Semester VI

L	T	P	C
6	2	-	6

17CMU602B FUNDAMENTALS OF INVESTMENT

Scope

Financial Management represents how the finances are managed and their reflections on the fundamental decisions to be taken by the corporate and finance world. This paper presents the basics of Finance functions, cost of capital and working capital management.

Objective

To familiarize the students with different investment alternatives, introduce them to the framework of their analysis and valuation and highlight the role of investor protection.

Unit I

The Investment Environment: The Investment Decision Process -Types of Investments – Commodities, Real Estate and Financial Assets - The Indian Securities Market, the Market Participants and Trading of Securities, Security Market Indices, Sources of Financial Information, Concept of Return and Risk, Impact of Taxes and Inflation on return.

Unit II

Fixed Income Securities: Bond Features, Types of Bonds, Estimating Bond Yields, Bond Valuation Types of Bond Risks, Default Risk and Credit Rating.

Unit III

Approaches to Equity Analysis: Introduction to Fundamental Analysis, Technical Analysis and Efficient Market - Hypothesis, Dividend Capitalization Models, and Price-Earnings Multiple Approach to Equity Valuation.

Unit IV

Portfolio Analysis and Financial Derivatives : Portfolio and Diversification - Portfolio Risk and Return - Mutual Funds - Introduction to Financial Derivatives - Financial Derivatives Markets in India

Unit V

Investor Protection : Role of SEBI and Stock Exchanges in Investor Protection - Investor Grievances and their Redressal System, Insider Trading, Investors' Awareness and Activism

Suggested Readings

Text book

1. Prasanna Chandra, *Investment Analysis and Portfolio Management*, McGraw Hill Education

Reference Books

1. C.P. Jones, *Investments Analysis and Management*, Wiley, 8th edition.
2. Prasanna Chandra, *Investment Analysis and Portfolio Management*, McGraw Hill Education
3. R.P. Rustogi, *Fundamentals of Investment*, New Delhi. Sultan Chand & Sons,
4. N.D. Vohra &B.R. Bagri, *Futures and Options*, McGraw Hill Education
5. Mayo, *An Introduction to Investment*, Cengage Learning.

V.K. Bhalla, *Investment Management*, New Delhi. Sultan Chand & Sons

SUBJECT: : Fundamentals of Investment
SEMESTER : VI
SUBJECT CODE: 17CMU602B

QUESTION	OPTION 1
A ---------- is the allocation of funds to assets and securities af	gambling
Investment in gold and silver is considered ---------- investment	real investment
The stock that higher rate of growth than the industrial growth rate in	growth shares
Gambling is a	very long term investment
The securities issued by the central , state and quasi-government are	face value
A ----------is an activity that is engaged in by people who have s	gambling
An example of money market instrument is	bond
Government bond is a	Long-term security
Investing money in a private business is known as -------	financial investment
LIC is primarily a	broker
Financial systems includes	financial market
The differences between the sale price and the purchase price is calle	depreciation
Money market is a market for purely	long term funds
The term structure is also known as	yield curve
The shape of the yield curve can be explained by the expectations of	liquidity preference theory
Investment is the	net addition made to the nation's cap
Supply and demand for fund are segmented in sub markets because c	liquidity preference theory
If the investment is properly undertaken, then	the return will commensurate with t
Investors buy	high grade securities
The negotiable financial investment differs from non-negotiable fina	face value
Investors would prefer to hold short term bonds to minimize the poss	liquidity preference theory
Which one of the following is not a fixed income bearing security ?	debentures
Which one the following scheme helps in reducing tax liability ?	investment in real estate
Which one of the following is a contingent investment?	recurring deposit
A current account is a	liquid period
The component of a capital market is	treasury bill market
Government securities are issued in the form	risky securities
Long term loan market is	capital market
Government securities are issued in the form	pledge
_____includes the financial markets and the financial institutions	financial system
_____Includes call money market, treasury bills market, comme	Insurance company
_____risks are non-divertible and arise out of the market, nat	unsystematic risk

_____ Risk is that portion of total risks that is unique, or pecul	unsystematic risk
_____is arrived at by dividing the annual coupon price by purchase	price earnings ratio
_____is arrived at by dividing market price per share by earnir	price earnings ratio
_____The risk affects the market as a whole	unsystematic risk
_____risk is the variation in return caused by the changes in the ma	interest rate
_____ Risk is caused by inflation	purchasing power
_____Risk is unique to the particular industry or company	unsystematic risk
Which of the following risks emerges from the debt component of th	financial risk
Interest rate risk is a ----------	systematic risk
A ---------- is a pessimistic speculator	bull
Identify the uncontrollable risk of a company	technological obsolescence
In the weak form of market stock prices reflect	the past prices and traded volumes
Risk is influenced by the	internal or external risk
Risk is	certainty
Market risk arises out of the changes in the pattern of	demand and supply
Internal business risk is associated with the	external environment
External Risk is associated with the	external environment
Risk is also arise due to changes in the	company policy
Principal amount and terminal value are known with certainty	Fixed principal investments
The price of preference shares is determined by ____	Demand
The terminal value of real estate is	Certain
_____ are the integral part of an investment decision	Risk
_____ risk is alo called as operating risk	Financial risk
The objectives of any investments made by an investor	Maximization of return
A voluntary provident fund scheme called Public Provident Fund is	Post office
Fixed income securities are subject to _____ risk	Interest rate
_____ is operated by Post office and Certain authorized Banks	Public Provident Fund
building , machinery & land are considered as	Tangible properties

KARPAGAM ACADEMY OF HIGHER EDUCATION

(Deemed University Established Under Section 3 of UGC Act 1956)

Coimbatore - 641021.

