

Subject # Macro-Economics.

Prepared by # Tahir Shah

Context



<u>Unit. No.</u>	<u>Chapter</u>	<u>Pages.</u>
01	Introduction	01 — 47
02	National income	48 — 61
03	Investment Theory	64 — 73
04	Money	74 — 83
05	Bank	86 — 108
06	Inflation	111 — 120
07	public finance	121 — 128
08	International Trade	131 — 137
09	Balance of payment	139 — 142
10	Economic Development	144 — 157
11	Unemployment	159 — 164
12	Agriculture	168 — 173
13	Business cycle	176 — 179
14	Economic Systems	181 — 185

CH #01: Introduction

Classical Macro-Economics
J.M Keynes Macro-Economics

Modern-Macro-Economics

Economics School of Thought

Different Economics Schools of Thought (Classical, Neo-classical, Keynes, New-classical, New-Keynesian, Monetarist, Marxist, Austrian School of Thought/Economics)

Supply Side/ Supply Side Economics

Demand Side/ Demand Side Economics

Open / Four Sector Economy

Closed / Three Sector Economy

Two Sector Economy.

Scope of Micro & Macro-Economics

Integration of Micro & Macro Economics

Separate identities of Micro & Macro-Economics

Limitations of Macro-Economics

Economic model, Micro & Macro-Economic Model

Partial & General Equilibrium Model

Construction of an Economic Model

Problems of Macro-Economics

Classical, Neo-classical, Keynesian Model

Classical vs Keynesian / Keynes

Classical view of wage-price flexibility

Keynesian view of wage-price flexibility

Sticky Price, Sticky Wage Model

Price rigidity, Price flexibility

Wage rigidity, Wage flexibility.

Criticism on Wage and price flexibility

Neutrality of Money

Classical & Keynesian View about Neutrality of Money

Money Supply & Money Stock

Aggregate Demand, Aggregate Supply

Classical AD & AS curve

Keynesian AD & AS curve

Equilibrium level of National income & employment

Wage rate, Real & Nominal wage rate

Pigou effect, Keynesian effect, Okun law,

Phillip curve, Short-run & long-run Phillip curve

Good market, labor market, Capital market,

Money market, Credit market

Misperception Theory, Worker Misperception Theory
 Moral Hazard, Adverse Selection
 Imperfect information model

Real value, Nominal value

Real Sector, Nominal/Monetary Sector

Demand and Supply of labor.

Short-run

Average Demand & Supply curve

Aggregate Demand & Supply

Classical & Keynesian Labor Demand & Supply.

MP, MPK, MP_L, VMP, VMP_K, VMP_L

Aggregate income, full-employment

Full employment is not possible, why?

Actual & potential/Natural/Sustainable output level

Saving not always equal to investment

Great Depreciation

Market crash, Stock market crash

Bank crises, Market failure, Bank failure

Supply shocks, Demand Shocks.

Planned & Actual Expenditure

Keynesian crisis.

Price wage cut view

- Rational & Adaptive expectation

- Natural rate hypothesis, hysteresis

Ricardian view of govt debt

Keynesian conjectures

Life-Cycle Consumption Function

optimization/consumer optimum

Borrowing constraint/Liquidity constraint

Stabilizing policy

Impossible Trinity. → Triffin's q,

Natural rate of unemployment

Marginal efficiency of Capital

Continuous, Discontinuous, dependent, Independent Variable

Expansionary & Contractionary Fiscal & Monetary Policy

- IS curve, LM curve, IS-LM model

Shift in IS & LM curve

Steeper & Flatter IS, LM curve

Certainty, uncertainty, risk, insurable & uninsurable risk

Cost benefit analysis, Specialization, Incentive

Producers, consumers, Economic institutions.

- Mundell Fleming model.

Monetary over production/Hawtrey Business cycle theory

AIH, R2H, PIH, LCIH

Stock & flow variable, Point in time, Period of time

CH#02:

National income

National Income, Real & Nominal National Income
 National Accounting, National Income Identity
 personal Income, Disposable Income, Personal Tax.

Circular flow of National Income in 2, 3, 4 Sector Economy

1st & 2nd Principle of circular flow of National Income.

Keynesian Approach / Methods of Measuring National Income

Methods of National Income (Product / Value added method / NI at MP)

- 1) Income Method / N.I at FC
- 2) Expenditure Method

GDP, CGDP at MP, GDP at FC, Real & Nominal GDP

GNP, GNP at MP, GNP at FC, Real & Nominal GNP

Real GDP formula, Real GDP growth rate formula

Net factor income from abroad

NNP, Net Domestic Product (NDP)

Money / Nominal income, Real income

purchasing power, Per Capita income

Developed, Developing, less developed countries.

Price index, GNP price index / GNP deflator

GDP price index / GDP deflator.

Net value of Production

Marketed & Non-marketed output, Imputed value

Value added, Productive & non-productive activity

Inventory, Under-ground / Shadow / Black Economy.

Difficulties in Measuring National Income

Causes of low Per Capita Income

Keynesian & Classical Theory of Income & Employment
 effective Demand

Consumption, Consumption Function, Keynes Psychological law

Propensity, MPC, APC, MPS, APS, propensity to save

Saving, Saving Function, Propensity to consume

leakage, injection, Aggregate Expenditure & Income

Expenditure Investment, Inventory Expenditure

Intended Saving & investment

Break-even Point

Determination of Equilibrium level of National Income

Paradox of Thrift, Accounting period

Ch # 03: Investment Theory

Investment, Capital, Business

Stock, Inventory, Venture
Gross & Net / pure investment

Autonomous & induced investment

Business fixed investment, Residential investment
Inventory investment, Real investment

Financial investment, Replacement investment
Gross investment / Gross Capital formation

Net investment / Net capital formation
Dis-investment, Production Smoothing

Demand for Capital
classical & Keynes theory of investment

Asset, Liability, Stock, Share

Capital stock, Capital formation,

Capital resources, Human resources

Natural resources, Yield

Rate of return, expected rate of return
Present value of yield, Discount rate

Present value (PV), Present discounted value (PDV)

Net present value (NPV)

Internal rate of return (IRR)

Which measure is best for investing (PDV, PV or IRR)

Formulas of PV, PDV, IRR *

Multiplier, Multiplier effect, Accelerator.

Spending Multiplier, Investment Multiplier

Govt / Fiscal / govt expenditure multiplier

Tax Multiplier, Super Multiplier

Accelerator Theory of investment - by J.M. Clark

James Tobin Theory of Investment

Ch # 04

Money

Money, Currency

Monetary base / M₀

Narrow Money / Base Money / M₁

Monetary Asset / M₂

Broad Money / M₃

Checkable & Non-checkable deposit

Barter system & its difficulties

P.T.O

Ch # 05

Bank Central
Bill of Exchange
Security
Treasury

Q5

Q5

Functions of Money (Medium of Exchange)

Measure of value

Unit of account

Store of value

Standard of deferred payment

Means of transferring value

Medium of Govt payment

Dynamic function i.e. Economic

growth, interest rate, inflation).

Kinds of Money (Metallic Money i.e Token, Full-baider)

Fiat Money, Intrinsic value, legal Tender

Journey / Evolution of Money (Barter System)

Commodity money

Metallic Money

Paper money / currency

Credit Money

Electronic Money

Convertible & Inconvertible Money

Monetize & Demonetize, Demand for Money

Components / Forms of Money Supply (Currency)

Deposit / Credit Money

Near Money

Sources of Money Supply (Central bank)

Commercial bank

Government

Keynes view of Demand for Money (Transactional demand for money)

Speculative demand for money

Precautionary demand for money

Helicopter Money, Seigniorage, Money illusion.

Nominal & Real money Supply

Cash balance, Liquidity.

Interest rate, Nominal & Real interest rate

Real interest rate types (Ex-Ante - Real interest rate)

(Ex-post - Real interest rate).

Money Stock vs Money Supply.

Ch # 05

Bank

Bank, Central bank, Commercial bank

Central bank functions

Bill of Exchange (Hundi), Bond, SUKU, STOCK, Share

Security, Govt Security, Govt bond

Treasury Bill & Treasury bond

Bank draft, Credit, debit, Credit card, debit card ATM
 Credit creation, Interest & interest rate
 interest free banking, Interest free banking in Pakistan
 importance of bank

Time deposit

Frictional reserve banking system

Statutory liquidity ratio (SLR)

Patent, Check, clearing house, Discount houses.
 Cash / Bank reserve, reserve requirement

Evolution of banking system (The Merchant
 The Gold-Smith
 The money lenders).

Fiscal policy, weapons of fiscal policy

Monetary policy, weapons of monetary policy

Fiscal policy in Depression & inflation

Monetary policy in Depression & inflation.

Mortgages, collateral

objectives of fiscal & monetary policy

Banking system, Discount / Bank rate

lender of last resort

Methods of Note-issuing (Fixed Fiduciary system
 proportional reserve system
 minimum reserve system)

Spot rate, Forward rate, Hedging, Diversification

Capital reserve, Virtual / online banking

Crowd-out, Crowd-out investment.

Stock-out avoidance, Bank capital

Equity vs Stock, Stock vs Share

Financial Market, Financial Assets

Financial instruments, financial system

Financial intermediary

Property, property right

Coupon bond, premium bond, discount bond

Instruments of Monetary Policy (open market operation
 Reserve requirements
 Discount rate)

functions of Bank / Commercial bank (Acceptance of deposits
Advancing loans).
Reserve requirements, currency deposit ratio
Reserve deposit ratio, Balance sheet, leverage

Exchange rates Systems (Fixed exchange rate system
Floating / flexible
Managed exchange rate system).

Role of Commercial bank

Role of banking System in Economic development
National bank of pakistan.

Classification of bank (According to Functions
on basis of ownership
on basis of domicile
Scheduled bank
Non-Scheduled bank)

Second Schedule of SBP act 1956

SBP role & functions

Theories of exchange rates (1) Mint-par-Parity Theory / determination of exchange rate under gold standard.
2) Purchasing power parity
3) BOP Theory of exchange rate / General equilibrium theory
of exchange rates

Quantity Theory of money (QTM), Equation of QTM

Fisher equation, Fisher effect, Velocity of Money

General price level / price level

Velocity of money is not always constant (classical view
Keynesian view)

International bond market, Eurobond, Euro-currency.

Exchange over The counter market

Primary & Secondary market

Total risk, Systematic & non-systematic risk
Capital Asset pricing model (CAPM)

Arbitrage

CH #06 : inflation

Inflation, Deflation, Reflation, disinflation
Stagflation, Shrinkflation, Hyper inflation

Causes of inflation, Effects/consequences of inflation
Remedies/Solution of inflation

Policies to control inflation
 Trade-off vs opportunity cost
 Consumer price index, producer price index
 GDP deflator vs consumer price index

Lasposers index, Paashe index

Demand pull inflation, Demand push-inflation

Cost-push inflation, Structural inflation

Inflationary gap & its remedies

Deflationary gap & its remedies

Augmented phillip curve

Shadow price, Relative price, Market price

Nominal price, Real price, Normal price

Stock exchange market

KSE-100, SECP, ISE, B bullish, ISE, bearish

Three Tier & Four Tier education system

Takaful vs insurance, Premium payment

Inflation benefits borrower, Deflation benefits lender

CH #07 Public Finance

Public finance, Govt/public Revenue & Expenditure
Tax-Revenue & Non-Tax revenue

Developmental & Non-Developmental Expenditure
Public / National / Govt debt

Impact & Incidence of Tax

Taxable income, Tax, Net Tax

Tax evasion, Tax exemption

Economical Tax, Progressive Tax

Regressive Tax, Proportional Tax

Lump-sum Tax, Direct Tax, Indirect Tax

Canon of Taxation (Equity/Fairness)

Certainty
Simplicity
Convenience
Transparency
Economical
Flexible

Diffusion Theory of Taxation

Different form of state borrowing
Hicks classification of National debt

(internal / Domestic
External / Foreign
(central bank borrowing))

(Deadweight debt
Passive debt
Active debt)

J.L. Hanson classification of National debt

(Deadweight debt
Funded debt
Unfunded debt
(reproductive debt))

Short-term and long-term debt

Public finance vs private finance

lease, Cooperative finance, Facility & Composition

Real-estate, Commercial, Retail

Tariff, Quota, Duty, levy, excise, Embargo

Term of Trade, Commodity term of Trade

Public good, private good, Externality

Ricardian equivalence

Tax, Subsidy, Steady state, Golden rule level of capital

Sustainable Economic growth / Development.

CH # 08

International Trade

Trade, Domestic Trade, International Trade
Advantages & Disadvantages of International Trade

Free Trade, Free Rider problems

protection, Dumping, International Standard organization (ISO)

Mobility of factors

Is free trade good for Economic growth?

Absolute Advantages Theory, Comparative Advantage / cost theory

Heckscher-Ohlin (H-O) Theory / Factor proportionate theory

Difference in relative cost is base for International Trade

Factors Abundance / Abundance factors

MNC's, TNC's, Centralization, Decentralization

Globalization, Global Economy, Urbanization

Exchange rate, Real & Nominal exchange rates

Capital flow (C.F), Capital inflow & outflow, Net Capital flow

Trade balance, Trade Surplus, Trade deficit, Net export

Laffer curve

World financial market, world interest rate.

CH #9 : Balance of Payment

BOP, Balance Bop, Surplus Bop, Bop deficit, Imbalance Bop
 TOT, Balance TOT, Imbalance TOT, Surplus & deficit TOT, Net Exports
 Bop account (current, Capital, Financial / monetary Account)
 Depreciation, Appreciation, Devaluation, Revaluation
 Structural disequilibrium in BOP
 International Bop & BOT
 Visible & invisible item/commodity in Bop
 Autonomous items in Bop

Accommodating & Autonomous Transaction in Bop
 Below the line items & Above the line items
 Autonomous Transaction

CH #10 : Economic Development

Growth, Development, Economic Growth & Development
 Sustainable Economic growth & Development.
 Instantaneous growth rate, Compound growth rate.
 Four wheels of Development (Human resources, Capital resources, Natural resources, Technology).

Human resources vs Human Capital

Communist Revolution in Russia in 1917

GAAT vs WTO & its members.

Developing, Developed, Less Developed / under Developed countries

Solow Growth Model, Harrod-Domar growth Model

Measures of Economic development

Benefits & cost of Economic growth

Human Development, HDI

Common characteristics of Developing countries

Brain Drain theory

Obstacles to growth of developing Countries

Dual Economy, Market Imperfection

Demonstration effect minimum wage law

Liberlization, liberal / liberalized Economy

Efficiency Wage Theory

1st, 2nd, 3rd, 4th Efficiency Wage Theory

Turnover

P-T-O

Ex 5

Q. 1

Insider, Outsider, Insider & outsider Model,
process of creating / creative destruction

Technological progress, Okun's law

Vendor industry, Vendor performance
Mineral Development Agencies (R&D, GEMEP, PMDC, GSP)

Mineral resources, CNG, Crude oil, Gasoline, Diesel
Petroleum, Cleaner-burning fuel, LPG

Five year plan, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th Five year plans
Paris Club, IMF, World bank, ADB, IDB, IFC

Micro-Finance, Micro-Finance bank, ICP, NIT, KESC

FDI, Portfolio

Economic vs Economics

Economy, Economics System

Grants, Aid, Remittances.

CH # 11 : Unemployment

Labour, labourer, labour force vs Work force
Dependence ratio, Participation ratio.

Disguised Unemployment

employment, unemployment, employed, unemployed
Under-employment, unemployment rate,

Mobility, Mobility of capital, Mobility of labour

Mobility of labour (occupational Mobility

i) Vertical mobility

ii) Horizontal mobility

iii) Geographical mobility

iv) Social mobility)

population, problems of population growth

problems of unemployment

labor force problems

Social exclusion, Sectorial Shift.

Production efficiency, Factors Accumulation.

Working man, Working women

Efficiency of labour, Productivity of labour

Duration of unemployment (Short & long-run)

Types of unemployment (Structural

cyclical

Seasonal

Frictional).

Vendor vs Supplier

CH # 12 : Agriculture

- Agriculture Economics
Sector, Primary Sector, Secondary Sector, Territorial Sector
Agri sector, Industrial sector, Service sector, Health Education factor
Agri price policy, Cobweb theorem / phenomenon.
Trickle-Down phenomenon, Cobra effect.
land reforms, land Tenure system (Royatwari, Mahalwari, Zamindari)
Land revenue system (Royatwari system, Private land-lordism, State land-lordism)
- Cottage, Small Scale industries
Agro based industries.
Farm Mechanization, Cooperative farming
Farm, Farmer, livestock, common types of livestock
Fisheries, Mining, Raw material
Types of Agri credit (short, medium, long-term)
Agriculture Marketing, Green Revolution
Supportive price / procurement
Pakistan irrigation system (Ground water / Glacier melt under ground water Rainfall water).
- Needs for land reforms, 1st, 2nd, 3rd land reforms
Importance of Agri Sector
Problems of Agri Sector in Pakistan
Agriculture and environment (+ve & -ve effect).
Tenancy.

CH # 13 Business cycle

- Business cycle, Trade cycle
Phases of Business Cycle (1) Depression / Trough
(2) Rival / Expansion
(3) Boom / Peak
(4) Recession / contraction

P-T-O

Theories of Trade cycle

{ Sun-Spot Theory
Psychological Theory
Hawtrey Theory
Monetarists Theory
Keynesian Theory
Real Business cycle Theory
Schumpeter's Theory}

Economy, Economic System,

{ Capitalism / Market Economy / price Economy
Socialism / Command Economy
Mixed Economy
Islamic Economic System}

Socialism vs Communism & Marxism.

Introduction. Macro

Classical Macro Economics:

Till 1930 (Great depression) whatsoever was discussed regarding the Economy was presented by classical.

