harrod-Domar Model**: Emphasizes the roles of savings and investment in growth.
2. **Solow-Swan Model**: Highlights technological progress, capital accumulation, and labor as key drivers of growth.
3. **Endogenous Growth Theory**: Focuses on internal factors such as human capital, innovation, and knowledge spillovers.

Stages of Economic Development (Keynes and Rostow)

Keynes:

- Did not propose a specific theory of stages but emphasized the importance of effective demand in the short run and the role of investment in long-run growth.
- Emphasized government intervention to manage demand and stabilize the economy.

Rostow's Stages of Economic Growth:

1. **Traditional Society**: Limited technology and static society.

2. **Preconditions for Take-off**: Development of more productive agricultural practices and infrastructure.
3. **Take-off**: Rapid growth in industries, increasing investment and income.
4. **Drive to Maturity**: Diversification of the economy, technological advancements.
5. **Age of High Mass Consumption**: High standard of living, widespread consumer goods.

Strategy of Balanced and Unbalanced Development

Balanced Development:

- Simultaneous investment in various sectors of the economy to ensure harmonious growth.
- Prevents sectoral imbalances and bottlenecks.
- Prominent proponent: Ragnar Nurkse.

Unbalanced Development:

- Focuses on key sectors to stimulate growth, creating linkages that will induce growth in other sectors.
- Encourages targeted investments to exploit leading sectors and generate overall economic momentum.
- Prominent proponents: Albert Hirschman and Gunnar Myrdal.

Summary

Understanding the concepts of economic development and growth is crucial for designing effective economic policies. Economic development encompasses a broader range of improvements in living standards and structural changes, while economic growth is more about quantitative increases in output. Both economic and non-economic factors play vital roles in shaping these processes. Classical and modern theories provide frameworks for understanding the dynamics of development, while stage theories like those of Keynes and Rostow offer insights into the phases economies go through as they develop. Strategies of balanced and unbalanced development offer different approaches to achieving sustainable economic progress.

UNIT-V

Changes in the Value of Money

Changes in the value of money refer to fluctuations in its purchasing power, which can be influenced by various factors, leading to inflation or deflation. Understanding these concepts is crucial for analyzing economic conditions and formulating appropriate monetary policies.

Money Inflation

Money Inflation:

- A sustained increase in the general price level of goods and services in an economy over a period of time.
- Measured by indices such as the Consumer Price Index (CPI) and the Producer Price Index (PPI).

Types of Inflation:

1. **Demand-Pull Inflation**:
   - Occurs when aggregate demand in an economy outpaces aggregate supply.
   - Common causes: Increased consumer spending, government expenditure, and investment spending.
2. **Cost-Push Inflation**:
   - Results from rising costs of production, leading to decreased supply of goods and services.
   - Common causes: Higher wages, increased prices of raw materials, and supply chain disruptions.
3. **Built-In Inflation**:
   - Caused by adaptive expectations, where workers demand higher wages to keep up with rising living costs, leading to higher production costs and prices.
4. **Hyperinflation**:

    - An extremely high and typically accelerating rate of inflation, often exceeding 50% per month.
    - Common causes: Excessive money supply, loss of confidence in the currency, and fiscal mismanagement.

Money Deflation

Money Deflation:

- A sustained decrease in the general price level of goods and services in an economy.
- Measured similarly to inflation, using indices like CPI and PPI.

Causes of Deflation:

- Decrease in aggregate demand due to lower consumer spending or investment.
- Increase in aggregate supply without corresponding demand.
- Tight monetary policies leading to reduced money supply.

Consequences of Deflation:

- Increased real value of debt, making it harder for borrowers to repay.
- Reduced consumer spending as people expect further price declines.
- Lower business revenues and profits, leading to layoffs and higher unemployment.

Inflation and Narrative Inflation

Narrative Inflation:

- Refers to the public perception and discourse around inflation.
- Influenced by media, government statements, and public opinion.
- Can affect economic behavior, such as spending and saving habits, independent of actual inflation rates.

Demand-Driven Inflation

Demand-Pull Inflation:

- Caused by increased aggregate demand in the economy.

- Key factors:
  - **Consumer Spending**: Higher disposable income leads to increased demand for goods and services.
  - **Government Spending**: Increased public expenditure boosts aggregate demand.
  - **Investment**: Higher business investment in capital goods.
  - **Net Exports**: Increase in demand for a country's exports.

Cost-Growth Inflation

Cost-Push Inflation:

- Caused by rising costs of production, leading to reduced supply.
- Key factors:
  - **Wage Increases**: Higher wages lead to increased production costs.
  - **Raw Material Prices**: Increase in the cost of raw materials (e.g., oil, metals).
  - **Supply Chain Disruptions**: Natural disasters, geopolitical tensions, and pandemics.

Stagflation:

- A combination of stagnant economic growth, high unemployment, and high inflation.
- Difficult to manage because policies to combat inflation (tight monetary policy) can exacerbate unemployment, and policies to reduce unemployment (expansionary monetary policy) can worsen inflation.

Effects of Money Inflation & Money Deflation in the Indian Economy

Effects of Money Inflation in India:

1. **Purchasing Power**: Erodes the purchasing power of money, affecting consumers' ability to buy goods and services.

2. **Cost of Living**: Increases the cost of living, particularly affecting lower-income groups.
3. **Savings and Investment**: Discourages savings due to negative real interest rates and can lead to speculative investments.
4. **Income Distribution**: Tends to widen income inequality as prices of essential goods rise faster than wages.
5. **Interest Rates**: Central bank (RBI) may raise interest rates to control inflation, affecting borrowing costs.
6. **Government Policies**: May necessitate fiscal and monetary measures to stabilize prices.

Effects of Money Deflation in India:

1. **Debt Burden**: Increases the real burden of debt, affecting both consumers and businesses.
2. **Consumer Spending**: Leads to decreased consumer spending as people delay purchases, expecting further price drops.
3. **Economic Growth**: Slows down economic growth due to reduced demand and investment.
4. **Unemployment**: Increases unemployment as businesses cut back on production.
5. **Banking Sector**: Poses risks to the banking sector due to increased loan defaults and lower profitability.
6. **Policy Challenges**: Requires careful policy interventions to avoid deepening the economic downturn.

Summary

Understanding changes in the value of money through inflation and deflation, along with their various forms and causes, is critical for managing economic stability. In the context of the Indian economy, both inflation and deflation present unique challenges that require targeted policy responses to ensure sustainable economic growth and stability.