(For the candidates admitted from 2018 onwards)

DEPARTMENT OF COMMERCE

CLASS : III B.COM

OPTION 2	OPTION 3	OPTION 4		
Investment	Speculation	Bonds		
risk free	risk	certain		
equity	preference	debenture		
very short term inv	medium investr	average investment		
real investment	government sec	intrinsic securities		
Investment	Speculation	Bonds		
debenture	stock certificate	certificate of deposit		
short-term security	medium-term se	neither long-term or short-term		
economic investme	business investr	social investment		
money market inter	secondary mark	lenders		
share market	financial and sh	capital market		
capital appreciation	investment	gambling		
medium term funds	short term funds	certain period		
profit curve	term curve	sales curve		
segmentation theor	expectation the	motivational theory		
person's commitme	employment of	monetary system		
segmentation theor	expectation the	motivational theory		
the return will be c	it will be liquid	not commensurate		
low grade securities	securities for sh	cost of purchase		
transferability	maturity period	interest rate		
segmentation theor	expectation the	motivational theory		
bonds	fixed deposits	equity shares		
national saving cert	equity shares	savings bank account		
bonds	equity shares	life insurance policy		
running account	mutual	temporary		
govt. securities mar	commercial bill	RBI		
not risky securities	expected securi	mutual securities		
money market	primary market	secondary market		
new method	promissory note	prepaid		
fiscal policy	economy rates	nature of the firm		
LIC	RBI	the imperial bank of India		
systematic risk	market risk	economic risk		

systematic risk	market risk	economic risk		
purchasing power	current yield	interest rate		
current yield	interest rate	dividend		
market risk	current yield	systematic		
intrinsic value	dividend policy	mutual value		
current yield	price earnings r	mutual value		
market risk	current yield	systematic		
business risk	purchasing pow	market risk		
unsystematic risk	internal risk	market risk		
bear	stag	lame duck		
cut in subsidy	labor problem	increase in loan services charges		
the demand for the	the country eco	the past price of the scrip		
internal	external	market risk		
uncertainty	appreciable	no appreciable		
supply	demand	profit		
internal environme	organization	management		
internal environme	organization	management		
market rules	dividend policy	government policies		
Variable investmen	Indirect alternat	Direct alternatives		
Supply	Demand and Su	Return		
Uncertain	Risk	Return		
Uncertainty	Risk & Uncerta	Return		
Business risk	Management ris	Political risk		
Maximization of re	Minimization o	Minimization of risk		
Certain authorized	Employee Prov	Post office and Certain authorized	Banks	
Performance	Capital	Dividends		
LIC Scheme	Employee Prov	Equity capital fund		
Intangible propertie	Tangible and In	Visible properties		

ANSWER
Investment
real investment
growth shares
very short term investment
government securities
investment
certificate of deposit
Long-term security
business investment
money market intermediary
financial market
capital appreciation
short term funds
yield curve
expectation theory
employment of funds on assets to earn return
segmentation theory
the return will commensurate with the risk
high grade securities
transferability
liquidity preference theory
equity shares
national saving certificate
life insurance policy
running account
govt. securities market
not risky securities
capital market
promissory note
financial system
the imperial bank of India
systematic risk

unsystematic risk
current yield
price earnings ratio
systematic
interest rate
purchasing power
unsystematic risk
financial risk
systematic risk
bear
cut in subsidy
the past prices and traded volumes
internal or external risk
uncertainty
demand and supply
internal environment
external environment
government policies
Fixed principal investments
Demand and Supply
Uncertain
Risk & Uncertain
Business risk
Maximization of return and Maximum of risk
Post office and Certain authorized Banks
Interest rate
Public Provident Fund
Tangible properties

SUBJECT: : Fundamentals of Investment
SEMESTER : VI
SUBJECT CODE: 17CMU602B

QUESTION
Which of the following is used in economic analysis?
A growth industry is
The investor wants to study those fundamental factors
An analysis of the whole market of securities are termed as ----------
Analysis of only scrip is called as ----------
Dividing profit after tax by the number of equity shares is equal to ----------
An investors focus on a company's basics is called ---------- approach
---------- consists of personal consumption expenditure, gross private domestic i
GDP reflects the overall performance of the ----------
A _____is a method of finding out the future price of a stock which an investo
_____is really a logical and systematic approach for estimating the future d
The _____has been defined as a homogeneous group of people doing a similar
The investor should verify whether a company follows a stable ---------- polic
mobilizing funds through issue of equity shares is known as
Return on equity is helpful in ascertaining the ---------- value
Earnings per share represents the profit earned by ----------
Profitability ratio measures ----------
Expenses ratio establish the relationship between ----------
Profitability ratio based on ----------
The development of the industry mostly depends upon the ----------
------ indicates what is going to happen in the economy
The first and foremost stage in the industrial life cycle is the ----------
_____Stage stabilize their prices, develop a market of their own strategies
The factors which have to be carefully analyzed are regarding the _____of th
There are lot of financial and non-financial aspects in _____and the investor shou
the financial statements of a company provide the best possible information about t
Financial ratios provide a standardized measure of a firm's
Financial ratios are helpful in ----------
Fundamentalists have developed certain valuation models for calculating
Ratio analysis can be used to analyses the ----------
Economic forecasting is usually based on a ----------
If the market share is _____the company would be able to meet the competition
A study of _____ ratios will be helpful in understanding the relationship

The _____ affects return on equity shareholders’ investment
Equity shareholders return can be increased by using more debts than
A company must make adequate _____ for payment of tax on its earnings
Under this method, the inventory is priced at cost price or market price, whichever
FIFO method will shows the inventory at a ---------
LIFO method will shows the inventory at a ----------
under _____ method a fixed percentage of original cost is charged as depreciati
In _____ method , the amount of depreciation will reduce from year to year
In _____method, the amount of depreciation is calculated with reference to sinl
Stability of sales ensures _____ to the company
Debentures used for ----------
An efficient management of a company will ensure _____ investment
Planning, organizing, directing, coordinating and controlling are the important fun
The company should strive to increase the return on investments and their
Ability to maintain _____ of the company within the industry, shows efficient
Ability to maintain _____ role in the market for growth of the industry
Financial statement of the company include ----------
The outsider's liabilities other than current liabilities are known as ----------
The profit and loss account is called ----------
ta
The preparation of financial statement is based on certain _____ concept
Annual reports of companies provide ----------
Daily security prices are quoted in ----------
The primary market for securities is ----------
The _____ analysis is based on security price quotation
The _____ of share means the value of net asset available per equity share c
The ----------analysis refers to an evaluation of the relative strengths and weaknes