Classical assumed ① flexibility of wage

② flexibility of interest rate ③ flexibility of price

④ full employment ⑤ Laissez-Fair - Economy

⑥ consistency of velocity of money ⑦ Perfect competition.

J.M. Keynes Macro Economics.

During great depression (1930) classical prepositions of full employment, perfect competition, laissez-fair economy collapsed. Keynes wrote a book in 1936.

Keynes reject classical theory of income and employment and presents his own theory of income and employment. According to Keynes "level of income and employment is determined by AD and AS."

Keynes also suggests the government intervention in the Economy

Modern Macro-Economics

Modern Macro-Economics linked AD and AS with price level.

Modern AS curve shows - the relationship between price level and output have been derived.

Modern AD curve shows - the relationship between price level and Aggregate expenditure have been derived.

Diagram

Schools of Thought: School of Thought is a group of Economic Thinkers who shared a common perspective on the way Economies work.

① Classical School of Thought / Economics

Classical School of Thought originated in late 18th century especially in Britain and Adam Smith was Founder of This School of Thought.

Classical Economists were liberal minded in term of Economic policies and promoting market freedom.

② Neo-classical school of Thought / Economics

Neo-classical School of Thought originated after 1870, and was clearly Scientific with Assumptions and hypothesis and attempt to derive general rules and principles about behaviour of firms and consumer.

This School of Thought focus on Marginal values such as: MU, MC, MR, .. etc.

This School of Thought associated with Alfred Marshall, William Jevons, Carl Menger, Leon Walras etc.

④

③ New classical School of Thought / Economics

This school of thought started from 1970's.

This school of thought attempt to explain macro-Economic issues and problems by using micro-Economic concepts like rational behaviour, rational expectations etc.

This school of thought focuses on demand and supply as deriving forces behind the production, consumption and pricing.

Robert Lucas was considered founder of this school of thought.

④ Keynesian School of Thought / Economics

J.M Keynes a British Economist was founder of this school of thought.

This school of thought justify government intervention through public policies that aim to achieve full employment and price stability.

⑤ New Keynesian School of Thought / Economics

in 1980 new Keynesian school of thought emerged.

This school of thought does not believe that

market will always be in equilibrium. They explain

why market fail. They admit that people follows

their own interests, so markets do not always clear.

George Mankiw is considered founder of this school of thought.

Keynesian - Demand Sider.
New Keynesian - Supply sider.

⑥ Monetarist School of Thought / Economics

Milton Friedman was chief of this school of thought

This school of thought was opposed of government

intervention.

This school of thought attempt to explain that

Supply of money is an important determinante

of price level (inflation) and Economic activities.

⑥

⑦ Marxist School of Thought / Economics

This school of thought emphasize on Socialist Economics system as the solution of Capitalist who exploit workers and control means of production.

Carl Marx was founder of This School of Thought

⑧ Austrian School of Thought / Economics

This School of Thought emphasized on the importance of individual freedom, private property rights and the market process in the Economy.

Carl Menger was founder of This School of Thought.

Supply Side Economics, In Supply side Economics, the goal is to provide more products and services options to consumers to buy / purchased by encouraging businesses to spend more on production and research.

Supply side consider, Supply drives Economic Activity
Arthur Laffer, Milton Friedman, Robert Mundell etc

Demand Side Economics, In Demand Side

Economics, the goal is to helping the consumers by maximizing their income through reducing Taxes to spend more on goods and services.

Demand side consider, Demand drives Economic Activities
J.M Keynes, Paul-Samulson, James Tobin etc

Open Economy, is one that interact freely

with other economies around the world.

Open Economy also called Four-Sector-Economy.

Closed Economy, is one that does not interact

with other economies around the world, They are

not export, nor import and have not capital flow
That Economy also called Three-Sector-Economy

Two Sector Economy

, is one, which have two sector

That is household sector and business sector and the

business sector do not carry out any export or import

activities and also there are no govt intervention. $Y = C + I$

⑥

Scope of Macro Economics:

The word scope refers to the range or area / region covered by anything or any subject or any topic.

Thus Considering this point, Scope of macro Economics means The topics or issues that are covered by macro Economics, Such as what is N.I., its types, its measures.

Theory of N.I.

Inflation, unemployment, Growth, Development, Consumption, Savings etc.

Scope of micro-Economics means The topics or issues that are covered by micro-Economics Such as,

Theory of consumer behaviour,

Theory of firm behaviour,

Theory of factor prices determination,

Utility, Scarcity, etc.

Integration of Micro & Macro Economics:

Basically Micro and Macro are two branches of Economics and They have Separate identities, but none of them alone can do the needful. Micro eventually generate the Macro.

Prof A. C. L. Gardner says " it is difficult to draw a line b/w Micro and Macro Economics theory ; the real general theory of an Economy will consist of both Micro & Macro Economics Theory "

Ex:- Economy on progress but Some Sectors facing crises or Economy is in recession but Some Sectors progressing, in Such Situations we Can not entirely depends upon neither on Micro nor on Macro Economics.

Separate Identity of Micro & Macro Economics:-

Basically Micro and Macro Economics are

- two branches of Economics. There are so many Economists who thinks that the Separate identity of both branches must maintain.

Following are the Arguments.

- ① At Micro level, if a firm ↓ prices, its sale ↑ but under Macro level it cause deflation if all firms ↓ prices
- ② in Micro level, if firm ↓ wages then their profit will ↑ but under Macro level, if all firms ↓ wages then Purchasing power of labor will ↓, so some goods will unsold.
- ③ At Micro level, every individual thinks to ↑ Saving in future but under Macro level, if all individuals ↑ Saving Then Consumption will ↓ and so many issues will emerge, and so on

Stock and flow variable.

Stock variable: refers to those variable who measures the quantity of something at a specific point in Time.

Eg → company assets, liability, inventory.

Flow variable refer to Those variable who measure the quantity of something that occurs over a period of time

Eg → income, expenditure,

Point in Time refers to a specific movement or instance in time, e.g. The exact time you wake up in the mornings

Period of Time refers to a duration of time which can be short or long and refers to a specific time frame, e.g. a week, a month or a year.

11

Economic Model, is a set of mathematical equations, functional relationships and graphs which describes the working of some economic unit or the working of an Economy.

Micro Economic Model: In Micro Economic model we discuss the behaviour of an individual unit of the Economy like Consumer, firm, factor of production etc. e.g. consumer demand model, model of consumer behaviour.

Macro Economic Model: Macro Economic model consists of aggregates like Aggregate Consumption, Aggregate N.I., Aggregate investment, general price level etc. e.g.: Solow model, Harrod-Domar model, Input-output model.

Partial equilibrium model, it is a model in which two or a few variables are selected while the rest of variables are kept fixed, then a functional relationship is established b/w selected variables of the model. $Q_f = f(P_i, P_j)$ e.g. effect of devaluation on export and import

General Equilibrium model: It is a model in which is composed of all the variables of the Economy

Such model establish the functional relationship b/w all the variables of the Economy. $G_f = f(P_i, P_j, Y_f)$ e.g. effect of devaluation on over all economic activity of the Economy.

Construction of An Economic Model

- ① Each Economic Model has four elements:
- ② Behaviour or Statement regarding certain variable
- ③ Assumptions that influence these variables
- ④ The hypothesis whereby the variables are connected
- ⑤ The prediction.

Problems of Macro Economics

unemployment, inflation, growth

Okun law This law states that "There exists a negative relationship b/w unemployment and GNP"

Phillip curve, is a curve which shows Trade-off b/w inflation and unemployment, means that if any economy wants to reduce the level of unemployment — then it will have to accept the rise in price level and vice versa.

(4)

Limitations of Macro-Economics:-

Macro-Economics ignore the welfare of individual but look to aggregate.

Macro-Economic models are mostly designed for developed countries, and developing countries face different reality.

Classical view of wage-price flexibility:-

According to classical, unemployment rises due to wages are rigid downward. If wages are decreased then unemployment will wash out.

Keynesian view of wage-price flexibility:-

Keynesian reject classical view of auto-adjustment of unemployment or wage-price flexibility. Keynes says that wage cut in presence of Trade union, minimum wage rate and collective bargaining is too much difficult. Keynes says that labor supply depends on current wage rate instead of real wage rate.

Real wage rate, refers to the wage rate that is adjusted for inflation or the amount of goods and services that can be bought/purchased with the money earned from work.

Nominal wage rate, it is also called money wage, it refers to the amount of money which an individual earn in term of their current currency without adjustment for inflation.

Wage rate, refers to the amount of money that a worker is paid for their work.

(b)

Piggy Pigou effect." When prices decreases then consumption function will shift upward so the mechanisms where the consumption function shifts upward is called Pigou effect.

Keynesian effect, it is also known as rate of interest effect. If wages and prices falls then transaction demand for money also falls, if money supply remain same, the speculative demand for money will rise leading to decrease rate of interest, its called Keynesian effect.

Classical AD and AS curve

Classical AD curve show graphical representation of the relationship b/w overall price level of the good and services in an Economy and the quantity of these goods and services that firm, households, government are willing and able to purchase.

Classical AS show graphical representation of "that firms are willing and able to produce and sell.

Goods Market, is a market where goods and services are bought and sold. In good market buyer and seller interact to determine price & quantity of goods & service.

Labor Market, is a market where workers sell their labor services to firm in exchange for wage & salary.

Money Market, is a market where short-term financial instruments which maturity date is less than one year are bought and sold.

Capital Market, is a market where long-term financial instruments which maturity date is more than one year is bought and sold.

Credit Market, is a financial market where people can lend and borrow money through financial institutions like banks, or buying and selling bonds.

Equilibrium level of N.I and employment, refers to a state in which the Economy is producing the maximum level of output (GDP) possible with available resources and existing Technology and There is no excess Demand or Supply in any market of the Economy.

Misperception Theory: is a Theory in Economics used to explain how people incorrect belief about the economy can lead to inefficient Market outcomes.

Worker Misperception Theory, is an Economics theory which suggests that worker may not immediately recognise change in their real wage and may base their decisions on nominal wage ; which cause Temporary increase in output and employment but when worker realize their mistake , they reduce labor Supply so output & employment reduce

Moral Hazard, describe the situation

where one party takes greater risks because

they know that they will not bear the full cost of those risks. E.g., Insured drivers.

Adverse Selection, describe a situation where

one party has more information than the other

party in a transaction, this can lead to the

party with more information taking advantages

of the situation and using it to their benefit.

Imperfect Information Model, is an Economic theory that recognises that market participants may not have complete information about market conditions or actions of other participants.

Real Value, Inflation adjusted value of

Something is called Real Value.

Real values take into account the changes

in overall price level of the Economy

Nominal Value, Value of Something in

Current currency without adjustment

for inflation is called Nominal value.

Sticky Price Model, is an Economic Theory which suggests that prices do not adjust immediately to change in Supply and demand. Instead prices are fixed or stick, which cause temporary imbalances in the market. This can create situation where either excess supply or Demand occur.

Sticky wage model, is an Economic theory which suggests that in short-run wages do not adjust quickly to change in the Supply of and demand for labor which lead to temporary imbalances in labor Market.

Classical Theory of AS curve, also known as long-run Aggregate Supply curve. Classical AS curve is vertical, mean perfectly inelastic, indicating that change in price level do not effect the long-run AS. This theory assume that wage and prices are flexible and economy will always return to full-employment in long-run.

Keynesian Theory of AS curve, also known as Short-run-Aggregate-Supply curve. Keynesian AS curve is upward sloping, suggesting that in short-run AS of the economy can increase as prices increased due to higher demand.

Real Sector, refers to that part of the Economy which includes all the business and industries which produce goods and services which people needs.

Nominal/Monetary Sector, refers to that part of the economy which concerned with creation and distribution of money and management of money, it includes central banks and other financial institutions.

27

Demand for labor, shows the amount of labor that employers seek to hire during given time period at particular wage rate.

Wage rate and Demand for labor are -vely related

Supply of labor, Shows how much work an individual will be willing to offer at different wage rate . Wage rate and Supply of labor are +vely relate

Short-run Average demand curve, refer to a graph which show relationship b/w the quantity demanded and average price of goods and services over a short period of time , holding all other things being constant .

Short-run Average Supply curve, refer to a graph which shows relationship b/w the quantity supplied and average prices of goods and services over a short period of time , holding all other things being constant .

Stock Price reflects expectations about future economic conditions

Price Rigidity, refers to the situation where prices of goods and services do not changes quickly or frequently in response to change in Supply and demand.

Price rigidity, refers to the situation where prices of goods and services do not changes quickly or frequently in response to changes in Supply and demand.

Wage Rigidity, refers to the situation where wages paid to workers do not changes quickly or frequently in response to changes in Supply and demand for labor.

Wage flexibility, refers to the ability of wage to change quickly and frequently in response to change in demand and Supply of labor.

Criticism on wages and price flexibility:-
According to Pigou "if unemployment increase then it is because of high real wages".

Pigou says that "labor should accept the wage cut, this will depress prices also, but decrease in prices will more than decrease in wages."

when real wage \downarrow , then producer profit will \uparrow , this will leads to \uparrow demand for labor, hence demand for labor will becomes equal to Supply of labor, so full employment will attained.

Aggregate Demand, AD refers to the Total demand for Goods and Services in an Economy at a given Time, Taking into account factors such as Consumer Spending, Investment, Government Spending and net export.

Aggregate Supply, AS refers to the Total amount of goods and services in an Economy that businesses are willing and able to produce at a given time, Taking into account factors such as Technology, inputs cost, and availability of labor and capital.

Classical labor Demand And Supply Curve:

According to classical, labor demand curve shows relationship b/w wage rate and quantity of labor that employers want to hire , while labor supply curve shows relationship b/w wage rate and the quantity of labor that workers are willing to supply.

Keynesian labor Supply and demand curve:

According to Keynesians, labor demand shows that the quantity of labor demanded is not only influenced by wage rate but also influenced by other factors such as Level of Economic activity and consumer demand.

And labor Supply curve shows that the quantity of labor Supplied is not only influenced by wage rate but also influenced by other factors such as AD level in the Economy etc.

Marginal product, MP refers to the additional

output produced by using one more unit of particular input

Marginal product of capital, MP_K refers to the

additional output produced by using one more unit of

factor Capital while holding all other factors constant

Value of Marginal Product of Capital, VM_{P_K} refers to

the additional revenue generated by using one more

unit of factor Capital, VM_{P_K} is calculated as MP_K

multiplied by price of output: $VM_{P_K} = MP_K \times P$

MPL, Marginal product of labor refers to the additional

output produced by using one more unit of factor labor.

VMPL, value of Marginal Product of labor refers to

the additional revenue generated by using one

more unit of factor labor, VM_{P_L} is calculated as

MP_L multiplied by price of output. $VM_{P_L} = MPL \times P$

Value of Marginal Product, VMP refers to the

additional revenue generated by using one more

unit of particular factor input.

Aggregate income, refers to the Total income earned by all the individuals, businesses and Government entities in an Economy over a given period of time. It represent the sum of all wages, salaries, profits and other sources of income generated in an Economy.

Full-employment, refers to the state of an Economy, where all individuals who are able and willing to work are employed.

It is typically defined as an unemployment rate that are close to zero.

Full employment is not possible, why?

Full employment is not possible because of various factors such as changes in Technology, Economic shocks, and labor market frictions.

In addition there may be some level of frictional or structural unemployment that persists even when overall unemployment rate is low.

Neutrality of Money: refers to the idea that changes in money supply only effect nominal variables such as prices and wages, leaving real economic variables unchanged such as output, employment etc. in long-run.

Classical view about Neutrality of Money:-

- ① There is no role of money in income and employment model.
- ② Classical said that in long-run money effects only price level.
- ③ According to classical Money is neutral.
- ④ According to classical money is an evil.
- ⑤ According to classical Money Supply have no effect on interest rate, investment, income and employment.
- ⑥ According to Classical money used as a medium of exchange and its impact is neutral in an Economy.

Keynesian view about neutrality of Money

Keynesian does not accept the neutrality of money, they think that money is not neutral.

According to Keynesians, change in money stock effect primarily the interest rate, as money supply rises then interest rate falls, and there is inverse relationship b/w money supply and interest rate.

Actual output level refers to the level of output which is produced when all resources are utilized.

Potential / Natural / Subs Sustainable output refers to the level of output which can be achieved by utilizing all resources.

Saving not always equal to investment.

If anytime $S > I$, then consumption decreases, AD decreases, over-production occur, loss and unemployment also occur.

If at anytime, $I > S$, Then AD rises, excess demand occur, prices rises, profit rises, over-full-employment occurs.

Pigou intersection of classical theory

According to pigou " Pressure of flexible wage if exist - then there is no possibility of unemployment".

Great Depression, was a severe worldwide economic downturn that began in 1929 and lasted for about a decade. Great depression was caused by a complex set of factors such as stock market crash, bank crises, decline in International Trade, low demand, high unemployment, over supply, inflation, mis-steps by federal reserve, decline in output etc.

Market crash, refers to a sudden and significant decline in the value of financial assets such as stocks or bond.

This happen when investor very worried about the future and sell their investment in large number, causing prices to fall rapidly.

Stock Market crash, refers to a sudden and significant drop in overall value of stock traded in the stock market.

Bank crises, refers to a situation where one or more banks are in financial trouble, often because of bad loans or other risky investment which leads to loss of confidence on bank, causing depositors to withdraw their money.

Market failure, refers to the situation when the allocation of goods and services by the free market fail to be efficient or fairly; often resulting negative externality such as pollution, inequality, monopoly...

Bank Failure, refers to the inability of bank to meet its financial obligations to its debtors or creditors often resulting closer or Takeover of the bank by regulatory authority.

Supply Shock, refers to a sudden and significant changes in the availability of goods and services or cost of goods and services. Such as Natural disasters, flood, change in production Techniques, etc.