KARPAGAM ACADEMY OF HIGHER
(Deemed University Established Under Section
Coimbatore - 641021.
(For the candidates admitted from 201
DEPARTMENT OF COMMEI

CLASS : III B.COM

OPTION 1	OPTION 2	OPTION 3	OPTION 4
gross domestic product	surveys	labor cost	diffusion indexes
an industry with 10% growth per an	an industry where dema	a capital intensive ind	an industry whos
that affect profit and dividend of a c	that influence the interes	that affect the risk and	affect profitabilit
macro analysis	micro analysis	general analysis	particular analysi
macro analysis	micro analysis	particular analysis	general analysis
preference share	earnings per share	equity share	differed share
upward	bottom up	forward	downward
NAV	GDP	EIC	GNP
economy	industry	company	fundamental
fundamental analysis	technical analysis	economic analysis	industrial analysi
fundamental analysis	secondary analysis	stock analysis	bond analysis
economy	business	industry	office
dividend	interest	appreciation	depreciation
debt financing	financial institution	funds	equity financing
market value	intrinsic value	extrinsic value	depreciable value
dividend	each share	interest	market price
liquidity	interest	profitability	all the above
expenses and sales	expenses and cost	liquidity position	financial position
assets or investment	assets or revenue	liability or loan	all the above
government	communication	productivity of labor	transportation
lagging indicators	leading indicators	coincidental indicator	sensex indicators
growth stage	decline stage	introduction stage	all the above
expansion stage	decline stage	introduction stage	all the above
stability	soundness	functions	defunct ion
economy	company	industry	technical
profitability	stability	employee	policy of the com
dividend	liquidity	stability	financial position
soundness	identify the weakest area	identify the accounts department	
dividend	share price	future price	market price
market value	financial position	liquidity	solvency
scientific theory	modern theory	specific theory	mm theory
Low	high	medium	decline
profitability	current	liquidity	solvency

working capital	capital structure	short term profit	long term profit
bonds	share price	equity	preference
profit	provision	working capital	share
FIFO	LIFO	Cost or market value r	straight line meth
lower cost	higher cost	average cost	medium cost
lower cost	higher cost	average cost	medium cost
straight line method	diminishing balance me	depreciation fund met	insurance policy r
straight line method	diminishing balance me	depreciation fund met	insurance policy r
straight line method	diminishing balance me	depreciation fund met	insurance policy r
variation	fixed	difficult	stable earning
long term	short term	very short term	medium term
change	fixed	failure	successful
management	administration	firm	industry
appropriation	appreciation	profitability	stable earning
Director	dividend	interest	competitiveness
manager	director	competitiveness	leadership
profit and loss account	shareholders document	debenture holders doc	employees record
long term liabilities	short term liabilities	outsider's liabilities	medium term liab
income statement	expenditure statement	operation statement	cost statement
historical	present	future	convention
accounting	product	purchase	sales
financial information	economic information	market information	sales information
stock exchange	leading dailies	investment week	government repor
stock exchanges	new issue market	national market	OTCEI
technical	economic	industry	company
intrinsic value	standard value	national market value	real value
company	economic	industry	political

EDUCATION
3 of UGC Act 1956)

8 onwards)
RCE

		ANSWER
		gross domestic product
e average growth is hi		an industry whose average growth is higher than the growth of economy
y		that affect the risk and return characteristics of a security
s		macro analysis
		micro analysis
		earnings per share
		bottom up
		GDP
		economy
s		fundamental analysis
		fundamental analysis
		industry
		dividend
		equity financing
		intrinsic value
		each share
		profitability
		expenses and sales
		assets or investment
		productivity of labor
		leading indicators
		introduction stage
		expansion stage
		stability
		economy
pany		profitability
		financial position
		identify the weakest area
		share price
		financial position
		specific theory
		high
		profitability

		capital structure
		equity
		provision
od		Cost or market value method
		higher cost
		lower cost
method		straight line method
method		diminishing balance method
method		depreciation fund method
		stable earning
		long term
		successful
		management
		appreciation
		competitiveness
		leadership
ls		profit and loss account
ilities		long term liabilities
		income statement
		historical
		accounting
		financial information
rt		stock exchange
		new issue market
		technical
		intrinsic value
		industry

SUBJECT: : Fundamentals of Investment
SEMESTER : VI
SUBJECT CODE: 17CMU602B

QUESTION
--------- is to study of price behavior
Technical analysis reflects the idea that stock prices
The stock price may intersect the
When the oscillator reaches the extreme lower end, it is suggested to buy the -
Technical analysts gives importance to total ---------
The technician believes that there is no _____ value to any stock
The primary trend which is used for analysis is
The secondary trend which is used for analysis is ---------
Minor trends are also called --------
---------- charts are drawn to predict the future price of stocks
Bullish market said when large volume of trade follows the _____ price
Share sold in small lots are called ----------
An Decrease in the index shows more --------
---------- charts are prepared in vertical lines and made to show the closing p
In the weak form of market stock prices reflect ----------
A run in the stock price is ----------
Moving average method used for ----------
Moving average are known as ----------
The prices of securities are determined by the ----------
Which factors affect the supply and demand of a security?
Shifts in demand and supply can be detected with the help of --------
The technical analysis attempts to forecast changes in the prices of securities b
The word moving means that the body of the data moves ahead to include the
The technical analysis only helps us improve the knowledge of the probabilitie
The technical analyst uses the price chart as a basic tool to study the ----------
The _____theory is one of the oldest technical methods of security v
When the market is moving upwards continuously, of short duration is referre
The Dow theory makes certain assumptions. The second hypothesis is
When there is a bull in the trading market followed by ----------
The market indices do not rise or fall in ----------
When the short-term average moves below the long-term average, it is indicat
Rate of change measures the rate of change between

Oscillators indicate the ----------
Short -selling is a technical indication which is also known as ----------
Odd-lot trading helps to ----------
In short-selling when the ratio is less than 1, the market is considered
Investors sells their shares when market value is ----------
Investors buys their shares when market value is ----------
Technical analysis works on the basis of ----------
Technical analysis believes ----------
Technical analysis _____are used to compare various price movement
Market data includes all of the following except ----------
The two primary tools of a technical analyst are ----------
When market shows an increasing trend it is known as----------
APT stands
DOW theory formulated hypothesis that the stock market does not perform on
The secondary trend also known as ---------- in technical analysis
The technical analysis only helps us improve the knowledge of the probabilitie
The technical analyst uses the price chart as a basic tool to study the ----------
Return on investment Ratio measures the ---------- of a business
---------- stage of Industry life cycle growth rate is more than the industries av
Charts helps technical analysis ----------
When there is a bull in the trading market followed by ----------
The investor have to closely monitor the events that take place in ------- stage
When the short-term average moves below the long-term average, it is indicat
Rate of change measures the rate of change between ----------
Oscillators indicate the ----------
Short -selling is a technical indication which is also known as
Odd-lot trading helps to ----------

(

CLASS : III B.COM

OPTION 1	OPTION 2
fundamental analysis	technical analysis
move upward over time.	move inversely over time.
moving average price	exponential moving average
scrips	symmetrical
equity	bonds
face value	standard value
short term trend	long term trend
short term trend	long term trend
random wriggles	primary trend
bar	line
rise price	fall price
odd lots	buyer
selling	buying
bar	line
the past prices and traded volumes	the demand for the scrip
an interrupted sequence of either fall	an alternative sequence of stock price movement
survey	chart
running average	precordial average
government policy	company movements
rational	irrational
chart	Email
company data	industry data
assumptions	observation
price behavior	future price behavior
share price movement	market price movement
Dow theory	Markowitz theory
bull run	bear phase
correction are manipulated	secondary reactions are manipulated
low purchase	high purchase
straight line	upward
fall price	decrease price
current price and price	future price and the price

price momentum	positive momentum
medium interest	short interest
small investor	medium investor
good	satisfy
high price	low price
high price	average price
assumption	accurate value
stock price	price trend
charts and tools	communication
number of shares traded.	earnings.
level of the market index and volum	economic indicators and level of the market index.
bull and bear	bear market
arbitrage pricing theory	asset product term
assumption basis	consist basis
evaluation trend	correction trend
price behavior	future price behavior
share price movement	market price movement
solvency	Debt service
Pioneering	Rapid growth
difficult	complicated
low purchase	high purchase
Pioneering	Rapid growth
fall price	decrease price
current price and price	future price and the price
price momentum	positive momentum
medium interest	short interest
small investor	medium investor

KARPAGAM ACADEMY OF HIGHER EDUCATION

Deemed University Established Under Section 3 of UGC Act 1956)

Coimbatore - 641021.

(For the candidates admitted from 2018 onwards)

DEPARTMENT OF COMMERCE

OPTION 3	OPTION 4		
random walk analys	value analysis		
move in trends.	move randomly.		
stock price average	methods		
ascending	descending		
shares	return		
real value	market value		
very short term tren	medium term trend		
very short term tren	medium term trend		
secondary trend	bullish trend		
candle	Point and figure		
stability	constant		
seller	broker		
sell and buy	investigate		
candle	Point and figure		
the country's econor	the past price of the scrip		
an interrupted seque	a residual analysis		
records	others		
mode average	samples		
demand and supply	price of stock		
rational and irration	profits		
Letters	records		
economic data	market data		
survey	graphic records		
past price behavior	current price behavior		
company price mov	industry price movements		
Japanese candle sti	Random walk theory		
correction	movements		
the average discoun	primary trend can be manipulated		
medium purchase	average purchase		
downward	upward and downward		
very low price	very high price		
past price behavior	forecast price and price		

negative momentum	market momentum		
high interest	short and high interest		
big investors	financial investor		
highly satisfy	weak		
medium price	average price		
medium price	low price		
outline value	future value		
past trend	market price		
industry analysis	company analysis		
level of market indi	stock price.		
price and volume.	price and technical indicators.		
lam duck	bull market		
asset price terms	assumption pricing theory		
random basis	parallel basis		
biased trend	relates trend		
past price behavior	current price behavior		
company price mov	industry price movements		
profitability	equity		
Maturity and stabili	Declining		
different	effectively		
medium purchase	average purchase		
Maturity and stabili	Declining		
very low price	very high price		
past price behavior	forecast price and price		
negative momentum	market momentum		
high interest	short and high interest		
big investors	financial investor		

ANSWER
technical analysis
move in trends.
moving average price
scrips
return
real value
long term trend
short term trend
random wriggles
line
rise price
odd lots
selling
bar
the past prices and traded volumes
an interrupted sequence of either fall or rise in stock prices
chart
running average
demand and supply
rational and irrational
chart
market data
observation
price behavior
share price movement
Dow theory
bull run
correction are manipulated
high purchase
straight line
fall price
current price and price

market momentum
short interest
small investor
weak
high price
low price
assumption
past trend
charts and tools
earnings.
price and volume.
bull market
arbitrage pricing theory
random basis
correction trend
price behavior
share price movement
profitability
Rapid growth
effectively
high purchase
Maturity and stabilization
fall price
current price and price
market momentum
short interest
small investor

Class: III BCOM **Course Name: Fundamentals of Investment**
Course Code: 18CMU602B **Unit 3** **BATCH: 2017-20**

Fundamental Analysis: Economic analysis – Economic Forecasting - Industrial Analysis - Industry life cycle – Analytical tools – SWOT – Porter's Five Force Model – Company Analysis.

Fundamental Analysis

"The crux of Fundamental Analysis lies in its attempt to determine the economic value of a security (a generic term for stocks and shares)"

Fundamental Analysis covers the area of research that studies economics, industry and company information for the purpose of making an informed judgement on a stock's value and its growth potential. The crux of Fundamental Analysis lies in its attempt to determine the economic value of a security (a generic term for stocks and shares).