Demand Shock, refers to a sudden and significant changes in the level of demand for goods and services. This can be caused by factors such as consumer preferences, Economic recession, government policies that effect consumer spending.

Planned Expenditure, refers to the amount of spendings that firm, households and govt intended to make.

Actual Expenditure, refers to the amount of spendings that household, firm and the govt actually made in Econ.

Keynesian cross, refers to a graph that shows the equilibrium level of output where planned expenditure equal actual expenditure (The 45° line).

Pigou Wage cut view: Suggests that during economic downturn (Recession), lowering wage can help in increasing employment by reducing cost of production.

By reducing wages, cost of production decrease, which can stimulate demand for goods and services and increase employment.

Rational Expectation, or Real expectation is an Economic theory that assumes that people use all available information to make accurate prediction.

Adaptive Expectation, is an Economic theory that suggests that people base their prediction of future on their past experience.

Natural rate hypothesis, states that the fluctuations in AD affects output and employment in short-run, In long-run economy return to the level of output and employment described by classical model.

Hysteresis, is the term used to describe the long-lasting influence of history on the natural rate.

Classical Model, is an Economic Theory that suggests that the market is self-regulating and government intervention is not necessary to achieve full-employment and price stability.

Classical model emphasise on importance of supply side factors such as production, investment etc

New Classical Model is an extension of classical model, it emphasise on importance of rational expectation and assumes that markets always clear quickly and oppose the govt intervention.

Keynesian Model, Suggests that government intervention particularly through fiscal policy is necessary to achieve full-employment and price stability

• It emphasises on importance of demand side factors such as Consumer Spending, government Spendings etc.

Ricardian view of government debt, states that when govt borrows money, people realize that they will pay it back through taxes in the future, so they save more money now to prepare for these higher taxes. This means that the burden of govt debt falls on both current and future generation.

Keynesian Conjectures, refers to the expectation that individual and firm made about the future behaviour of the Economy.

According to Keynes, The expectations and decisions of individuals and firms play an important role in determining overall behaviour of an Economy.

Eg: if individuals and firms expect that Economy may be weak in the future, They may reduce their Spendings, which can lead to a self-fulfilling prophecy of Economic weakness.

Life-cycle Consumption function, states that Consumption depends on wealth as well as income.

$$\frac{C}{Y} = \alpha \left(\frac{W}{Y} \right) + \beta$$

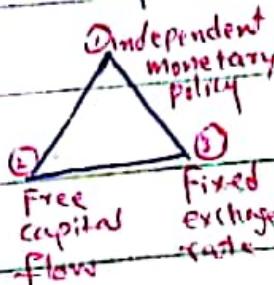
optimization / consumer optimum, refers to the process of finding the best solution of a problem, given certain constraints or limitations.

It involves identifying what you want to maximize or minimize and then figuring out the best values for the things you control with those constraints.

Borrowing constraints / Liquidity constraints, it states that consumption in period one must be less or equal to income in period one as $c_1 \leq Y_1$, this additional constraint on consumer is called Borrowing constraint or Liquidity constraint.

Stabilization policy, refers to policy action aimed at reducing the severity of short-run economic fluctuations such as Demand shocks, Supply shocks etc.

The impossible Trinity, it refers to the idea that it is impossible for a nation to have free capital flow, a fixed exchange rate and independent monetary policy. A nation must choose one of them, giving up the others.



Tobin's q , refers to a financial ratio, used to measure/determine whether a company is over-valued or under-valued in the Stock Market.

$$\text{Tobin } q\text{'s} = \frac{\text{Market value of installed capital}}{\text{Replacement cost of installed capital}}$$

if $q > 1$, refers that market value of installed capital is greater than replacement cost of installed capital, it indicates that company is overvalued.

if q , less than 1 ($q < 1$), indicates that company is undervalued.

Mundell Fleming Model: is an Economic Theory that explain that how changes in Interest rate and exchange rate effect the country output and income in an open Economy.

This model suggests that a country's choice of exchange rate regime, such as fixed or floating exchange rate can impact its ability to control its domestic monetary policy.

In Small open Economy, fixed exchange rate regime can only be maintained by sacrificing controls of domestic monetary policy, conversely a floating exchange rate regime allows for greater controls over monetary policy.

phillip curve: is a concept that show the inverse relationship between inflation and unemployment.

Short-run phillip curve, shows the relationship b/w inflation and unemployment in short-run.

Long-run phillip curve, show the relationship b/w inflation and unemployment that There is no Trade-off b/w inflation and unemployment in long-run, and long-run phillip curve is vertical at natural rate of unemployment.

Natural rate of unemployment, refers to the rate of unemployment at which inflation is stable, and the labor market is in equilibrium and operating on full-employment.

Marginal efficiency of capital, MEC refers to the expected annual return rate on an additional unit of a capital good.

Continuous Variable refers to a variable which can assume each and every value b/w its range i.e. upper and lower limit.

Discontinuous Variable refers to a variable which possible values are not observed on continuous scale, there is jump in value.

Dependent Variable, refers to a variable whose value is influenced/determined by other variables in the model or experiment.

Independent Variable, refers to a variable that is manipulated or controlled by the experimenter and its value are used to explain or predict changes in the dependent variables.

Dependent Variable,
also known as

Endogenous Variable,

Regressand,

Response,

Target,

Predicted,

Explained Variable,

Independent Variable

Also known as,

Exogenous Variable,

Regressor,

Covariate,

feature,

Predictor,

Explanatory Variable,

Classical

Unemployment occurs when there is excess supply of labor at higher wage. And Economy is always at full-employment level.

Says law of Market, Supply creates its own Demand. So whatever is produced is sold.

Classical says that $S=I$ at full-employment level, when $S < I$ or $S > I$ then interest rate changes and $S=I$.

Classical says that prices changes due to change in quantity of Money.

Classical says that Demand for money is only for Transaction purposes.

Classical focuses on long-run

Classical focuses on faith on market forces and oppose government intervention.

Keynes

Unemployment occurs when AD function intersect AS function at less than full-employment level!

Keynes rejects law of market that there are existance of inventory.

Keynes says that $S=I$ through income not through interest rate.

Keynes rejects Classical view about money and prices, as that in recession resources are idle and increase in spending of money, may lead increase in real output and employment without effecting price level.

Keynes says that people demand for money both for Transaction and Speculative purposes.

Keynes focuses on Short-run

Keynes put less faith on market forces and focuses on government intervention.

Classical Dichotomy refers to the idea that the real and nominal sectors of the economy can be analyzed separately. It suggests that changes in the nominal variables such as money supply, or price level etc do not affect the real variables such as output, employment or real income in long-run.

Classical Dichotomy is based on the notion that the real sector of the economy is determined by productive factors such as technology, labor, capital etc while the nominal sector is determined by money supply and price.

Money Supply, refers to the total amount of money circulating in an economy at a given time. It includes both physical currency and digital money in circulation.

Money Stock, generally refers to the total amount of money held by individuals, businesses, and banks at a particular point in time. It can include money that is not currently in circulation such as money held in saving account or other financial instruments.

Monetary over-production Theory OR

Ralph G Hawtrey Monetary Theory of Business cycle:-

This Theory States that fluctuations in money supply is primary/main cause of Business/Economic cycle.

According to Hawtrey, "An increase in money supply leads to increase in investment which in turn leads to Economic expansion" and vice versa"

Hawtrey believe that monetary policy should be used to stabilize the Economy., as ↑MS in recession and ↓MS during Economic expansion.

Absolute income hypothesis, States that an individual's spendings are primarily determined by their absolute income, rather than relative income or social comparisons. As individual income ↑, his/her spending also ↑.

Relative income hypothesis, States that an individual's consumption level or spending habit is determined by their income relative to others in their social circle and adjust their spending accordingly.

Permanent Income Theory, States that an individual's consumption level or spending habit.. is determined by their permanent income which is an estimate of their average income over a long period of time.

Life-cycle-income hypothesis, states that people plan their spending and saving based on their expected life-time income, rather than their current income.

This Theory Suggests That people will save more when they are young and earning less, and they will spend more when they will older and earning more.

$$C = f(Y - T, w)$$

Y — income
 T — taxes
 w — wealth.

Expansionary Fiscal policy, refers to the govt action to increase spending and/or decrease taxes.

- to increase AD and boost Economic Activity.
This policy used during recession to increase AD and avoid deflation.

Contractionary Fiscal policy, refers to the govt action to reduce govt spending and/or increase taxes, to decrease AD; to cooldown overheating economy and combat inflation.

This policy is used during Economic boom and inflation.

Expansionary Monetary policy, refers to the action taken by central bank (during recession) to increase money supply and lower rate of interest to stimulate economic growth. (This can include buying govt bonds and other securities, reducing reserve requirements etc.)

Contractionary monetary policy, refers to the action of central bank (during Economic boom) to reducing money supply and increasing rate of interest to combat inflation and cooldown overheating Economy.

IS curve, IS stands for Investment and Saving

IS curve, Shows equilibrium in goods market.

IS curve is a graph which shows relationship b/w interest rate and the level of goods and Services produced in an Economy.

LM curve, LM stands for Liquidity and Money.

LM curve Shows equilibrium in money market.

LM curve is a graph which shows relationship b/w interest rate and demand for money in an Economy.

IS-LM model; is a model which combine

IS and LM curves to show simultaneous

equilibrium in both goods and money markets.

It helps to analyse the impact of fiscal and monetary policy on output, interest rate, and inflation.

Shift in IS curve, A change in factors (Determinants of IS curve) which effects demand for goods and services such as Consumption, Investment, govt spending or net export will cause the IS curve to shift. This shift will result to change equilibrium level of output and interest rate.

Shift in LM curve, A change in any factors (Determinant of LM curve) which effects demand for money Such as price level, real income, interest rate will shift LM curve. This shift will result to changes in equilibrium level of output and interest rate.

Steeper IS curve, IS curve is Steeper when AD is less sensitive to interest rate. It is known as Keynesian case. Shows that a small change in interest rate.

causes relatively large change in output level (GDP)

Steeper LM curve, Shows that a smaller increase in money supply is needed to lower the interest rate and stimulate greater spending and economic growth.

Vertical IS curve, shows that AD is not sensitive to interest rate, it is known as Extreme Keynesian case. This is Theoretical concept, not often observed in reality. It indicates that level of output (GDP) is independent of rate of interest.

Vertical LM curve, or Flatter LM curve, shows that money demand does not depend on interest rate. This shows that the interest rate is independent of money supply, and also have no effect of interest rate on the Economic growth.

Certainty refers to the situation where outcomes of an event is known with 100% accuracy.

Uncertainty refers to the situation where the outcomes of an event is unknown or cannot be predicted with confidence.

Risk and its Types, Risk refers to the probability of loss or harm occurring due to uncertain events.

Insurable risk refers to risk that can be transferred to an insurance company such as car accidents, home damage...

Uninsurable risk refers to risks that cannot be transferred to an insurance company, and difficult to predict. Such as war, political instability.

Cost benefit Analysis, is a method used to evaluate the ~~cost~~ potential benefits and costs of a decision or project.

Specialization, refer to the process of focusing one a specific task or area of expertise to increase efficiency and productivity.

Incentives refers to the rewards or punishments that motivate people to act in a certain way.

Producer, refer to individual or business that create / produce goods and services for consumers.

Consumer refer to the individual or business that purchase and use goods and services (for direct satisfaction)

Economic institutions, refers to the structures that shape economic behaviour, such as law, regulation, and cultural norms.

National Income

National income, Marshall "N.I. is the sum of all the goods and services produced by utilizing resources of the economy with the help of labor and capital in a fixed period (generally a year) and the net income from abroad".

Real National income, refers to the total quantity of goods and services produced in a fixed period in a country.

Nominal National income, refers to the monetary value of all goods and services produced in a fixed period in a country.

National accounting, refers to the working out measures of a country income and production, such as GNP, GDP, NNP, etc.

National income identity, says that GDP is given by consumption expenditure, investment expenditure, government expenditure and net export. $GDP = C + I + G + NX$

Personal income, refers to the income which receive by an individual both earned and unearned income in a year.
 $P.I = N.I \dots$

Disposable income, refers to the amount of income which is actually at the disposal of a household to spend as they like after payment of direct tax. ($Y_d = Y - T$).

Personal Tax, also referred as individual income tax. This type of tax is levied on individual wages, salaries and other type of income.

Circular flow of National income (in Two Sector Economy).

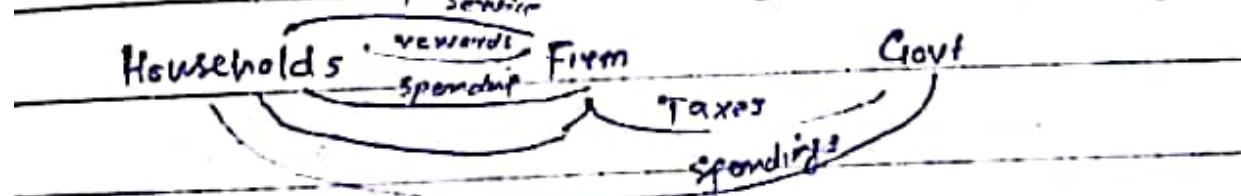
refers to The flow of income in an Economy.

In Two Sector Economy → household & Firm Sector.

Households provide factor services to firm, and in return get reward from firm, and then spend this income on purchasing goods and services from firm, so then income goes back to firm for further production, This phenomenon called Circular flow of National income.

Circular flow of National income (in Three Sector Economy)

Three Sector Economy consists of households, Firm, government, as consumption, production and government spending.



1st principle of circular flow of National income, In business Transaction the seller of goods receive exactly the same amount which the buyer spend on them.

2nd principle of circular flow of National income, The goods and services flows in one direction while monetary payment flows in other direction.

Keynesian Methods / Approaches to Measure N.I.:

Keynesian Use Three Methods to Measure N.I.

① income Expenditure Method, Under This method N.I. measured as The sum of all expenditure made in a country.

② N.I at factor. prices Method, Under This method N.I. is measured as The sum of The rewards of all factors of production engaged in production process.

③ Subtraction of cost of production from Aggregate output, Under This Method N.I is measured by Subtracting The cost of production from The total output produced in Economy.

Methods of Measuring National income

① product method / value added method / N.I at mp
Under This method N.I. is measured as by dividing the economy into sectors (i.e Agri sector, Industrial Sector, Services Sector, Transport Sector etc) and then the net value (money value) of total production in these sectors in given year is added and net income from abroad is also included.

② Income Method / N.I at factor cost, under This method N.I. is measured as the sum of all factors of production reward or sum of income of all individuals of the economy plus net income from abroad.

③ Expenditure Method, Under This method N.I. is measured as the sum of all expenditure on final goods and services in an economy in given period plus net income from abroad.

GDP, Gross Domestic product, refers to the market value of all final goods and services produced within a country in fixed period of time : ($GDP = C + I + G + NX$).

GDP at MP, when GDP of a country is measured at actual / current market price, called GDP at MP.

GDP at FC, if GDP is measured as the sum of all factors of production reward in a country, called GDP at FC

Real GDP, refers to the sum of Economic output produced in a country in a year valued at predetermined base^{year} market price.

Nominal GDP, also known as current dollar GDP, it refers to the sum of all Economic output produced in a country in a year valued at current market price

$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{GDP deflator}} \times 100$$

$$\text{Real GDP growth rate} = \frac{\text{GDP (current)} - \text{GDP (past)}}{\text{GDP (past)}} \times 100$$

GNP, is the sum of market / monetary value of all final goods and services produced by the nation of a country in a year. ($GNP = GDP + \text{net abroad income}$)

Net factor income from Abroad, refers to the difference of what income received from abroad and how much ^{income} foreigners taken from the country.

GNP at Market Price

GNP at Factor Cost

Nominal GNP, Real GNP

Net National Product, NNP, is the market value of all final goods and services produced by a country including net factor income from abroad after allowing for depreciation. ($NNP = GNP - D$)

Net Domestic Product, NDP, is the net money value of all newly manufactured final goods and services in a country in a year. Hence NDP is the part of GDP after subtracting depreciation. ($NDP = GDP - D$)

Money income, also known as nominal income, it is the current currency (dollar) amount of income received learned without accounting for inflation.

Real income, also known as real wage, refers to - the amount of income received after accounting for inflation.

Purchasing power, refers to the value of a currency expressed in term of goods and services that one unit of money can buy.

Per Capita Income, refers to the per head income of the individual's or a country. ($\text{Per capita income} = \frac{\text{GDP}}{\text{population}}$)

Developed Country, refers to those countries whose per capita income is more than 2000 dollars

Developing Countries, refers to those countries whose per capita income is b/w 2000 and 20000 dollars

Less Developed Countries, refers to those countries whose per capita income is less than 2000 dollars.

Measure of Price level

Price level is stated as index number.

Price index refers to the combined prices of a particular collection of goods and services (called market basket) in a given period relative to the combined price of an identical/similar group of goods and services in a reference period (Base year).

Price index in given year = $\frac{\text{Price of market basket in given year}}{\text{Price of market basket in base year}} \times 100$

PI

GNP Price Index / GNP deflator, is an Economic metric that use to measure inflation in the current year GNP by converting it output to a base period

$$\text{GNP deflator} = \frac{\text{Nominal GNP}}{\text{Real GNP}} \times 100$$

GDP deflator / GDP Price index, or implicit price deflator measure the change in prices of all goods and services produced in an economy in a year.

$$\text{GDP deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

Net value of production, Net value of production of a sector means Gross value of its production minus the value of all purchases made by the sector from other sectors.

- Non-Marketed output, refers to those output which not sold at some market price. e.g. household productive, self-service etc.
- Imputed value, Some goods and services not sold at market place and therefore do not have market price, so we estimate value of these goods and services to include in GDP, Such estimate is called imputed value
- Value added, refers to the value of output of a firm minus the value of input purchased from other firms.
- productive activity, refers to those activities which contribute to the flow of goods and services, while non-productive activity refers to those activities which do not contribute / result any production.