The Focus of Fundamental Analysis

Economic Analysis covers the study of the country's economic indicators such as new orders, money supply, stock price indices, stocks of unfinished goods, new business formations, consumer price index and unit labour costs. Important economic considerations would include interest rates and inflation and its impact on the stock market, the level of government debt, the level of corporate debts, monetary and fiscal policy.

Industry Analysis covers the structure and state of competition in the industry, nature and prospects of demand for products and services of the industry, cost conditions and profitability, technology and research requirements, the immediate and long term outlook for sales and profit.

Types of Fundamental Analysis

Although it is generally accepted that the aim Fundamental Analysis is to determine the economic value of a security, it is the practice of Fundamental Analysis that gives rise to two sub types namely Macro-Fundamental Analysis and Micro-Fundamental Analysis.

Macro-Fundamental Analysis: The Top Down Approach

Macro-Fundamental Analysis focuses on broad economic factors that affect the stock market as a whole or industry groups of securities. This approach is known as the Top Down approach of Macro-Fundamental Analysis. The practice of Macro-Fundamental Analysis starts at the overall performance of the economy, its impact on industry groups. It is noteworthy that Macro-Fundamental Analysis has a more formal and structured approach and as such this approach is much favoured by research departments of investment management companies and brokerage houses.

Micro- Fundamental Analysis: The Bottom Up Approach

Micro-Fundamental Analysis starts by considering the current price of a stock and compares it to measures of value. Hence the current price of a stock is compared to its dividend, its earnings, and to its assets resulting in valuation ratios such as its dividend yield, price to earnings ratio and its price to asset ratio. The resultant valuations enable comparisons to be made amongst stocks in the same industry groups and undervalued and overvalued stocks are identified by comparisons to the industrial norm. after this phase of analysis, the Micro-Fundamental Analysis attempts to predict industry and economic developments that may positively or negatively impact the stocks current price.

It is pertinent to note that investment icons such as Benjamin Graham, his prodigies Warren Buffet, Charles Munger and William Ruane tend toward Micro-Fundamental Analysis.

Economic Analysis

Economic analysis is a process whereby the strengths and weaknesses of an economy are analyzed. Economic analysis is important in order to understand the exact condition of an economy.

Macroeconomics and Economic Analysis

Macroeconomic issues are important aspects of the economic analysis process. However, economic analysis can also be done at a microeconomic level.

Macroeconomic analysis gives insight into the fundamentals of an economy - and the strengths and weaknesses of economies.

Macroeconomic analysis takes into account growth achieved by par economy, or rather a sector of that economy. It tries to reveal reasons behind a particular economic phenomenon like growth or reversal of the economy.

Inflation and Economic Analysis

Many countries in the world are plagued by rising inflation. Economic analysis tells us why inflation has taken place. It also suggests ways in which the rate of inflation could be reduced, so that economic development could continue.

Economic Analysis and Government Policies

Government policies and plans that affect the economy have always been an important part of economic analysis. Since policies and plans adopted by a particular government are responsible for shaping an economy, they are always closely scrutinized by various processes of economic analysis.

Economic Ratings and Economic Analysis

Economic ratings are another important aspect of economic analysis, as it provides an accurate picture of how an economy is faring compared to others.

Economic Analysis and Comparison of Economic Policies

It is a good way to analyze an economy by comparing its policies with those of other economies. This is all more applicable in the case of economies that are of similar types, for example developing economies.

Economic Forecasting

Economic forecasting, the prediction of any of the elements of economic activity. Such forecasts may be made in great detail or may be very general. In any case, they describe the expected future behaviour of all or part of the economy and help form the basis of planning.

Formal economic forecasting is usually based on a specific theory as to how the economy works. Some theories are complicated, and their application requires an elaborate tracing of cause and effect. Others are relatively simple, ascribing most developments in the economy to one or two basic factors. Many economists, for example, believe that changes in the supply of money determine the rate of growth of general business activity. Others assign a central role to investment in new facilities—housing, industrial plants, highways, and so forth. In the United States, where consumers account for such a large share of economic activity, some economists believe that consumer decisions to invest or save provide the principal clues to the future course of the entire economy. Obviously the theory that a forecaster applies is of critical importance to the forecasting process; it dictates his line of investigation, the statistics he will regard as most important, and many of the techniques he will apply.

Although economic theory may determine the general outline of a forecast, judgment also often plays an important role. A forecaster may decide that the circumstances of the moment are unique and that a forecast produced by the usual statistical methods should be modified to take account of special current circumstances. This is particularly necessary when some event outside the usual run of economic activity inevitably has an economic effect. For example, forecasts of 1987 economic activity in the United States were more accurate when the analyst correctly foresaw that the exchange value of the dollar would fall sharply during the year, that consumer spending would slacken, and that interest rates would rise only moderately. None of these conclusions followed from purely economic analysis; they all required judgment as to future decisions. Similarly, an economist may decide to adjust an economic forecast that was made by traditional methods to take account of other unique conditions; he may, for example, decide that consumers will alter their spending patterns because of special circumstances such as rising prices of imports or fear of threatened shortages.

Although judgment may be based on experience and understanding, it may also be no more than unconscious bias. Forecasts based on judgment cannot be subjected to the kind of rigorous checks applied to forecasts developed by the use of more objective techniques. Consequently, the most accurate and useful forecasts are likely to be those founded on essentially economic considerations and standard statistical techniques. Though they can then be modified by the application of judgment,

the resulting changes should be stated explicitly enough so that anyone wishing to use a forecast will know where, and how, it has been affected by the forecaster's own judgment, or bias.

Economic forecasting is probably as old as organized economic activity, but modern forecasting got its impetus from the Great Depression of the 1930s. The effort to understand and correct the worldwide economic disaster led to the development of a vastly greater supply of statistics and also of the techniques needed to analyze them. After World War II, many governments committed themselves to maintaining a high level of employment. Most governments of the industrialized Western countries were prepared to intervene more often and more directly in economic affairs than previously. Business organizations manifested more concern with anticipating the future. Many trade associations now provide forecasts of future trends for their members, and a number of highly successful consulting firms have been formed to provide additional forecasting help for governments and businesses.

Forecasting Techniques

Forecasting the GNP and its elements

Perhaps the forecasts most familiar to the public are those of gross national product and its elements. Gross national product, or GNP, is the total value of the goods and services produced in a nation. It is, therefore, a convenient and comprehensive measure for assessing changes in general economic welfare. A forecast of the GNP also provides a useful framework for more detailed forecasts of specific industries. Almost all developed nations maintain sets of national income accounts and make forecasts as well.

Forecasting for an industry or firm

General economic conditions set the tone for all parts of the economy. Good forecasting for an industry or firm begins, therefore, with a good analysis of the overall economy. Within this framework, the analyst must then take account of the particular factors that are most important to his own industry. In some cases, the sales of an industry may correlate fairly directly with one or more of the elements of the national income and product accounts—lumber sales with home construction, for example, or sales of nondurable consumer goods with consumer income and total consumer spending.

Forecasting for industries that produce basic materials usually requires a series of projections for specific markets. A steel forecast might be based on the outlook for such major steel markets as automobiles, construction, and metal containers. The basic forecast would then be adjusted for expected shifts in exports and imports of steel and for changes in inventories of steel or steel-using products.

Long-term forecasting

In recent years, increasing effort has been devoted to long-range forecasting for periods extending five, 10, or more years past the normal ‑short-term‖ forecast period of one or two years. Business has come to recognize the usefulness of such forecasts in developing plans for future expansion and financing.

Long-range forecasts usually are based on the assumption that activity toward the end of the period will reflect normal ‑full‖ employment. Given this assumption, the overall rate of growth depends on two principal factors: the number of people in the labour force and the rate at which productivity (output per worker) increases. The number of people of working age is known, barring some natural disaster (and excluding immigration), far into the future; they have already been born. Forecasters usually assume that productivity will continue to grow at the typical rates of recent decades. Expected technological developments, however, may alter the projected rate of change. The combination of changes in the labour force and productivity produces an estimate of the total growth rate for the economy.

Industry analysis

An industry analysis is a business function completed by business owners and other individuals to assess the current business environment. This analysis helps businesses understand various economic pieces of the marketplace and how these various pieces may be used to gain a competitive advantage. Although business owners may conduct an industry analysis according to their specific needs, a few basic standards exist for conducting this important business function.

Features

Industry analysis features include a review of the economic and political underpinnings of the business environment. Economic reviews often include an examination of the industry's business cycle. The business cycle helps individuals understand if the industry is growing, reaching a plateau or in decline. A political review helps individuals understand the amount of government regulation and taxation present in the business industry. Industries with heavy government involvement may have fewer profits for companies operating in these environments.

Facts

Business owners often conduct industry analysis before starting their business. This analysis is included in the entrepreneur's business plan that outlines specific elements of the economic marketplace. Elements may include the number of competitors, availability of substitute goods, target markets and demographic groups or various other pieces of essential business information. This information is commonly used to secure external financing from banks or lenders for starting a new business venture.

Industry Classification

On the basis of the number of labour employed. On this basis the industries are classified into three classes :

- Large scale industries: Large scale industries include cotton and jute textile industries. Number of labourers working in this industry is large.
- Medium scale industries: Medium scale industries include electric fan, sewing machine, cycle, radio, television industries etc.
- Small scale industries: Small scale industries include soap, basket, match-box, bidi industries etc.

On the basis of the nature of the product manufactured. On this basis industries are classified into three classes :

- Primary industry is one which is concerned with collecting or making available materials produced by nature. For example— food gathering, hunting, fisheries, forestry, agriculture and mining.

- Secondary industry is one which is connected with the transformation of material provided by primary industry. For example—Iron and steel industry, textile industry, cement industry, chemical, drug industry etc.
- Tertiary industries are those which render help and services to all other industries. For example—Management, Banking, Transportation, etc.

On the basis of raw material and finished products. On this basis the industries fall into three categories :

- Heavy industries
- Medium industries
- Light industries.

On the basis of ownership. On the basis of ownership, industries are divided into four categories :

- Public sector industries
- Private sector industries
- Joint sector industries
- Co-operative sector industries.

On the basis of origin of their raw material. This basis divides the industries into two main classes :

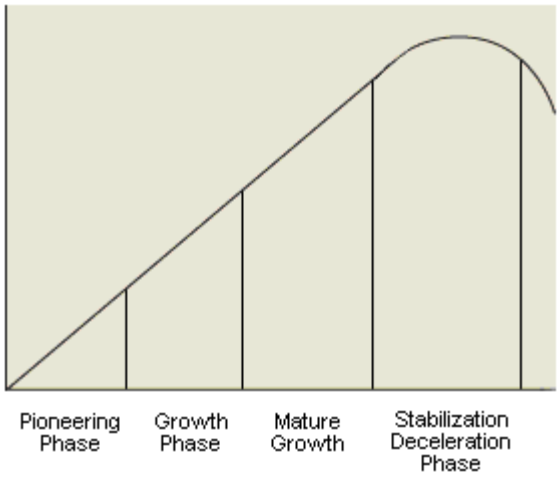
- Agro-based industries. Agro-based industries are those industries which are based on agricultural products. These industries occupy an important place in our economy, both in respect of their output and the employment opportunities. Textiles, sugar, vegetable oil, tobacco, rubber, paper and dairying are the important ones in this category.
- Mineral-based industries. The industries, which are based on mineral products are known as mineral-based industries. Unlike the traditional industries, most of the modem industries in India are mineral-based. The iron and steel and chemical industries are the important ones in this category.