Inventory refers to the censored and unfinished stock of goods and services, materials with a firm.

Under ground Economy /Shadow Economy / Black Economy refers to Economic activities that are not reported or officially recorded in official statistics of the Economy. This can includes illegal activities such as Tax evasion, Drug Trafficking as well as legal activities such as the sale of goods and services in informal Sector, Unreported income from self-employment etc., It not include in GDP measure.

Difficulties in Measuring National income

- ① Under-ground Economy make national income measure difficult.
- ② Quality Improvement make it difficult
to compare the value of new product with older product.
- ③ Inflation (change in prices) make difficult to compare N.I.
- ④ Non-market Activities, such as household's work may not have a market value and therefore cannot include in calculation of National income
- ⑤ Depreciation, can be difficult to measure accurately
- ⑥ International Trade can make it difficult to measure N.I., As some goods and services are produced abroad and sold in Domestic market making it difficult to accurately measure the contribution of these goods and services to Domestic Economy.

Causes of low Per Capita Income

- low Economic growth, High population growth
- Lack of education and skills, Lack of foreign Trade
- Lack of Technological advancement,
- low resource endowment etc

Keynesian Theory of Income and Employment

This Theory also known as Keynesian Economics.

This Theory argues that change in AD have a significant impact on the Economy, particularly with respect to income and employment.

According to this Theory when AD ↓ then economy experiences a ↓ in Economic Activities, leads to high unemployment and lower income, while ↑ in AD cause ↑ in Economic activities, leads to low unemployment and higher income level.

This Theory Suggest that govt intervention in form of fiscal policy (\uparrow in G, \downarrow T) can help to ↑ AD and Economic activities. Additionally, monetary policy (changes in interest rate) can also help in ↑ AD and Stabilizing the Economy.

Effective Demand, refers to the actual demand for goods and services that is backed by the ability to pay and willingness to pay for it.

Consumption, refer to that part of income which spend on consumer goods for getting direct satisfaction.

Consumption function, shows relationship b/w Consumption and Income, as $C=f(Y)$

Keynes Psychological law, states that when income of a person increases, its consumption also increases but not at the same proportion.

Propensity to consume, refers to the ratio of Consumption to income.

MPC refers to the increase in consumer spending due to increase in disposable income of the consumer.

APC refers to the proportion of disposable income that is spent on goods and services.

$$APC = \frac{C}{Y}$$

Aggregate Expenditure, refers to the total expenditure on goods and services in an economy in a year.

Saving, refers to that part of income which is not consumed, which left after Consumption (i.e. c).

Saving function, Shows relationship between Saving and Income, as $s = f(y)$.

Propensity to save, refers to the ratio of Saving to income.

MPS refers to The increase in Saving due to an increase in disposable income

APS refers to The portion of income which is Saved

Leakage or withdrawal refers to That part of N.I. which is not used by households for purchasing consumer goods, leakage includes Saving, net tax, imports.. etc

Injection, refers to The flow of funds into domestic product market which are not the result of consumption expenditure of the household.

Injection includes Investment, govt purchases, exports...etc

Investment, refers to The expenditure done by an individual, firm, countries to increase capital stock and income.

Inventories Expenditure, refers to the expenditure incurred by businesses on purchase of raw materials, Semi finished goods.

Break-even point, refers to the point/level at which company's/firm's expenses equal to its revenue, resulting Zero Economic Profit.

Intended Saving, refers to the portion of person's or household's income that they intended to save or set aside for future use.

Intended investment, refers to the planned or intended level of investment in capital goods to make in future.

Determination of Equilibrium level of N.I

(According to Keynes, equilibrium level of N.I is determined (in Two sector Economy) when $AD=AS$) Such equality ($AD=AS$) known as effective Demand.

Paradox of Thrift; This phenomenon is explained as if in a society it is attempted to save more then ultimately the society will save same amount or less than earlier.

"Higher the attempt to save, less is saved". Increase in saving cause decrease in consumption, so output will decrease which leads to decrease national income, so then saving will ultimately decrease

Accounting period, refer to a specific time frame used for financial reporting purposes such as a month, quarter, a year.

Investment Theory

Investment refer to The act of putting money or other financial resources (capital) into a project or venture with the aim/expectation of generating income.

Capital, refers to the financial resources such as money, equipment, machinery, buildings and other assets that an individual or businesses has available to use for their operation or projects.

Business, refers to an organization, that engages in activities for profit or income.

Stock, is subset of inventory, it refers to finished

goods that are ready/available for sale

Inventory, refers to the unsold goods and services,

and raw material that firm (businesses) held.

Capital Stock, refers to the Total value of assets

both physically and financially that a company or an

economy possess at a specific point in time, This

include machineries, buildings, inventory, cash,

Investment etc..

Autonomous Investment, is a type of investment that is independent of the level of output or income of the Economy.

Induced investment; refers to the type of investment that is influenced by the changes in the level of output or income of the Economy.

Business Fixed investment, refers to the expenditure made by company / businesses to acquire long-term physical assets such as Buildings, Machinery, equipments etc.

Residential investment, refers to the expenditure made by individual or households etc to purchase or improve their home.

Inventory investment, refers to the expenditure made by businesses to purchase raw materials, goods-in-progress or finished goods for use in production process or resale.

Real investment refers to the expenditure on physical stock of capital such as machinery, buildings, ...etc

Financial investment, refers to purchase of financial assets such as bond, Securities.. etc

Gross investment / Gross capital formation, refers to the total amount of resources that a company is investing in new capital goods such as building, machinery etc
→ it includes both replacement investment and inventory investment.

Net investment / Net capital formation, it refers to the changes in company's capital stock after accounting for depreciations. It represents the resources that are being added to the economy.

Replacement investment, refers to the amount of investment needed to replace or repair existing capital goods that have worn out or become obsolete.

Inventory investment, refers to the amount of money that a business spends to acquire and maintain its inventory.

Disinvestment, when Gross investment is less than replacement investment, Then The net investment will negative, This is called Disinvestment

Production Smoothing, when Sales are high, Then firm produce less Than its Sale and Takes goods out of inventories, and when Sale are low then firm produce more Than its Sale and put extra goods into inventory, This motive of holding inventory is called Production Smoothing.

Asset refers to Somethings of value, that is owned by a person or company such as cash, property, stocks, equipment etc. Asset can be Tangible like car, and can be intangible like a patent.

Liability, is a debt or obligation that is owed by a person or company, this can includes things like loans, Taxes, account payable etc.

Demand for Capital, refer to the amount of money or financial resources that businesses, individuals or govt need to invest in order to produce goods and services, expands their operations or pursue new opportunities

→ The relationship b/w MEC and stock of capital is called Demand for Capital.

→ if we add different demand for capital at different MEC, we get AD of capital in Economy

Keynesian Theory of Investment

Keynesian Theory of Investment Suggests that Investment decisions are influenced by expected rate of return which are influenced by interest rate and uncertainty.

Expected rate of return refers to the average return that an investor expects to receive on an investment, based on historical data and future projections uncertainty

Classical Theory of Investment, Suggests

That investment decisions are based on

expected rate of return which influenced

by interest rate and risk

Rate of return refers to the profit or loss of an investment, it expressed in percentage

Rate

Yield, is a financial term used to describe the

return on an investment, it expressed as a percentage of the investment cost. Such as interest payment, rent, dividends etc.

Present value of yield, refers to the current value of future cash flow from an investment, discounted to reflect the time value of money.

$$\text{As } PV = \frac{C}{(1+r)^t}$$

C - future cash flow.
r - discount rate

Discount rate, is a financial term used to determine the present value of a cash flow. It represents the rate of return which an investor expects to receive for taking on the risk of investing in a particular project or assets. Higher the risk, higher will discount rate.

present value, PV refers to the current value of a future sum of money, calculated by discounting future cash flow to reflect the time value of money.

Present Discounted value, refers to the current value of future sum of money, calculated by discounting future cash flow, using a discount rate, to reflect the time value of money and the risk involved.

Net present value, is a financial term used to evaluate the profitability of an investment. It compares the present value of cash inflow to the present value of cash outflow. If the resulting PV is positive then investment is considered profitable, if it is negative then investment is considered not profitable.

Internal rate of return, IRR, is a measure of an investment profitability. It is calculated by interest rate at which net present value of all cash flow equal to zero.

Which Measure (IRR, Pv, PDV) is best for investing / investment?

The best measure for investing depends upon a specific circumstances of the investment.

If the investment has fixed time-line and the goal is to maximize return, then IRR is best measure.

If the investment has variable time-line and the goal is to maximize total value then PDV is best measure.

If the investment has single cash flow, then Pv is best measure.

IRR is useful for comparing profitability of different investments, while PDV is useful for determining the current value of money.

$$\text{IRR formula} \rightarrow NPV = \sum (C_t / (1+r)^t) = 0$$

$$Pv \text{ formula} \rightarrow Pv = C / (1+r)^t$$

$$PDV \text{ formula} \rightarrow PDV = \sum (C / (1+r)^t)$$

C — Future cash flow

r — discount rate

t — Time Period.

Multiplier, is a factor that shows/measure that how much changes in one variable effects the other variable in the Economy.

Spending Multiplier, measure that how much initial increase in govt spending ^{change} increase Total output

Investment Multiplier refers to the change in investment spending on the level of Economic activity. $K_I = \frac{\Delta Y}{\Delta I} = -\frac{1}{S}$

Govt Multiplier/Fiscal Multiplier/Out Expenditure Multiplier
It refers to the effect that how much change in govt spending has on overall Economic activity of the Economy. $K_G = \frac{\Delta Y}{\Delta G_0}$

Super Multiplier, refers to the combined effect of multiple multipliers operating in the economy at same time.

$$K_S = \frac{\Delta Y}{\Delta I_0} = \frac{-c}{1-c-c} = \frac{-MPC}{1-MPC-MP}$$

Tax Multiplier, refers to the effect that how much change in Taxes has on overall level of Economic Activities. $K_T = \frac{\Delta Y}{\Delta T_0} = \frac{-c}{1-c} = \frac{-MPC}{1-MPC}$

Multiplier effect, refer to the amplification of initial change in one variable (e.g. spending or investment), bringing multiple changes in the other variables (e.g. income, spending).

Accelerator, measure that how changes in investment changes bring changes in AD.

Accelerator Theory of Investment - J.M Clark

This Theory Suggests that the level of investment in the Economy is directly related / Proportional to rate of change of output/Demand.

This Theory explain that how changes in demand can effect business investment decisions.

According to This Theory, if there is increase in Demand for goods and services, business will increase investment to keep up with the demand and vice versa.

James-Thobin Theory of Investment

This Theory Suggests that business investment decisions are based on both expected returns and uncertainty. According to Thobin " investors

are willing to invest more if they are confident in their predictions about future returns and level of uncertainty is also low and vice versa

Thobin Theory emphasise on the importance of stability and predictability in the Economy to encourage investment

Money

Money, refers to anything which is generally accepted as a medium of exchange and in repayment of debt.

Currency, refers to a specific kind of money that is issued by a govt and used as a medium of exchange within the country e.g. Dollar, Euro, Rupee..

Narrow Money / Base Money / M₁, consists of currency notes and those deposits which is used through Cheque

Monetary Asset / M₂, consists of M₁ plus non-checkable deposits (Fixed deposits).

Broad Money / M₃, consists of M₂ plus all assets like govt securities, Saving certificates etc

Monetary Basic / M₀, is called high powered money, it consists of currency.

The money issued by central bank / govt official as a medium of exchange is called currency. It has two types ① Metallic Money
② Paper Money

Checkable deposits, are bank ^{deposit} account that allow depositors / account holders to write cheque or make other withdraw against the balance in their account. E.g. checking account, demand deposit...
Non-Checkable deposit, are bank deposit that cannot be easily converted into cash or used as a medium of exchange. E.g. Saving account, ... etc

Barter System, refer to a system in which exchange of goods take place without use of money and people exchange goods for other goods.

Difficulties of Barter System.

Lack of Double coincidence of wants

Lack of common measure of values

Indivisibility of goods

Difficulties in store of values

Difficulties in Borrowing and lending

Difficulties in govt Taxes and payment

Difficulties in transfer of wealth

Functions of Money

- ① Medium of Exchange, is primary function of Money.
- ② Measure of Value, Money Serve as a Standard measure of value.
- ③ Unit of account, monetary unit (like Pakistani rupee) use as a yardstick for measuring the relative value of different things
- ④ Store of Value, Money is the liquid form of all the assets and is a very convenient form in which wealth can be stored
- ⑤ Standard of deferred payment, money is also used to make payment at some future time (Borrowing and lending money)
- ⑥ Means of Transferring Value, Transferring of value from one place to other is also function of money.
- ⑦ Medium of Govt payment, Govt receive payment or dues such as Taxes, fee etc in form of money and also pays salaries, pensions etc in form of money.
- ⑧ Dynamic function of Money
 - Changes in Money Supply cause changes in price level which effects Economic growth.
 - Changes in money Supply effects interest rate
 - Trade is easier due to use of Money

Journey / Evolution of Money

① Barter System.

② Commodity Money, refer to a type of money

That value has based on a physical commodity
such as Gold, Silver, Copper etc, That ^{was} is widely

Accepted as a medium of Exchange.

③ Metallic Money, refers to coin made of precious

metals such as Gold, Silver, Copper etc that have

Intrinsic value based on metal They are made from.

④ Paper Money / Paper Currency, refer to physical

Currency That is made up of paper and has no

Intrinsic value but it is accepted as a medium of

exchange because it is issued by a govt.

⑤ Credit Money, refers to money That exists as

record on a bank balance sheet, That can be

used to make payment or withdraw cash.

⑥ Electronic Money, refers to money stored in

electronic form such as in digital wallet, That

can be used to make purchase or withdraw

Cash electronically.

Kinds of Money.

① Metallic Money or coin, it consists of all the coins such as Five rupee coin, 10 rupee coin etc. in Pak.

Metallic Money has Two Types

③ TOKEN MONEY / TOKEN COINS, refers to The coin or money whose face value is greater than the value of metal it contains.

④ FULL-BACKED-COIN, refers to The coin or money whose face value is equal to the metal value it contains

② PAPER MONEY, refers to The paper notes issued by central bank

Fiat Money, refer to a Type of money that is issued by a govt and is accepted as a medium of exchange due to govt mandate or legal tender law rather than its intrinsic value

Intrinsic value refers to The inherent worth or value of an asset independent of its market price.

Intrinsic Value in context of Money means, The value of money that is based on a physical Commodities Such as gold, Silver etc rather than the Trust or confidence of govt.

Legal Tender, refers to The bank-notes and coins issued by govt / central bank which are offered in payment of debts and which are must be accepted.

Convertible Money, refers to the money/currency against which govt promises to change into gold when demanded.

Inconvertible Money, refer to the money/currency against which govt has no promises to change them into gold when demanded.

Demonetise, To demonetise something means to take it out of being money or to stop using it as a form of money.

Monetize, To monetize something means to make it to money or to convert it into a form that can be used as a money.

Demand for money refers to the quantity of money which people wants to hold at given time at different rates of interest, other things remain same (such as income, inflation...etc).

Forms of Money Supply.

- ① Currency, refer to a specific type of money that includes coin and paper notes, which issued by a govt. and used as a legal tender within the country.
- ② Demand deposit Deposit money / Credit money / Bank money, it refers to money that is created by banks when they lend money to borrowers (it refers to the deposits in checking accounts that can be withdrawn on demand).
- ③ Saving deposits refers to the deposits in saving accounts that can be withdrawn on demand.

Near Money, refers to all accounts such as

Saving accounts, PLS accounts, Time deposit (Fixed deposits) which can be quickly changed into checkable deposit.

Sources of Money Supply

There are three main sources of money supply.

① Central bank, is the most important source of money supply.

② Commercial bank, major part of money supply comes from commercial banks

③ Government, Govt supplies coins and currency notes.

Keynes View of Demand for money.

① Transactive Demand for Money, people demand for money to use for day-to-day Transaction, this motive of demand for money called Transactive demand for money.

② Speculative Demand for Money, Money is also demanded for the purpose of To make more money, this motive of holding money is called Speculative demand for money.

③ Precautionary demand for Money, people demand for money for unexpected events in life such as diseases, emergencies..etc Such motive of demand for money is called precautionary demand for money

Helicopter Money, refer to a monetary policy

in which a central bank or govt gives money

directly to the public Typically Through a one-time

payment or deposited into individual bank

account to stimulate spending and boost economic activity.

⇒ A sudden and unexpected infusion of cash into the Economy.

Seigniorage, is a french word which means "feudal lord", the revenue rising by printing notes is called Seigniorage.

Nominal Money Supply, refers to The Total amount of money in an Economy, measured in current prices.

Real money Supply, refer to The nominal money Supply adjusted for inflation.

Real money Supply measure purchasing power.

Money illusion, refer to an Economic phenomenon where individuals perception of the value of money is influenced by changes in nominal value of money rather than changes in real value of money.

E.g :- if nominal value of money ↑ and cost of goods and services also ↑ and consumer purchasing power is remain same, so if individual are under illusion, They may believe that they have more purchasing power and spend more money, but in reality they are not any better-off.

Cash Balance refers to the amount of money an individual or an organization has available in their liquid assets such as cash, saving account etc
→ It is a measure of immediate fund that are available for spending or investment.

Liquidity, means that an asset is available for some immediate payment. Cash is the most liquid form of asset.

Interest rate, refer to the cost of borrowing and the return on saving and investment.

Nominal interest rate, refers to interest rate at which money is lend or borrowed without accounting for inflation. ($i = r + \pi$).