Industry Life Cycle

The industry life cycle is made up of the following stages:

1. Pioneering Phase
2. Growth Phase
3. Mature Growth Phase
4. Stabilization/Maturity Phase
5. Deceleration/Decline Phase

Chart 2: Life Cycle Diagram



1) Pioneering Phase

This phase is characterized by low demand for the industry's product and large upstart costs. Industries in this phase are typically start-up firms, with large upfront costs and few sales.

2) Growth Phase

After the pioneering phase, an industry can transfer into the growth phase. The growth phase is characterized by little competition and accelerated sales. Industries in this phase have typically survived the pioneering phase and are beginning to recognize sales growth.

3) Mature Growth Phase

After the growth phase, an industry will reach the mature growth phase. The mature growth phase is characterized above average growth, but no longer accelerating growth. Industries in this phase now face increasing competition and, as a result, profit margins begin to erode.

4) Stabilization/Maturity Phase

After the growth phases, an industry will enter in the stabilization/maturity phase. The stabilization/maturity phase is characterized by growth that is now average. Industries in this phase have significant competition and the return on equity is now more normalized. This is typically the longest phase an industry will go through.

5) Deceleration/Decline Phase

The deceleration follows the growth and maturity phases. The deceleration/decline phase is characterized by declining growth as demand shifts to other substitute (new) products.

Class: III BCOM **Course Name: Security Analysis and Portfolio Management**
Course Code: 17CMU602A **Unit 3** **BATCH: 2019-20**

PART B

1. What is fundamental analysis?
2. Write short notes on economic analysis.
3. Why do we need company analysis?
4. List out the factors affecting industry analysis.
5. What is SWOT?
6. How porters five force model help in industry analysis?
7. Define ratio.
8. What is EPS?
9. Give the meaning of industry.
10. Sketch the industry life cycle.

PART – C

1. Explain the factors affecting Fundamental Analysis?
2. Enumerate the forecasting techniques used in Economic Analysis?
3. Explain the Factors Affecting Industry Analysis?
4. Describe the various steps involved in fundamental analysis briefly?
5. Explain the factors affecting Economic Analysis withexample.
6. Elucidate the concept Industry Analysis with suitableexample.
7. Explain the factors affecting Industrial Analysis in detail?
8. What is company analysis? Explain how financial ratios can be used to determine the strengths and weaknesses of a company.
9. Elucidate the difference between Fundamental Analysis and Technical Analysis?
10. Enumerate the Characteristics and types of Industries with suitable examples?

PART D

CASE STUDY

1. The Philips lighting sales force saved 2,500 hours per month by integrating digital voice technology and cloud storage into its CRM system data entry workflow. Philips Lighting is dedicated to introducing innovative end-user-driven and energy-efficient solutions and applications for lighting, based on a thorough understanding of customer needs. Its sales team in the US is a highly mobile force of between 100 to 150 account representatives who serve at both a regional and national level and make an average of three to four customer calls each day. As required by their sales leaders, for each call a sales rep makes, they must either create or update information in Philips Lighting's customer relations management (CRM) system.

a. Examine the above problem using SWOT analysis.

SUBJECT: : Fundamentals of Investment
SEMESTER : VI
SUBJECT CODE: 17CMU602B

QUESTION	OPTION 1
The risk in average individual stock can be reduced by placing the inc	Unsystematic Risk
The expected returns weighted average on assets in the portfolio is co	weighted portfolio
_____means combination of financial assets and physical assets	portfolio
_____ deals with the selection of optimal portfolios by rational ris	risk management
_____involves a shift from one stock to another or from stock to b	risk management
The policy which lays emphasis on safety of principal invested in sec	defensive policy
Growth policy in portfolio gives priority to	current income of the
The single index model is widely employed to allocate investments in	equity shares
portfolio diversification mangement diversification is the technique o	stability
Bonds issued by the _____ are highly safe as they are suppo	central government
A security is regarded_____ when it can be disposed off at short	portfolio
The first and foremost step in the portfolio management process is the	identification of objec
Portfolio management is the process of selecting a bunch of	current assets
Portfolio means a combination of	financial assets and ph
The financial assets are ----------	shares
The physical assets are ----------	debentures
Asset mix means the ----------	proportion of stock
A proper mix means ----------	assets
the first and foremost factor contributing to portfolio management is	timing of investment
Timing of investment is an important factor in	portfolio management
Diversification reduces ----------	inflation risk
Which one of the following is not an efficient portfolio?	portfolio which gives
Corner portfolio is one with ----------	lowest return and risk
Shares having betas less than 1 can be said to be	defensive
Capital Market Line is firstly initiated by	Mohsin
The most favorable portfolio is the proficient portfolio with the	lowest risk
A main difference among real and nominal interest proceeds is that	real returns adjust for
_____ includes portfolio which gives more return for the same le	Efficient frontier
In a two-stock portfolio, the minimum attainable risk and the lower re	investment portfolio
_____ model is based on security's return relationship with th	sharpe
A number of portfolio models have been developed for choosing an	sharpe's model
Sharpe's portfolio model is a	single index model
Markowitz approach has roots in	Good portfolio manag

An aggressive policy is one which places more emphasis on the	yield of securities
Defensive policy lays much emphasis on	growth of securities
aggressive defensive policy lays emphasis on a balances portfolio con	growth of securities
Income vs growth policy resolves the conflicting issues between	fixed income and fixe
A sound portfolio management should ensure	selection of securities
The marketability of a security depends upon the _____ of the i	risk and return
The size of the market is further affected by the fact whether the secu	over-priced
A good investment portfolio consists of securities whose prices remai	diversify
Liquidity is another important principle that governs the _____ for	transfer securities
The value of shares fluctuates more than that of	debentures
Institutional investors are	commercial bank
Portfolio managers should continuously evaluate the	management
A proper decision on _____ of investment would always fe	planning
Portfolio management deals with the selection of optimal portfolio by	rational risk averse
Portfolio revision generally involves a shift from	stock to bond
Security analysis depends on the	sources of information
Financial hazard is most related with	the use of equity finan
In order to settle on the compound growth rate of an investment over	geometric mean
Investors should be agreeing to invest in riskier investments merely	if the return is short
Hold two securities as an alternative of will not decrease the hazard o	perfectively positive c
---------- describes the relationship between the stock's return and th	alpha
In Capital Market Line every investment is	infinitely divisible
Superior portfolio is not basically a collection of individually	good portfolio
Investments would grade the uppermost with regard to protection is	government bonds
Tracking error is defined as	the difference betwee
If a portfolio manager consistently obtains a high Sharpe measure, the	is above average
Active portfolio management consists of _____.	market timing
Perfect timing ability is equivalent to having _____ on the mar	a call option

KARPAGAM ACADEMY OF HIGHER EDUCATION

(Deemed University Established Under Section 3 of UGC Act 1956)

Coimbatore - 641021.