Real interest rate, refers to the nominal interest rate adjusted for inflation which reflect the true cost of borrowing or True return on lending. ($r = i - \pi$).

Real interest rate Types

Ex-Ante- Real interest rate, refers to the real interest rate which the borrower and the lender expect when loan is made.

Ex-Post- Real interest rate, refer to the real interest rate that actually realized.

Money Stock vs

Money Supply

Money Stock refers to
the total amount of
money in an economy,
at a specific point in
time, it including
physical currency and
bank deposits.

Money Supply refers to
the amount of money
available for use in an
Economy at any given
time, it including
money held in bank
accounts, circulating
currency, other
liquid assets.

Bank

Bank, is a financial institution that accept deposits, make loans and provide financial services to its customers.

Central bank, is a government-owned financial institution which is bankers-Bank and manages the country monetary policy and regulate banking system.

Commercial bank, is a type of bank which accept deposits from individual and businesses and provide financial services to individual such as loan, investment, credit card, checking account, Saving account.

Central bank -function, central bank functions includes Controlling money Supply, setting interest rate and regulating the banking System to ensure the stability of financial system.

Central bank serve as Bank,
bank, lender of last resort, Guided to govt,

Seller is Drawer of Bill

(Hundi)
Bill of Exchange, is a written document that orders to one person or organization to pay a specific amount of money to another person or organization at a specific time in future.

→ Bill of exchange can bought and sold.

Security, is a financial term which refers to anything (e.g. Documents) which is offered by the borrower to lender for getting a loan.

Treasury Bill, is a short-term debt security issued by a govt typically with a maturity less than one year.

Treasury Bond, is a long-term debt security issued by a govt typically with a maturity more than one year.

Government Bond, is a type of debt security issued by a govt to raise money for public projects and expenses, typically with a maturity date more than one year.

Government Security, is a financial instrument issued by a govt, that represent a promise to repay borrowed money. Typically, with interest rate, this include both bonds and bills.

Bond, is a interest bearing certificate issued by a govt or business corporation, promising to repay a sum of money (Principle amount) plus interest at specific date in future.

SUKU, is an arabic name for financial certificates that the Islamic equivalence of bond. Suku is a security which employs with Islam law (Shariah) and investment principles.

Bank draft, refers to order of bank to some other banks to pay the specific amount to the person mentioned in the draft.

Instruments of Money, refers to tools or means of payment such as coins, currency, checks or electronic transfers used for exchange of value of goods and services.

Credit refers to a transaction that result in increase in the balance of bank account such as deposit or loan.

Credit refers to the ability to borrow money which is typically provided by a bank or other financial institutions or individual etc.

Debit refers to a transaction that result in decrease in the balance of bank account such as withdrawal or a payment.

Credit card, is a payment card that allowed a person to access funds directly from their bank account to make purchase or withdraw cash.

Debit card, is a company card that allows ..

Credit creation, is the process by which banks and other financial institution create credit or money by lending out more money than they hold in reserve.

Interest is the cost of borrowing money or other compensation paid for use of money. It is usually expressed as percentage of borrowed or saved.

Interest rate, is the price that link present and future. It is the percentage amount charged by a lender for borrowing.

Interest-free banking also known as Islamic banking - it refers to a banking system that operates without charging interest rate on loans, instead it relies on profit-sharing agreement which means that the bank and the customer share the profit and loss of an investment.

Importance of Banks, Banks are important because they provide a safe place to store money, make payment and access credit etc. Banks play a vital role in Economic development of a country.

Time deposit, refer to a type of bank account, where you deposit a fixed amount of money for a specific period of time such as six month or a year, you earn interest rate on your deposit but you can not withdraw the money before end of the term without paying a penalty.

Fractional Reserve banking System, refers to the arrangement which allows extra deposit money to be created by Bank.

Statutory liquidity ratio, SLR, refers to the minimum percentage of deposits that bank has to maintain in form of liquid cash, gold..etc

Patent, is an exclusive legal right granted to an inventor for a specific period of time to make use and sale of an invention.

Handi Check refers to a formal written financial instrument that instructs a bank to pay a specific amount of money to a person or entity.

Clearing house, is an association of commercial banks that facilitate the settlement of financial transaction b/w banks and other financial institutions.

Discount houses, are financial institutions that buy and sell short-term financial instruments like Treasury bill, Bill of exchange etc at a discount rate.

Cash / Bank Reserve refers to the amount of money that bank keeps on hands or in its account as a precaution against unexpected withdrawal or financial obligations.

Reserve requirement, refers to the amount of money that banks are required to hold in reserve against their deposits.

Evolution of Banking System.

- ① Evolution of banking system was started from Merchant, who were Traders and provided loan to Traders.
- ② After the Merchant, the Gold-Smith System Started who would keep valuables and money safe in exchange for a fee.
- ③ After the Gold-Smith System, the money lender system started, who provided loan at high interest to individual who could not access Traditional banking system.

Fiscal policy, refers to the use of govt spending and taxation to influence the economy.

Fiscal policy refers to the govt decisions regarding spending, taxation and borrowing, to influence economy.

Monetary policy, refers to the use interest rate and money supply to manage the economy.

Monetary policy refers to the decisions made by central bank to manage the supply of money and interest rate to stabilize the economy.

Weapons of fiscal policy, refers to the tools that govt use to influence the economy, such as govt spending and taxation.

Weapons of Monetary policy, refers to the tools that central bank use to influence the economy such as setting interest rate, controlling money supply, regulating banks.

Fiscal policy in depression - Keynes

According to Keynes, during depression govt policies such as ↑ govt spending and ↓ Taxes can stimulate demand and boost economic growth activity during depression.

Monetary policy during inflation, during inflation monetary policy is used to reduce the money supply and increase rate of interest, to reduce inflationary pressures.

Monetary policy during depression, during depression monetary policy is used to increase money supply and reduce interest rates to stimulate economic growth.

Fiscal policy during inflation. According to Keynes, during inflation, govt policies such as ↓ govt spending and ↑ Taxes can ↓ demand and stabilize price level.

Mortgages, refers to the loan used to purchase a property with the property serving as collateral for the loan.

The borrowers makes regular payments which include principal and interest until the loan is fully paid out.

Objectives of Fiscal policy

Promoting Economic growth, Controlling inflation, reducing unemployment, Stabilizing the economy etc.

Objectives of Monetary policy

Stabilizing Exchange rate, Stable price level, promoting high employment, achieving economic growth etc

Banking System, is a system of financial

Institutions (like bank, credit union etc) that provides various financial services including accepting deposits, making loan, etc

Cast Reserve,

Discount rate / Bank rate, is the interest rate at which central bank lend money to commercial bank

Functions of central bank

Sole right to issue notes, Banicer's bank

Advisor to Govt

Controller of credit

Lender of last resort, Development role.

Lender of last resort refers to the role of central banks in providing liquidity to financial institutions during time of crisis/financial distress when no other source of funding are available.

Method of Note issue

Fixed Fiduciary System is a method of note issuing, where central bank holds a fixed amount of gold or foreign exchange as a reserve against the total currency.

Proportional Reserve System, is a method of note issuing, where the central banks hold a fixed percentage of total deposits as a reserve and can create money by lending out the excess reserve.

Minimum reserve System, is a method of issuing notes where the central bank holds a minimum amount of reserve against the total reserve and lending out the excess reserve by creating new money.

Forward rate is an exchange rate quoted today for a transaction, that will take place in the future, taking into account the interest rate differentials between the two currencies.

Spot rate, refers to the exchange rate for the immediate delivery of a currency.

→ Spot rate refers to the current exchange rate at which one currency can exchange for other currency.

Hedging, is a risk management strategy used to minimize potential losses through taking actions that offset or reduce the impact.

→ This is typically done by taking opposite position in related assets or market, so that any losses incurred in one area are offset by gains in another area.

Share Capital / Equity Capital of firm, refers to the funds raised by any firm or company through issuing ownership shares to investors.

Capital reserve, refers to the funds that are set aside by a company or financial institution from their profit, to support future growth and to protect against unexpected losses.

Virtual banking, also known as online banking or internet banking, it allows customers to conduct banking or financial transactions remotely through internet without need for physical visit to a bank branch.

Crowd out investment, refers to a phenomenon where increase in govt borrowing lead to decrease in private investment.

This can happen because the increase in demand for borrowing pushes up interest rate making it more expensive for private investors to borrow money and invest in their own projects. As a result private investment is crowed out by govt borrowing.

Stock out avoidance, if demand exceeds production and there are no inventory, the good will run out of stock for a period of time and the firm will loss sale and profit, so inventory can prevent this situation happening, this form of holding inventory is called stock out avoidance.

Bank Capital, Starting a bank requires some capital. The bank owner must start with some financial resources to get the business going, those resources are called bank capital.

Crowd-out, describe a situation where an increase demand for resources by one group or entity lead to a decrease in resources available for other group or entity.

Security, is a financial instrument that shows ownership or creditor relationship with an entity such as govt or company.

Stock, is a type of security that represent ownership in a company and can fluctuate its value based on its financial performance and market condition.

Share, represent a unit of ownership in a company, that entitles () the owners to a portion of its profit and loss.

Equity vs Stock

Equity refer to the residual value of a company's assets after liabilities have been paid (which represent the owner's stake in business) which is owned by the shareholders

Stock refers to the ownership of a company which is divided into share that are bought and sold in the stock market

Stock vs Share

Stock is the piece of the company that an investor can own
e.g. you own 10% of company

Share is unit of ownership in a company.
e.g.: You 10 shares in a company.

Stock is an actual asset in which you invest

Share is the unit of the measurement of that asset.

Financial Market, refer to a market where buyers and sellers bought and sold financial assets such as bond, Stock, currencies...etc.

Financial Assets. Refers to those assets which have financial values such as stock, bond, cash...

Financial intermediary, refers to the company or institution that act as a middleman between borrower and lender by taking on some of the risk involved.

Financial instruments, refer to a contract or agreement that represent a financial assets such as bonds, stocks etc.

Financial System, refers to the network of institution, markets and intermediaries that facilitate the flow of capital and investment in Economy.

Property, refers to the physical assets such as land, building, car etc - that has value and can be owned.

Property right, is a legal concept that gives the owner of a property an exclusive right to use, control and dispose of it.

Coupon bond, is a type of debt security that pays regular / periodic interest payment to the bondholder until the bond matures. And after maturity date of this bond the bondholder receive the face value of the bond.

Instruments of monetary policy
These are the tools used by a central bank
to control money supply and interest rate
in the Economy

① Open Market operation, it involves buying and selling of govt's securities in the open market to influence the amount of money in circulation.
→ Buying — injects Money — increase money supply — lower interest rate
→ Selling Govt securities — reduce money supply — increase interest rate

② Reserve requirements, refers to the amount of money that banks are required to keep in reserve with central bank.

③ Discount rate, also known as bank rate, is the interest rate at which central bank lend money to commercial banks.

Function of Bank

① Acceptance of deposits, refers to accepting money individual, business etc and holding in an account such as saving account, current account etc.
→ It is primary function of bank

② Advancing loan, refers to function of bank as lending money to individuals, businesses etc for a specific period of time with the expectation that it will repay with interest.
→ It is secondary function of bank.

Frictional reserve banking, refer to a system where banks keep a portion of their deposits as a reserve to meet daily needs of cash and lend out the rest.

100 percent Reserve banking, refer to a banking system where banks keep 100 percent of their deposits as reserve and do not lend out any money.

Currency deposit ratio, c_y , refer to the amount of currency people holds as a fraction of their demand deposit. (Money deposits in banking system).

Reserve deposit ratio, r_r , is the fraction of deposit that bank hold in reserve.

Balance Sheet, refer to a financial statement that shows a company assets, liabilities and equity at a specific point in time.

Monetary Base, refer to the total amount of money holds by public as a currency and by bank as a reserve.

→ Monetary base refer to the total amount of money in circulation including physical currency and banks deposits.

Leverage, refer to the use of borrowed money (debt) to increase the potential return on an investment, it amplified both gains & loss.

Exchange rates System.

- ① Fixed Exchange rate system, is one which the exchange rate between two or more countries is set by the govt of the country.
- ② Floating / Flexible exchange rate, is one in which the foreign exchange rates between two or more countries is determined by the forces of demand and supply of foreign currency.
- ③ Managed Exchange rate System, Under this system the currency of a country is allowed to float in foreign exchange market and determines its exchange rates according to the market forces but also govt intervention exist time-to-time.

Functions of commercial bank.

- ① Basic / primary function of commercial bank is accepting deposits.
- ② Secondary function of commercial bank is advancing loans.

Role of Commercial bank.

Promoting capital formation, investment in new enterprises, promotion of Trade and Industries, balance development of different regions, influence different Economic activities, providing financial Services Accepting deposits.

Role of Banking System in Economic Development.

Banking system plays very important role in economic development of a country. Banks provide loans/funds for investment in various sectors, which stimulate economic growth. They also facilitate trade by providing payment services.

Banking system also helps in mobilizing saving for productive investments, creating jobs, etc.

Interest-free banking in Pakistan.

Interest-free banking also known as Islamic banking. It refers to a type of banking system in Pakistan where financial transactions are conducted according to Islamic principles. In Islamic banking system interest rate is not allowed and profit is generated through sharing risk and returns between the bank and the customers.

National Bank of Pakistan.

NBP established in 9 Nov 1949

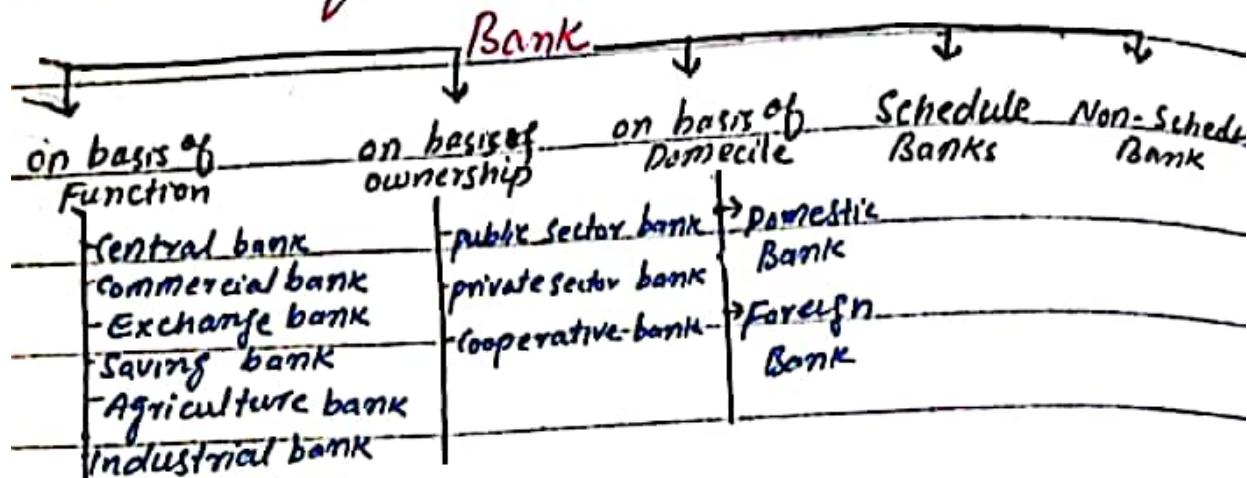
NBP is state-owned commercial bank in Pakistan that provides financial and banking services

December 2021, govt held 94.14% stake in

NBP while remaining share were owned by private body

NBP has large network of branches throughout Pakistan and also operates in other countries.

Classification of Bank:



Exchange bank, refer to the bank which specializes in foreign exchange transaction, facilitating the exchange of currencies for international trade and investment.

Saving bank, refer to the financial institutions which accept deposits and pay interest on those deposits. It generally offer a range of saving & investment products to its customers.

Agriculture Bank, refer to the financial institution which provides loan and other financial services to farmers and other agri businesses.

Domestic bank, refers to that bank which operate within a single country and serves customers within that country, providing banking services in local currency.

Foreign bank, refer to that bank which operate in a country other than the one in which it is headquartered and may serve in both local and international currencies.

Public Sector banks, refer to those banks which are owned and controlled by govt such as NBP, HBL etc.

Private Sector banks, refer to those banks which are owned and controlled by private body or corporation such as MCB, ABL, City Bank etc.

Cooperative banks, refer to those banks which are established mainly to provide short-term and medium-term loans for rural development in general.

Scheduled Banks, refer to those banks who have capital reserve not less than 5 million rupees in Pakistan, and also listed in Second Schedule of SBP act 1956.

Non-Schedule banks, are those banks which are not listed in second schedule of SBP act 1956, and have minimum capital reserve value 5 million or less.

Second Schedule of SBP Act 1956, refer to a list of all banks that are eligible to receive certain benefits from SBP such as loans, deposits, etc.

SBP, its role, Functions.

SBP is central bank of pakistan and established in 1 July 1948; it managed pakistan monetary policy and regulating banking system in pakistan.

SBP play very important role in Economic development of a country, it includes conducting monetary policy to achieve price stability, issuing and regulating the country's currency, maintaining foreign reserve of a country, promoting growth and so on.

The functions of SBP include acting as the lender of last resort, supervising and regulating commercial banks, etc..

ATM, is an electronic device that allows individual to perform basic banking transactions such as withdrawing cash, or making deposits without to visit a physically bank branch.

Credit is the right to receive payment.

Theories of rate of Exchange.

Mint-pr-parity Theory of Exchange
OR

Determination of rate of Exchange under gold standard.

This theory was popular during gold standard,
According to this theory - the exchange rates b/w
two countries should be based on the ratio of
the amount of gold held in their respective currencies.

① Purchasing power parity, PPP refer to the
exchange rate at which the currency of one
country would have to be converted into that of
another country to buy the same amount of goods
and services.
→ PPP used to control differences in price levels
between Economies.

② Balance of payment Theory of Exchange rate
This theory also known as General equilibrium
theory of exchange rate.

According to this theory the exchange rate
of a country currency depends upon
its demand and supply of foreign currency.

OR

The Balance of payment Theory of exchange
rate suggests that countries exchange
rates is determined by its export & import

if Export > Import → Surplus in Bop-leads stronger currency.

if Import > Export - Deficit in Bop-leads weaker currency.

Quantity Theory of Money.

re other things being constant, the general level of prices in an Economy moves in direct proportion to the changes in money supply.

Tauising, "other things being equal, double the quantity of, prices will be twice as high as before and value of money will be one-half and vice versa".

$$MV = PT$$

Supply of Money Demand for Money.

Fisher equation, also known as fisher effect, it describes the situation that a one percent increase in inflation rate cause a one percent increase in nominal interest rate.

$$\text{Fisher equation} \Rightarrow i = r + \pi$$

Fisher define Quantity Theory of Money as " price level varies directly with the quantity of money in circulation while velocity of money and output remain same".

$$MV = PY$$

Money Supply Price Level
Velocity of Money GNP

So This fisher equation says that v and y are constant, so double the quantity of money, double will price level and vice versa.

Velocity of Money is not always constant.

Classical, Velocity of money is always constant
as money is just used as a medium of exchange

Keynes, Velocity of money is not always constant
as money is not only demanded for transaction
purposes but also for speculative purposes. As when
people demand for money for speculative purpose then
such amount of money will have zero velocity, it
will reduce Aggregate velocity of money and vice versa.

So Velocity of money changes as demand
function for money changes.

Classical $\rightarrow M\bar{V} = P\bar{Y}$, so Money Supply
determine nominal value of output ($P\bar{Y}$) as
velocity of money is constant.

$M\bar{V} = P\bar{Y}$, money Supply
Determine inflation rate when V and
 \bar{Y} are constant.

International bond Market refers to the market setup where foreign bonds are traded.

Eurobond, refer to the bond which dominate the currency other than that country where it is traded.

Euro-currency refer to the foreign currency which is deposited in bank outside the home country.

Exchange over the Counter Market, refer to the market setup where dealers at different locations are stand ready to buy and sell securities.

Primary Market, refers to the financial market where new issues securities are bought and sold by initial buyers by the corporation or govt.

Secondary Market; refers to the market where the bond/security resold.

Diversification, in Economic Diversification means the process of shifting an Economy away from income Source to Multiple income sources

or

$$\text{Total Risk} = \text{Systematic risk} + \text{Unsystematic risk}$$

Systematic risk or Non-Diversifiable risk or market risk refers to The fluctuations in return on securities that occur due to macro-Economic factors. Such as interest risk, inflation risk, market risk...

Unsystematic risk refers to The fluctuations in return on securities that occur due to micro-Economic factors. Such as Business risk, financial risk...

Capital Asset Pricing model (CAPM), refers to a model which shows relationship b/w Systematic risk and expected return for Assets.

This model shows positive relationship b/w systematic risk and expected returns.

Arbitrage, refers to The simultaneous purchase and sale of The same assets in different markets due to differences in Assets prices.

E.g. if gold is cheaper in U.S and expensive in U.K, then investor purchase gold from U.S and sold in U.K

Inflation

Prof - Crowther "inflation is a state in which the value of money falls and price level persistently rises".

Deflation refers to the (persistently) decrease in general price level of goods and services

Inflation, refers to the (persistently) increase in general price level of goods and services

Disinflation, refer to a decrease in rate of inflation means that prices are still increasing but at slower pace/rate than before.

Reflation, refer to an intentional increase in inflation by a government or central bank usually through monetary policy in order to stimulate economic growth and combat deflation.

Stagflation, describes a period where slow economic growth and unemployment coincide with inflation.

Hyper inflation, defined as the inflation that exceeds 50% per month, which is just 1% per day.

Shrinkflation, refers to the reduction of a package's contents as a result of inflation, rather than increasing its price.

It refers to the situation where a company reduce size of a product while keeping its price same, leaving you to pay the same amount for less. This is usually occurs when there is high inflation.

Causes of inflation.

Inflation (changes in price level) can be caused by variety of factors such as change in supply, demand or government policies.
e.g. if Demand increases then price level also increases
if Supply ↑ than price level ↓ and vice versa.
And Monetary and fiscal policies can also cause inflation.

Effects of inflation

Inflation can have various effects such as high inflation can reduce purchasing power of consumers, increase interest rate which increase cost of production for businesses -

Conversely low inflation rate or deflation can lead to lower economic growth and higher unemployment.

Consequences of inflation

Inflation can reduce purchasing power

Inflation can reduce saving, as due to inflation the value of your saving decreases.

Inflation leads uncertainty, as inflation makes it difficult to plan for future and cause economic instability.

Inflation can lead to redistribution of wealth as some group benefited from inflation and some lost their due to inflation.

Inflation can lead to high interest rate, as to reduce spending and slowdown economic growth the central bank increase interest rate.

Inflation benefitted the debtors/borrowers

∴ Deflation benefitted the creditors/lenders.

Remedies / Solution of inflation.

To control inflation, the remedies are either to decrease AD (in short-run) or to increase supply of goods (in long-run).

Policies to control inflation.

Monetary policy → Decreasing money supply through interest rate

Fiscal policy → Decreasing govt. expenditure on unproductive goods, increasing direct taxes, which will decrease disposable income so AD for goods will fall.

Direct or physical measure → is step of govt like rationing of goods, freezing of prices and wages.

Trade-off vs opportunity Cost

Trade-off refer to giving one thing in order to gain another thing

Trade-off is act of choosing b/w two options

opportunity cost refer to the cost of the best alternative forgone when making a decision.

opportunity cost is the value of the option that is not chosen.

Consumer Price Index, CPI, measure the price of basket of goods and services bought by consumer, relative to the prices of same basket in some base year. ($CPI = \frac{C_t}{C_0} \times 100$).

producer Price index, PPI, measure the prices of a typical basket of goods and services bought by firm/producer, relative to the prices of same basket in some base year.

GDP deflator, VS CPI

GDP deflator measure the prices of all goods and services relative to their prices in some base year

CPI measure prices of basket of goods and services that consumer bought, relative to the prices of same basket in some base year.

imported goods are not part of GDP deflator but includes only those goods which produced domestically

imported goods included in CPI

It signs different weights to price of different goods.

It signs fixed weight to the price of different goods.

Shadow price, refer to the economic value assigned to a product or resources that does not have market value/price.

Laspeyres Index, is a measure that compares the cost of fixed basket of goods and services at current prices to their cost at base year prices, using base period quantity as weight.

→ it assumes that consumers buying same quantities of goods and services as they did in base year.

$$P_L = \left(\frac{\sum (P_i, q_{-0})}{\sum (P_0, q_{-0})} \right) \times 100$$

Paasche Index, is a measure that compares the cost of changing basket of goods and services at current prices to their cost at base year prices, using current period quantities as weight.

→ it assumes that consumers changing the quantities of goods and services they buy as prices changes.

$$P_P = \left(\frac{\sum (P_i, q_{-i})}{\sum (P_0, q_{-0})} \right) \times 100$$

Laspyer index use ^{base period} quantities as weight and compare current prices to a base year.

Paasche Index use current period quantities as weight and compares current prices to a base year.

Demand-pull inflation — Real Analysis - Keynesian Approach

if at full-employment level (where output reached its maximum). AD increase, then prices will rises. It is called Demand-pull inflation.

→ Rise in prices due to ↑ in AD called Demand-pull-inflation.

Demand-push inflation — A monetary Analysis.

When money supply rises, then interest rate will falls, so consumption will rises, investment will also rises; government expenditure will also rises, so AD curve will shift to right but output remain same, so such shifting of AD will cause rising price level which is called demand-push inflation.

Cost-push inflation; When in an Economy the price level raises due to increase in cost of production, Then it is called Cost-push inflation.

Structural inflation / Sectoral demand Shift

This is an Economic Theory; which states that inflation is generated because of internal changes in the demand structure of the Economy, however such internal changes does not bring change in AD.

→ This Theory was presented by Charles Schultz.

Inflationary gap, if at full-employment.

$AD > AS$, then inflationary gap develop

→ It occurs because of increase in expenditure which result excess demand in the Economy.

Remedies of inflationary gap:

Consumer should decrease Consumption expenditure, They should withdrawn subsidies or Tax exemptions etc.

Govt expenditure should decrease

Central bank should raise bank rate, so that commercial banks ↑ interest rate so investment activities will discouraged.

Investors should not exempted from Tax nor subsidies given them.

Deflationary gap, if at full-employment level

$AS > AD$, then deflationary gap develop.

→ it occurs due to reduction in expenditure which result in over-production

Remedies of deflationary gap:

Consumer should increase Consumption expenditure, they should provide subsidies, Tax exemption.

Govt expenditure should increase.

Central bank should decrease bank rate.

Investors should exempted from Tax and Subsidies are given them.

Augmented Phillip curve, is a tool used by economists to analyse the dynamic of inflation and unemployment in an Economy.

The fact that other things such as change in expectations, influence of supply shocks can also impact the relationship between inflation and unemployment.

Relative Price refers to the price of a good or services compared to the price of another good or services. It tells you how much of one good you can get in exchange for other.

Real price, refer to the price of good or services adjusted for inflation. It tells you how much of your purchasing power is required to buy a good or service.

Nominal price refer to the price of goods or services without adjusting for inflation in current dollars.

Market Price refer to the current price at which goods or services bought or sold in the market. It can be higher or lower than nominal price due to inflation.

Normal price refer to the long-run / long-term price of goods or services adjusted for change in demand and supply.

In long-run prices are flexible and depends on Demand and Supply

In short-run prices are sticky at some predetermined level.

Stock exchange market, is a market setup where shares, bonds, securities are bought and sold.

Pakistan Stock Exchange Markets

- ① Karachi Stock Exchange Market — KSE
- ② Lahore Stock Exchange Market — LSE
- ③ Islamabad Stock Exchange Market — ISE
Karachi

KSE-100, is index of stock exchange market, which means their change in index are calculated on the basis of shares of 100 most important companies.

Bullish — Buying pressure, rush on buying shares.

Bearish — Selling pressure, rush on selling shares.

SECP, Security and Exchange Commission of Pakistan, which established to develop and regulate Capital markets in Pakistan.

Three Tier Education System, refer to a education system that divided into three levels or Tiers, such as primary (5—11 aged), Secondary (11—16 aged) and tertiary (16 aged and above).

Four Tier Education System, refer to a education system that divided into four levels or Tiers, such as primary → 0 to 5 to 11 aged children " " lower secondary → 11 to 14 aged children " " upper secondary → 14 to 18 aged
tertiary → 18 aged and above.

Takaful vs Insurance

Insurance is a contract b/w insurer and a policy holder, where the insurer agrees to compensate the policy holders in the event of specific losses or damage in exchange for a premium payment.

Takaful is a type of Islamic insurance based on Islamic principles of mutual cooperation and sharing risk and responsibilities among members of a group.

Premium Payment

refer to the regular payment of money by an individual or an organization to an insurance company to maintain an insurance policy.

Public Finance

Public finance is a branch of Economics which deals with govt revenue 'govt' and its account / management.

Govt / Public Revenue refers to the funds generated by govt to fulfill the expenditure of govt for welfare maximization of the residents of the country.

Tax Revenue refer to the revenue collected by the govt from / through Taxes.

Non-Tax Revenue refer to the revenue collected by the govt other than Tax Sources such as revenue from fee, PIA... etc.

Govt / public Expenditure, refer to all govt consumption, govt investment, Transfer payment, infrastructure of roads, Dams, education etc.

Developmental Expenditure, refer to govt expenditure which helps in Economic Development of a country.
E.g. govt expenditure on Road, education, health etc

Non-Developmental Expenditure, refers to the expenditure of govt which not directly help in Economic development of a Country, such as govt expenditure on military, defense

Govt debt, refer to the debt own by the govt.

When govt revenue is less than govt expenditure then govt borrows money to cover this situation, This called Govt debt.

Impact of Tax, refers to the initial burden of Tax.

Incidence of Tax refers to the final burden of Tax.

Taxable income, refers to Total income minus exempted income from Tax.

Net Tax, refer to Total Tax minus govt Transfer payment.

Tax, refer to a mandatory payment made by individuals or entity to the govt, to fund public services.

Tax evasion, refer to a criminal activity that involves intentionally hiding income or assets from the Tax Authority / Authorities in order to avoid paying Tax.

Tax exemption refer to a type of Tax relief that allows individuals, organizations or activities to avoid paying taxes that would normally be required by law.

Economical Tax, refer to a Tax which Collection cost is low, called Economical Tax

Advalorem Tax, refer to a Tax which is levied as a percentage of value of a good or service.

Specific Tax, refer to a Tax which is levied as a fixed amount per unit of good or service.

Progressive Tax, refer to a Type of Tax which rate increase as income or wealth increase.

Regressive Tax refers to a Type of Tax which rate decrease as income or wealth increase.

Direct Tax refer to a Type of Tax that is directly paid by the person or entity being taxed
→ Direct Tax is a Tax which burden cannot be shifted.

Indirect Tax, refer to a Type of Tax which burden can be shifted to others and paid by the end consumer or producer.

Lump-Sum Tax, refer to a Type of Tax which is a fixed amount of Tax which is same for everyone regardless of income and wealth of Taxpayer
[Lump-Sum Tax is a Tax which imposed on certain profession in the form of an arbitrary fixed amount e.g Tax on small business or profession]

Proportional Tax refer to a Type of Tax which rate remains same regardless of income and wealth of Taxpayer.

Lump-Sum Tax & Proportional Tax also called Flat Tax.

Canons of Taxation, refers to the principles used to guide the design of a Tax System. It includes

Equity, Certainty, Convenience and Efficiency

① Equity / Fairness

The Taxes Should be Distributed fairly among Tax Payers based on their ability to pay.

② certainty

Tax Payers Should know in advance how much Tax They are expected to pay, how it is to be paid, and when it is due

③ Simplicity, The Tax System Should be Simple and easy to understand

④ Convenience,

Every Tax must be imposed at the Time or manners in which it most likely happens to pay it

⑤ Transparency, The Tax System Should be transparent with Taxpayers being full informed about the Taxes They are paying and how govt is spending the collected revenue

⑥ Economy, The cost of collecting Tax Should be minimum.

⑦ Flexibility in Tax

Diffusion Theory of Taxation: This Theory Suggests that burden of a tax is not only born by the person or entity upon which Tax is levied but also by other parties who are indirectly effected by the Tax, means that impact of Tax is spread out across a wider range of people than just to those who pay the Tax directly.

E.g Direct Tax payer may shift the Tax burden into others indirectly by raising prices, lowering wages, reducing investment etc.

Entity, refers to something that exists and has a distinct and independent existence.

In finance, Entity refers to an Organization, company or individual that is legally recognized as a separate and distinct entity for Tax, accounting or legal action.

Different forms of State borrowing

① Internal / Domestic borrowing, when a govt or an organization borrows money within its own country is called internal borrowing. E.g Sale of govt bonds....

② External borrowing, when a govt or an organization borrows money from outside of its own country is called external borrowing. E.g Sale of govt bonds to foreign investors or loan taking from international institution like IMF, World bank etc.. by issuing bonds.

③ loan from Central bank, refers to when a govt or an organization borrow money from central bank directly. This is usually Short-Term loan.

National debt, refers to the total amount of money that a govt owes to its creditors.

National debt refers to the total amount of money that a country's govt owed due to borrowing.

Hicks classification of National debt

① Deadweight debt, refer to a debt which is not covered in any asset. E.g. Debt invested on war or on prevention of war etc.

② Passive debt, refer to a debt which spends on those projects which neither yields money nor help in increasing productivity, they simply provide enjoyment to citizens, such as debt spends on public park, museums, public buildings etc.

③ Active debt, refer to a debt which is spent on those projects which directly help in increasing productivity of a country and yielding money, income

J.L Hanson classification of national debt

① Deadweight govt debt

② Funded debt, are long-term govt debt and the govt paying annual interest on such debt/loan but make no promises to pay the principle sum of money to the lender on specific date. War loan, govt stocks etc.

③ Unfunded loan/debt or floating debt, is a short-term loan, it is payable to the lender with interest on fix date or after fix date.

④ Reproductive govt debt, when a debt has assets to balance it, it's called reproductive debt.

E.g. if govt borrow to spend it on construction of canal, irrigation system, factories etc, it is able to repay the loan from these liquidating projects.

Short-Term loan, refer to Those loans that are borrowed for short period of time, typically for upto 1 year, to finance Short-term needs such as working capital, inventory or unexpected expenses etc. These loans have higher interest rates.

Long-Term loan, refer to Those loans that are borrowed for long-period of time, Typically for more than 1 year, to finance long-term investments such as real estate, machinery or equipments etc
→ These loans have lower interest rates.

Real estate, refer to The property in the form of land, building and any other structures that are attached with land permanently.
→ It includes both residential and commercial properties.

Commercial, refer to activities or properties related to buying and selling goods or services for profit like as office, retail store, hotel...etc

Retail, refer to The sale of goods or Services directly to consumer for personal uses or consumptions :-

Lease, refer to an agreement b/w lessor (property owner) and lessee (Tenant) That allows the lessee to use the lessor's property for a specific period of time in exchange for periodic payment.

public Finance vs Private finance

Public Finance deals with govt revenue and govt expenditure and its accounts while private finance is concerned with individual or corporate finance.

public finance aims to achieve policy objectives that benefits society as a whole, while private finance is focuses on meeting personal or corporate financial goals.

Corporate finance, refers to the financial management of corporations / company to maximizes shareholder value and achieve financial goals.

Fallacy of Composition, refer to the phenomenon that we generally have the impression that what is good for each person separately, is also good for all or what is good action for private individual is also true for the govt behaviour.

Sale Tax is levied by the federal govt in pakistan
Provisional Tax in pakistan is Sale Tax

Source of revenue for local govt in Pak is property tax

In Pakistan Income Tax is collected by federal govt.

Tariff, refer to a Tax on imported or exported goods, often used to protect domestic industries or generate revenue for govt.

Levy, refer to an imposed Tax or fee. It is often used for a specific purposes such as road maintenance levy, petrol levy etc.

Duty, refer to a Tax or fee imposed on imported or exported goods often used to regulate Trade or raise revenue for govt.

Quota, refer to a limit imposed on quantity of a particular product that can be imported or exported.

Exchange control, refer to govt regulations on the flow of capital in and out of the country

Excise, refer to a Tax imposed on certain goods produced within a country, such as Tobacco, alcohol, gasoline etc.

TOT, refer to The Term or rates at which the product of one country are exchanged for product of other country

Commodity Term of Trade, refer to the rate at which given volume of export is exchanged for a given quantity of import.

$$T^e = \frac{P_x^1}{P_x^0} \div \frac{P_m^1}{P_m^0}$$

P_x^1 - export price index of base year
 P_m^1 → Export price index of requested year.

public good, refer to those goods and services that are non-excludable and non-rivalrous, meaning that they are available to everyone and consumption by one person does not reduce availability to others.

private good refers to those goods and services that are excludable and rivalrous, meaning that access can be restricted and consumption by one person reduces availability to others.

Externality refers to a cost or benefit that affects a third party which is not involved in a transaction.

Embargo refers to a government-imposed ban on trade with another country.

Ricardian equivalence states that if govt borrows by decreasing taxes, then it will have to repay it by imposing tax in future, this point of view is called ricardian equivalence.

{ Public debt is equal to future Tax.
Future Tax will equal to present Tax cut }

Tax refers to the Compulsory Contribution of individual, firms, & industry, businesses to the Govt revenue.

Subsidy, refers to the amount which paid by the Govt to firms, industries, businesses for the purpose of to lower the price of the thing for the consumer/buyer

Steady State refers to an equilibrium where the economy's output and capital stock remain constant over time.
→ At Steady State investment equal to depreciation.

Golden rule level of Capital, refers to the level of capital stock that allows an economy to invest in just the right amount of capital to maintain its level of productivity over time and to sustain () a steady state of economic growth.

OR

It is the level at which $MPK = \text{depreciation}$ and consumption is at highest possible level.

Golden rule level, refers to the optimal level of consumption and investment that maximizes sustainable economic growth subject to various constraints.

Golden rule level of consumption refers to the optimal level of consumption that maximizes sustainable economic growth over time, at this level the economy is consuming and saving enough to maintain a steady state of economic growth over the long-term.

Sustainable Economic Growth, refers to the pattern of economic growth that can be maintained over the long-period / long-term without causing negative effect on the environment or depleting natural resources.

Sustainable Economic Development, refers to the pattern of economic growth that aims to balance economic, social, and environmental factors for the well-being of society.

International Trade

Trade, refers to the exchange of goods and services between peoples, countries or regions etc

Domestic Trade, refers to the trade between various regions of same country.

International Trade, refer to the exchange of goods and services between different countries of the world.

Advantages/benefits of International Trade

Increase Economic growth, Greater efficiency, Increase competition, Great variety of goods and services availability, Access to new markets

Disadvantages of International Trade,
Includes increase competition, loss of jobs, negative effect on the environment,

Free Trade, refer to the removal of Trade barriers, allowing goods and services to flow freely b/w countries to promote open markets.

Dumping, refer to a situation where a foreign firm sells its exports at lower price than its cost or price in their domestic market.

protection, refer to a policy in which domestic industries are protected from foreign competition.

ISO, International Standard organization is a setting body which fix world-wide industrial and commercial standards.

ISO - 9000 — Quantity management for business
ISO - 14000 → Environmental management.

ISO - 22000 → Food Safety management System

ISO - 26000 → Social responsibility.

ISO - 31000 → Risk management

ISO - 51000 → Energy management.

Mobility of factors, refers to the ability of factors (e.g labor & capital) to move across the borders to where they are needed for production
 → and it conversely called immobility of factors.

Free Rider Problem, it occurs when firms or individual get benefits from a public good without paying for it, leading to under-provision of the good.

Comparative Cost Advantage Theory OR
Classical Theory of International Trade,
also known as Comparative advantage
Theory of International Trade.

This Theory States That Trade is based on comparative advantages and -the differences in relative cost of production. This Theory states that a country should specialize in producing the goods and services that it can produce at a lower opportunity-cost than other countries.

Absolute Advantage Theory, states that a country should specialize in producing goods and services that it can produce more efficiently than other countries.

Factor Proportional Theory OR
(H-O) Ohlin-Heckscher-Ohlin Theory

This Theory explain that Trade patterns is based on relative abundance of factors of production such as labor & Capital. This Theory based on the idea that country will specialize in producing and exporting those goods which require factors of production that the country have in abundance and export goods that requires for which are relatively scarce in the country.

Differences in Relative Cost is base for International Trade
Because it allow countries to specialize in producing the goods and services that they can produce more efficiently and Trade with other countries for the goods and services that they cannot produce efficiently.

Factors Abundance / or Abundance factors refers to The relative availability or Abundance of Factors of production
such as labor and Capital, land and natural resources

MNC's are companies that have operations in multiple countries but are based in one country. These companies have usually a centralized management structure and strong home country has influence in decision making.

TNC's are companies that have operations in multiple countries but not tied to any specific countries.

These companies have usually a decentralized management structure.

Centralized or centralization refers to a system or organization in which power (decision making and controls) are distributed among multiple individuals or entities.

Decentralized or Decentralization refers to a system or organization in which power are concentrated in the hand of few individuals or entities or central authority.

Globalization refer to the increasing interconnectedness of the world economies, societies and cultures.

Global Economy refers to a system of interdependent economies that participate in international Trade and capital flows.

Urbanization refer to the process of increasing the proportion of people living in Urban areas.

Exchange rates, refer to the buying and selling of currencies from different countries.

(Exchange rate refers to value of one currency in relation to other currency).

Real exchange rate, refers to the exchange rate adjusted for inflation, which reflect the relative purchasing power of two currencies.

Nominal exchange rate, refers to the exchange rate without adjustment for inflation, which reflect the relative value of two currencies.

law of one price, states that the same goods can be sold at different prices in different locations at same time.

Capital flow (CF), refer to the movement of funds b/w countries for investment purposes.

Capital inflow, refer to the amount of funds that foreign investors invest/lend here.

Capital outflow, refer to the funds that domestic investors invest abroad.

Net capital flow, refer to the difference b/w capital inflow and capital outflows.

Trade balance, refers to the difference between country's export and import.

Trade Surplus, refer to the situation where country's export is more than its import.

Trade deficit, refers to the situation where country's import is more than its export.

Net export, refers to the value of country's export minus its import.

World interest rate, refer to the interest rate that prevails in the world financial market (r^*).

World financial Market, refer to a global market setup where individuals and institutions buy and sell financial assets from anywhere in the world.

Laffer curve, Shows relationship between Tax and government revenue

Is free Trade good for Economic growth?

Free Trade is generally considered beneficial for economic growth as it promote efficient allocation of resources, greater competition, innovation and expand the market for goods and services.

however some argue that free trade can lead to Joblessness in certain industries, widening income inequalities, etc

Difference b/w Exchange rate & Foreign exchange

Balance of payment

BOP, Show financial record of Transactions between a country and the rest of the world.

BOT, is a component of BOP, it specifically show the financial record of country's export and import.

BOP Accounts.

① current account, is an account of BOP, which consists of sum of all sale and purchase of currently produced goods and services, investment income, gifts, grants, remittances etc.

② Capital account, is an account of BOP, which shows records of short-term and long-term Capital inflow and outflow, loan and investment.

③ Financial account / Monetary account / official reserve account is an account of BOP, which shows record of, how much a country has foreign reserve to correct its BOP deficit.
It includes FDI, long-term loan

Disequilibrium in BOP, refer to the imbalance in a country's international transactions, resulting in a deficit BOP or Surplus BOP.

Depreciation, refer to the falling of external value of a currency in free/floating exchange rate.

Appreciation, refers to the increasing of value of a currency in free/Floating exchange rate.

Devaluation, refer to the decrease in external value of a currency announced by the govt authority.

Revaluation, refer to the increase in value of a currency announced by the govt authority.

Structural Disequilibrium in Bop, is occurred when export of a country falls due to increase in the reward of a factor of production.

International BOP refer to the statement that take into account the debt and credit of a country on international account during a year.

International BOT, refer to the statement that take into account the total value of exports and imports of visible commodities of a country on international account during a year.

Visible Commodities, refer to the commodities which when exported or imported are recorded to the Trade account on the books.

Autonomous Transaction, refers to Those international Transactions That are taken with The sole motive of earning profit, They are also called 'Above -the line item' in Bop.
→ They are independent of Bop Status.

Accommodating Transaction or refers to those international Transactions ,That are executed to bring equilibrium in Autonomous items.
→ it is also called " Below The line item " in Bop.
→ They are dependent of Bop Status .

The line item in Bop, refers to The Transactions in The Bop account that do not effects the country's overall economic balance, Such as Aid, grants, debt forgiveness etc

The line item in Bop refers to Those Transaction in Bop account That effect the Country's overall Economic balance such as export, import, loan, foreign investment etc.

Autonomous item in Bop, refer to The Transaction in Bop account That are not influenced by The Economic policies of the Govt or central bank Such as private remittances, Tourism, International Trade etc

Economic Development

Growth, refer to an increase in size or quantity such as plant growing taller, or a company revenue increasing etc.

Economic growth, refer to an increase in production, output or per capita income within an Economy.

Development, refer to the process of improving or progress over time such as a child developing new skills etc.

Economic development refer to Economic growth coupled with structural changes within an Economy.

Sustainable development, refer to a development that meet the needs of the present generation without compromising the ability of future generation to meet their own needs.

Instantaneous growth rate refers to the growth rate at a point of time

Compound growth rate refers to the growth rate over a period of time.

Four wheels of Development

- ① Human resources, They are the people who contribute their skills, knowledge and labor to an organization, Community or Country.
- ② National resources, refer to the natural resources a country posses and can use for Economic growth and development.
- ③ Capital resources, refer to the man-made tools, equipments and infrastructure used to produce goods and services.
- ④ Technology, refer to the use of scientific knowledge and innovation to create new products, Services and process that improve human life and productivity.

Communist revolution in Russia in 1917, is marked by beginning of communist rule in Russia, by Karl Marx ideology, This revolution aim was overthrow of Capitalism system, redistribution of wealth, etc, and this revolution led to establish Soviet Union.

GAAT, is a global Trade agreement Signed in 1947 that aims is to reduce Trade barriers to international Trade and promote Economic growth.

Developing Countries refer to those countries which are undergoing economic and social changes and are working towards greater industrialization, modernization and economic growth.

Developed Countries refer to those countries which are having high level of Economic development, high living standard and advance infrastructure.

Under-developed Countries or Less Developed countries are those countries that have low level of Economic development, low living standard and limited infrastructure.

Solow Growth Model, is a theoretical model that explain economic growth in terms of capital accumulation, Technological progress and labor force growth. This model show long-term Economic growth.

Domar Growth Model, is a theoretical model which suggests that economic growth is driven by the amount of saving and investment in a country, which leads to an increase in capital stock and consequently Economic growth.

→ This model emphasizes the importance of investment in Economic growth.

Measures of Economic development

- ① Increase in real GDP as measure " 1970
- ② Increase in per capita income as a Measure
- ③ Increase in overall well-being of people as a Measure
- ④ HDI as a measure of Economic development
- ⑤ Basic needs or physical quality of life as a Measure

Benefits of Economic growth

- It helps in increasing material standard of living things
- It allows Economy to have more consumer goods and producer goods.
- It increases employment opportunities.

Cost of Economic growth

- ① Economic growth can lead to pollution, Traffic etc
- ② Economic growth can also cause to decrease our scarce resources due to high level production.
- ③ Economic growth can lead to reduce quality of life due to pollution, smoke etc

Human Development, is the process of improving people's well-being and opportunities through social, economical and political development.

HDI, is a measure of Human development that take into account factors such as education, life expectancy, and per capita income to compare the development level of different countries of the world.

Common Characteristics of Developing Countries.

Burden of international debt, low per capita income, low productivity level, High population growth rate, unproductive use of funds, inappropriate investment decisions, Agri. etc., main occupation, Brain Drain

Brain Drain Theory, States that highly skilled or educated people leave their home country, to work & live in another country, often resulting a loss of valuable human capital for the home country.

Obstacle to Economic growth of developing countries :

Political instability, corruption, over-population, wrong job, lack of investment, inefficient human capital, dual economy, market imperfection, demonstration effect etc.

Dual Economy, refer to a phenomenon where a country has both traditional and modern sector, often resulting income inequality and limited growth rate.

Market imperfection, refer to the idea that market do not always functions efficiently due to factors such as imperfect information, externalities, etc.

Demonstration effect, refer to the phenomenon where people's consumption and behaviour are influenced by other people's consumption or behaviour.

Liberalization refer to the reduction or removal of govt restrictions on economic activities, leading to greater economic freedom and market based competition.

liberal / Liberalize Economy, refer to an Economic system that characterized by free market principles, minimum govt intervention, and individual economic freedom.

→ This Economy based on Laissez-fair principle

Minimum wage law, is a law that set a legal minimum wage / amount that employers must pay to their employees for their labor. It is intended to ensure that workers are paid a fair wage.

Efficiency wage Theory is a theory which suggests that paying more wage to workers than market wage rate, can motivate workers, improve productivity, increase job satisfaction, which can leads to long-term cost saving for firms.

1st efficiency wage theory, states that higher wage rates can improve worker health and reduce absenteeism. This theory can employ in case of developing countries.

2nd efficiency wage theory, states that paying higher wages can attract more qualified and productive workers. This theory can employ in developed countries.

3rd efficiency wage theory, states that higher wages can enhance workers' moral and job satisfactions, leading to increase productivity.

4th efficiency wage theory, states that higher wage can single the quality of the job to workers and will improve efforts of worker.

Turnover, refer to the total amount of revenue generated by a company over a specific period of time.

Insider and outsider Model, explain that the insider (the worker who employed in firm) desire that the firm should increase wages while the outsider (the unemployed workers out of firm) desire that the firm should decrease wages to create employment opportunities.

Process of creating destruction, creative destruction is the process by which new innovations and Technologies replace older (less efficient one) resulting both the creation and destruction of businesses and jobs.

Technological progress, refer to the development and use of new Technologies that increase productivity and efficiency, leading to Economic growth and higher standard of living.

Okun law, State / Show the relationship b/w changes in unemployment and change in real GDP.
It suggests that for every 1% increase in real GDP - the unemployment rate will decrease by a certain amount.

Vendor performance refer to the evaluation and measurement of a Supplier's ability to meet the requirements and expectations of its consumers, typically measured through delivery, quality, cost and time.

Mineral Development Agencies in Pakistan.

Resources development corporation - RDC

Gemstone corporation of Pakistan limited - GEMCP

PAKISTAN mineral development corporation - PMDC

Geological Survey of Pakistan - GSP

152

Mineral resources refer to the natural substance found in earth crust, that have economic value, such as Coal, Iron, Copper, Gold, Gas, etc.

CNG, Compressed Natural Gas, is a fuel made from gas that is compressed and used as a cleaner-burning alternative to gasoline and diesel.

Cleaner-burning fuel, refers to fuel that produce fewer harmful emissions when burned such as natural gas, ethanol etc.

Gasoline is another term for petrol, it refers to a fuel that is used in gasoline / petrol engines, it is highly flammable liquid that is made from crude oil.

Crude oil, refers to a naturally occurring liquid that is found in geological formation that is used to produce a variety of petroleum products including gasoline, diesel fuel, heating oil etc.

Diesel is a fuel that is used in Diesel engines, it is made from crude oil and is less refined than gasoline / petrol.

Petroleum, refers to a naturally occurring liquid that is refined to produce diesel, gasoline and other fuels which used to power vehicles.

LPG, liquefied petroleum gas is a flammable gas that is compressed and stored as a liquid and used for heating, cooking, transportation etc.

Five year plans refer to a series of Economic development plans.

Pakistan Five year Plans

1st Five Year Plan, 1955-60, aimed to boost Agriculture, industrialize the Economy and increase per capita income

2nd Five Year plan, 1960-65, aimed to improving infrastructure, developing heavy industries and Strengthening institutions.

3rd Five Year plan, 1965-70, was interrupted by PAK-INDO war but still managed to focus on rural development and poverty reduction.

4th Five Year plan, 1970-75, aimed to shift the economy toward Socialism, nationalizing industries and promoting corporate farming.

5th Five Year plan, 1978-83, aimed to revive economic growth and tackle poverty but was disrupted by political instability and The Soviet-Afghan war.

6th Five year plan, 1983-88, aimed on improving energy production, expanding the industrial base and increasing export.

7th Five Year plan, 1988-93, aimed to promote Social development, decentralization and good governance while also privatizing state-owned enterprises.

8th Five year plan, 1993-98, aimed to liberalize the economy, reduce govt intervention and promote Private Sector development.

Paris Club, is a forum where official creditors meet together to solve the payment difficulties of loans taken by debtor countries. (1st meeting of Paris Club 1956).

IMF, is an international organization that provides financial assistance and advice to developing countries to promote economic growth and stability.

World Bank, is an international organization that provides financial and Technical assistance to developing countries to promote economic growth and reduce poverty.

Asian Development Bank, ADB is a regional development bank that provide financial assistance and Technical Support to member countries in Asia, to promote economic development and reduce poverty.

Islamic Development Bank, IDB is a multilateral development bank that provide financial and Technical Support to its member countries, to promote economic and Social development, and it operate according to Islamic principles and Shariah.

International Finance Corporation, IFC - 1956, is an international corporation that provides financial support for industrial projects to private enterprises in developing countries.

Micro Finance refer to the provision of financial services to low income individuals who typically lack access to Traditional banking services.

Micro Finance bank, refer to a financial institution that specializes in providing microfinance services to low-income individuals, typically offering a small loans, saving accounts etc

Investment Corporation of Pakistan, ICP, is a govt-owned company that provides long-term investment opportunities and financial support to promote Pakistan's economic development.

National Investment Trust, NIT is a mutual fund company in Pakistan that offers individuals and institutions a diversified portfolio of stock and bonds to invest in it.

Karachi Electricity Supply Corporation, KESC is an electric utility company in Pakistan that generates, transmits and distribute electricity to Karachi and its surrounding areas.

FDI, refer to the investment made by a Company in foreign countries to establish a long-term business interest.

Portfolio, refer to collection of financial assets held by an individual or an institution for investment purposes.

Economics vs Economic

Economics
is an
academic
field.

Economics is a social science that studies how individuals, business, govt and society allocate their scarce resources to satisfy their needs and wants.

While

Economic is an adjective that describes something relating to Economy or Financial system such as Economic growth, Economic policies etc

Economy, refer to a geographical area or country's economic condition, status and economic activities such as consumption, production, distribution of goods and services.

Economic System, refer to the rules, institutions and customs that shape economic activity within a country.

Grants refer to a financial award, it is a sum of money given to an individual or an organization by a govt or other organization for a specific purpose or project

1

Aid, refer to a form of help (Financial or material help) given to an individual, or a country in need, to promote development or alleviate suffering.

Unemployment

Labor refer to the physical or mental work that people do for reward.

laborer refer to someone who do the physical or mental work for reward.

Labor force, refer to the total number of peoples who are either employed or seeking employment, in an Economy.

Dependency ratio, refer to the number of non-working people relative to working-age people in an Economy.

Participation ratio, refer to the percentage of adult population that is in labor force.

$$\text{labor force participation ratio} = \frac{\text{labor force}}{\text{Adult population}} \times 100$$

or \rightarrow labor force - population %

Disguised unemployment, refer to the situation where people are employed but their work is not contributing to the overall output of the country.

Employment, refer to the state of having job and earning wage or salary
OR

Unemployment refer to the state of being without a job or seeking work
OR

refer to the number of people who are able and willing to work but are unable to find employment on current market wage rate

Employed, refer to the individuals who are currently working and receiving wage or salary for their job.

unemployed, refer to those individuals who are actually seeking employment but are unable to find a job.

Under-employment, refer to the situation where an individual are employed but not fully utilizing their skills and ability or not earning sufficient income to meet their basic needs (refers to people who are working in jobs that are below their skill level).

Unemployment rate, refer to the percentage of labor force that is unemployed.

$$\text{Unemployment rate} = \frac{\text{number of unemployed}}{\text{labor force}} \times 100$$

Mobility of Capital, refer to the ability of Capital to move between regions or industries.

Mobility of labor, refer to the ability of workers to move between regions or industries in search of employment opportunities.

① occupational mobility, refer to moving from one profession to other profession.

E.g.: A PST Teacher leave Teaching and start business.

Occupational mobility has Two Types

(i) Vertical mobility, refer to moving of labor from one profession to other profession but have the same grade or level.

E.g. When a Teacher of grade 17 become Assistant director of grade - 17.

(ii) Horizontal mobility, refer to the movement of laborer from one profession to other profession having different grade and income.

E.g. When a PST Teacher becomes SS.

② Geographical mobility, refer to movement of ^{worker} from one place to another place.

③ Social mobility, refer to changes in social status of laborer.

E.g.: Son of farmer becomes SS. etc

population, refer to the total numbers of people living in a given area or Country.

Problem of population growth, refer to the challenges associated with a rapid population growth such as Strain on resources, increase demand for Jobs and housing, Traffic, decrease in per capita income etc

problem of unemployment, refer to the challenges associated with a lack of employment opportunities and high rates of Joblessness such as poverty, Social exclusion, reduced economic growth etc

labor force problem, refer to the issues associated with labor force such as unemployment, Skills mismatch, low wages that effects the productivity and well-being of workers etc

Social exclusion, refer to the process of exclusion of certain group or individuals from participating fully in society.

Sectoral shift,

refer to the movement of resources, capital and labor from one industry or Sector to another, often driven by change in Technology, consumer demand or govt policy.

Production efficiency refer to the ability of a firm or an economy to produce a maximum possible output of goods and services with a given set of inputs such as labor & capital.

Factors accumulation, refer to the process of increasing the quantity or quality of inputs used in production in order to increase production / productivity of an Economy.

Working man, refer to a male who is employed and earn money by doing a job, often in manual or industrial sector etc.

Working woman, refer to a female who is employed and earn money by doing a job, often in manual or industrial sector etc.

Efficiency of labor mean how well the workers use their time and resources
it refers to productive capacity of labor

Productivity of labor refer to output per worker, per unit of time.

Duration of unemployment (Short-run & long-run)

Duration of unemployment refer to the length of the time an individual remain unemployed, measured either in short-run (upto a year) or long-run (over a year).

Types of Unemployment.

① Structural unemployment, refer to a Type of unemployment that occurs when workers do not have the skills or qualification needed for the job.

② Cyclical unemployment, refers to a Type of unemployment that occurs due to fluctuations in business cycle and in the Economy.

③ Seasonal unemployment, refer to a Type of unemployment that occurs when employment opportunities are limited to a certain time of the year.

④ Frictional unemployment refer to a temporary unemployment that occurs when people are searching for new job.

Agriculture

Agriculture Economic, is a branch of Economics which deals with the study of production and distribution of Agriculture products.

Sector refer to a part of The economy That is characterized by a specific set of activities or services.

Primary Sector, refer to The part of The economy That is involved in the extraction, and production of natural resources, Such as Agri, fishing, mining, forestry etc.

Secondary Sector, refer to The part of the economy that is involved in production of goods including manufacturing, construction, energy generators etc.

Tertiary Sector, refer to The part of The Economy That is involved in the management of public resources and services, Such as health, education, defense, law etc.

Agriculture Sector refer to The part of The economy that involved in Agriculture activities, Such as crops production, livestock, fisheries, etc

Industrial sector refer to The part of The economy That is involved in the production of goods, including manufacturing, construction, etc

Services Sector, refer to The part of The economy That is involved in providing services

Health Sector, refer to the part of the economy that is involved in the provision of healthcare services, including clinic, hospitals, medical research etc.

Education Sector, refer to the part of the economy that is involved in the provision of education and Training Services, including schools, colleges, universities etc.

Agriculture Price policy, refer to a policy which consists of all those policies which are made by the govt for the purpose of to effect Agri output & input prices.

Cobweb Theorem, refer to a phenomenon that how changes in supply and demand effect prices in the market.

\rightarrow if $S > D \rightarrow P \downarrow S$. Then $S \downarrow$ and eventually higher prices and vice versa.

Trickle-down Phenomenon, is a theory which states that if the govt provides benefits to the wealthy then its will ultimately benefits everyone in the society.

Cobra effect, refer to a phenomenon that occurs when a policy intended to solve a problem, actually make it worse or even create a new problem.

E.g. govt give reward on each rat tail....

Land reforms refer to the government-initiated changes in ownership, distribution and use of land.

Land Tenure System, refer to the system of land ownership, control and transfer in a given society.

OR

Land Tenure System refers to a system which related to right of land and use of land; it shows the relationship among landlords, cultivators and government.

① Rajatwari System, refer to a land revenue system under which individual farmers were taxed, based on the amount of land they cultivated.

② Mahalwari System refers to a land revenue system under which revenue were collected from groups of villages rather than individual farmers.

③ Zamindari System refers to a land revenue system where landlords or Zamindar were granted the right to collect taxes from farmers in exchange for providing certain services and protection.

Land Revenue System refers to the system where govt collects revenue from landlords or landowners based on the amount of land they own.

Cottage, refer to small businesses run from home, with simple tools and manual labor, typically producing handicrafts or artisanal products.

Small Scale Industries, refer to a business that have a limited production capacity and employ relatively a small number of workers and use less advanced technology.

Agro based industries refer to those businesses that process raw materials derived from Agri sector products, such as Textile industries, Food processing industries etc

Farm mechanization, refer to the use of machines for conducting operations replacing the traditional methods which involves human and animals labor.

Cooperative farming, refer to a system in which pool their resources, land and labor to jointly produce Agriculture goods.

Livestock refer to domesticated animals that are raised on farms or ranches () for food, meat, fibers or other products. e.g. cow, sheep etc

Fisheries refer to the activity involved in catching, breeding and processing fish and other aquatic animals / organisms for human consumptions or other purposes.

Mining refers to the extraction of valuable minerals or other geological materials from the earth.

Types of Agri credit.

① Short-Term credit

Those loans which maturity date of Agri credit refers to and it used for purchase of seeds, fertilizers etc.

② Medium-Term credit

Those loans which maturity date of Agri sector refers to and it used for cattle etc in Agri sector.

③ Long-Term credit

Agri maturity date is more than five years and is used for machines, Tubewell, building etc in Agri sector.

Agriculture Marketing, refer to the performances of business activities that direct the flow of Agri goods and services from farmer to consumers.

Green Revolution, starts / comes with the introduction of high yield variety (HYV) of wheat seed by Doctor Borlaug in 1950.

Supportive price / Procurement, It refers to

The minimum price which determined by the govt especially for farm produce in order to maintain a certain price level. This price determined through

① cost of production method

② parity approach (determination of price of good on the basis of price of other good).

Types of Land tenure System.

① Private land / lordism. Under this system the individual is the owner of the land, and they (owners) pay revenue under periodical settlements. (This type of land tenure system is in Pakistan).

② Rajwari System, Under this system the govt give land directly to the peasants / cultivators without the involvement of landlords (This type of land tenure system is in Sindh)

③ State-land / lordism Under this system the govt act as a landlord and the cultivator is the tenant of the state and the tenant is allowed to cultivate the land.

Pakistan Irrigation Systems

- ① Ground water / Glacier melt
- ② Gr. under ground water
- ③ Rainfall water.

Needs for land reforms, land reforms is necessary to solve the issues of poverty and social justice in Agri sector.

The needs of land reform arises from issues such as unequal land distribution, Tenancy, lower productivity of land, unused land, rising population, better Utilization of land, to abolish the Unnatural Agri monopolies..

1st land reforms / 1949

Was introduced by
It was recommended that
Jagirdari should be abolished
land-lords have no more than 150 acres canal
land lords not have more than 450 acres Barrani
No land owner should be paid more than 15 lac
in compensation.

The 1st land reform focused on the abolition of the
feudal system and redistribution of land.

2nd land reforms — 1958

Was introduced by Ayub Khan
It was recommended that
Jagirdari should be abolished
landlord should not have more than 500 Acres canal
irrigated land and 100 Acres Barrani irrigated land,
and the extra land was taken by govt and
distributed among those who have less or
no land.

The second land reforms focused on the Tenancy
and regulation of the Tenancy contract.

3rd land reforms was introduced by Z.A. Bhutto in December 1972

It was recommended that,

Jagirdari should be abolished

landlords should not have more than 150 acres canal
irrigated land and 300 Acres Barrani irrigated land.

Govt will not pay any compensation to landlords

The 3rd land reforms focused on the land
development, infrastructure and Agriculture
Support Services.

Importance of Agri Sector, Agri Sector play a very important role in Economic Development of a country, particularly in developing countries, it provides food, raw materials for industry, contribution to export-earning, provide employment opportunities....

Problems of Agri Sector in Pakistan refers to the challenges faces by Agri Sector in Pakistan, such as low productivity, lack of Access to credit and markets, landlessness, climate change,...

Agriculture and Environment, Agri Sector can have both positive and negative impacts on the environment.

Positive impact

It promote Soil conservation, biodiversity, food availability, employment opportunities, Carbon Sequestration, better/clean atmosphere, Oxygen production, earning Source in foreign exchange

Negative impact

it can contribute to soil erosion, water pollution, deforestation, Agri wastes, use of fertilizers,

Business cycle

Business cycle refer to the rise and fall of economic activities in a country over time

Trade cycle refer to the rise and fall in a specific sector of an Economy over Time.

Phases of Business cycle

① Expansion

refer to that phase of business cycle which show period of increasing economic activities, where employment, production and income, all growing.

② Peak

refer to that phase of business cycle which show highest point of Economic activities, where growth begins to slow down and reach its maximum.

③ Contraction / Recession

refer to that phase of business cycle which show period of decreasing economic activities, where production, employment and income all are declining

④ Trough Depression

refer to That phase of business cycle which show the lowest point of Economic activity where Contraction phase comes to an end and economic growth begins to pick-up again.

Theories of Trade Cycle

① Sun-Spot Theory, According to this theory, Trade cycle are generated due to changes in climate and weather conditions, such changes bring certain spots on face of Sun, so Agriculture activities will effect and so it will have negative effects on Industrial sectors and thus Depression will occur.

② Psychological Theory, This Theory States that fluctuation in the economy are driven by changes in mood and behaviour of peoples, rather than fundamental factors like productivity or Technology etc.

According to This Theory emotions, beliefs, and expectations play an important role in Trade cycle.

Eg- When people feel optimistic () and confident then they invest and spends more which leads to economic growth and vice versa.

③ Hawtrey Theory of Trade cycle

This Theory States that money supply and banking systems are responsible for Trade cycle.

④ Monetarists Theory of Trade cycle, States that fluctuations in money supply are the main cause of economic cycle. Monetarists recommended that govt should keep the money supply stable to prevent economic fluctuations.

They argue that too much money in circulation can lead to inflation and too little money in circulation leads to deflation which can both harm the Economy.

⑤ Keynesian Theory of Trade cycle,

States that Economic down-turns are caused by lack of demand in the Economy. This happens when people do not spend enough money, leading to lower production and jobs loss.

Keynesians argue that Volatility of expenditure are responsible for Trade/Economic fluctuations.

⑥ Real Business cycle Theory, states that changes in real factors such as productivity, Technology and other real factors are the primary drivers of Business/Trade cycle.

According to this theory economic down-turns occurs when productivity or technology decreases, while economic upswing occurs when productivity or technology increases.

This theory oppose govt intervention.

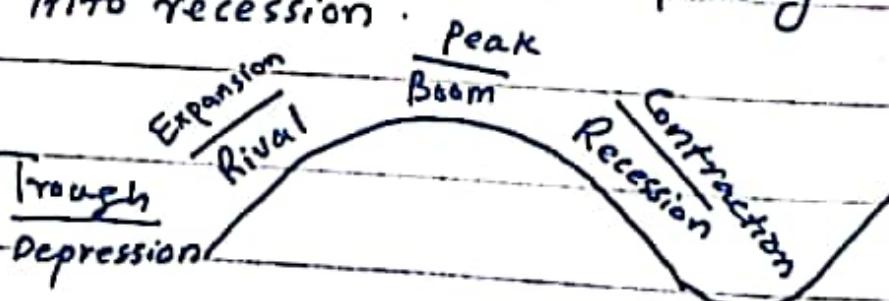
⑦ Schumpeter's Theory of Trade cycle

States that Trade cycle are generated by innovation and innovation on the part of entrepreneurship (Discovery of new methods, capital, machines etc).

Schumpeter Theory of Trade Cycle also known as Innovation theory.

This Theory Suggests that economic cycles are driven by waves of Technological innovation.

Trade / Business / Economic cycle Starts from depression, and enter into Rival Then Convert into Boom and finally turn into recession.



Economic Systems

Economy refers to a system of production, distribution and consumption of goods and services in a region or country.

Economic System refers to the set of laws, institutions, and regulations that governs how goods and services are produced, distributed and consumed in an Economy.

i) Capitalism / Market Economy / Price System

refers to an Economic System which based on private ownership of Economic resources (both natural resources and capital).

Capitalistic Economy work / function through a network of prices and market, here Govt control is minimum.

Features

Highly efficient in production due to self interest
private property

competition

limited role of govt

Inefficient in equitable distribution of wealth
More freedom of choice for consumer & producer

Capitalist refer to a person or entity that support or engaged in capitalism

2. Socialism / Communal Economy

refers to an Economic System which based on govt ownership of Economic resources (both natural and capital).

In This System govt play a dominate role in Economic matter.
means of production such as farms, factories, Shops etc are either directly owned by govt or by the govt-controlled cooperative Societies

Extreme form of Socialism called Communism or Marxism.

Features.

- Efficient in distribution of wealth and income
- State ownership of all property
- govt control over all Economic activity
- less freedom of choice for Consumers
- Inefficient in production of goods & services

The guidance principle of Socialism is "From each according to his ability, to each according to his need".

Socialist refers to a person or entity That Support or engaged in Socialism.

③ Mixed Economy, it refers to an Economic system which have combined features of Capitalism and Socialism.

In This System a part of productive activity in industry, Trade, energy, Transport and Communications is controlled by the govt but the private sector is very strong.

In general under Mixed economic System, prices of Goods and Services are determined by free market forces of demand and supply by govt also keeps an eye over the market situation and intervenes when necessary.

This System is in Pakistan

① Islamic Economic System, refers to an Economic system which based on the Islamic principles and values such as Justice, fairness and moral values.

Islamic Economic System is a govt-regulated free economy.

Socialism vs Communism, Marxism

Communism / Marxism is the extreme form of Socialism.

Both Socialism and Communism seeks to create classless society where resources and wealth are equally distributed.

Socialism allows some private ownership of property and means of production while

Communism advocates for the abolition of private property and the establishment of planned economy.