(For the candidates admitted from 2018 onwards)

DEPARTMENT OF COMMERCE

CLASS : III B.COM

OPTION 2	OPTION 3	OPTION 4			ANSWER
diversified portfoli	undiversified po	high risk portfolio			diversified portfo
expected return on	coefficient of po	expected assets			expected return o
evaluation	portfolio constru	diversification			portfolio
portfolio managem	portfolio constru	debt instrument			portfolio manage
portfolio managem	portfolio constru	portfolio revision			portfolio revisior
aggressive policy	aggressive defer	growth policy			defensive policy
capital appreciation	derivatives	tax savings			capital appreciati
debt instruments	derivatives	revision			equity shares
evaluation	risk	return			risk
state government	public	industry			central governme
liquid	scrips	industry data			liquid
selection of the ass	portfolio executi	portfolio revision			identification of
long term asset	securities	debt instrument			securities
short term assets	long term assets	very short term assets			financial assets a
silver	real estate	gold			shares
shares	other securities	gold			gold
proportion current a	proportion of lia	proportion of profits			proportion of sto
asset and liability	stock and bonds	liability			stock and bonds
planning	performance app	close monitoring of shares			planning
economic forecast	industry analysis	company analysis			portfolio manage
market risk	interest rate risk	unique risk			unique risk
portfolio which giv	portfolio which	portfolio which gives lower return at the lower risk			portfolio which g
nil return	excess return	unexplained variance			lowest return and
aggressive	neutral	appropriation			aggressive
Linter	Markowitz	William Sharpe			William Sharpe
highest risk	highest utility	least investment			highest utility
real returns use act	real interest adju	real returns show the highest possible return and no			real returns adjus
Baumel's model	Sharpe's model	Portfolio selection			Efficient frontier
sharpe's portfolio	corner	efficient portfolio			corner
baumel's model	portfolio selectio	efficient frontier			portfolio selectio
optimal portfolio	capital asset pric	possible portfolio			optimal portfolio
double index model		past index model			single index mod
proper entry and ex	estimation of sto	Analyzing the risk and return related to stocks			Analyzing the ris

principal of securiti	loss of securities	types of securities			yield of securitie
yield of securities	types of securiti	safety of invested securities			safety of investe
yield of securities	types of securiti	safety of invested securities			types of securitie
current income or c	bonds and deber	shares and public deposits			current income o
liquidity of securiti	transferability of	marketability of securities			marketability of
price and size	investors	under price			price and size
average priced	medium priced	average or medium priced			over-priced
stable	not stable	over valued			stable
yield securities	invested securiti	selection of securities			selection of secu
bonds	gold	real estate			bonds
central government	state governmen	semi government			commercial bank
liquidity	portfolio perfor	industry performance			portfolio perform
timing of investme	portfolio revisio	performance appraisal			timing of investn
irrational risk avers	rational and irra	various assets			rational risk aver
assets or revenue	assets to liability	stock to risk			stock to bond
price	average return	equity			sources of inform
the use of the debt	equity investme	debt investment held by the corporations			the use of the del
calculus mean	arithmetic mean	arithmetic median			geometric mean
if there are no safe	if the expected r	if there are true speculators			if the expected re
perfectively negativ	no correlation	all of the answer correct			perfectively posi
beta	regression line	standard deviation			beta
finitely divisible	a & b	all of the answer correct			infinitely divisibl
good investments	negative securiti	all of the answer correct			good investments
common stock	preferred stock	real estate			government bond
the variance of the	the variance of t	the variance of the return of the actively-managed			the difference be
is average	is below average	does not exist			is above average
security analysis	indexing	market timing and security analysis			market analysis a
a futures contract	a put option	a commodities contract			a call option

olio
on portfolio

ement
n

ion of the portfolio

ent

objectives and constraints

nd physical assets

ck

ement

gives lower return at the lower risk
l risk combination

st for inflation and nominal returns do not

on

lel
sk and return related to stocks

s
l securities
s
r capital gains
securities

rities

ance
nent
se

ation
ot financing by corporations

eturn is adequate for the risk level
tive correlated

le
s
ls
tween the returns on the overall risky portfolio versus the benchmark return.

nd security analysis

Class: III BCOM **Course Name: Fundamental of Investment**
Course Code: 17CMU602A **Unit 4** **BATCH: 2017-19**

Forecasting individual stock performance: Technical analysis – Charting methods – Market indicators, Trends –Trend reversals- Moving average – Oscillators - CAPM –APT theory Valuation of securities- Risk and return – Types - Factors affecting option price.

Company Analysis

Company analysis is a process carried out by investors to evaluate securities, collecting information related to the company's profile, products and services as well as profitability. It is also referred as „fundamental analysis." A company analysis incorporates basic info about the company, like the mission statement and apparition and the goals and values. During the process of company analysis, an investor also considers the company's history, focusing on events which have contributed in shaping the company.

Also, a company analysis looks into the goods and services proffered by the company. If the company is involved in manufacturing activities, the analysis studies the products produced by the company and also analyzes the demand and quality of these products. Conversely, if it is a service business, the investor studies the services put forward.

How to do a company analysis

It is essential for a company analysis to be comprehensive to obtain strategic insight. Being a thorough evaluation of an organization, the company analysis provides insight to rationalize processes and make revenue potentials better.

The process of conducting a company analysis involves the following steps:

- The primary step is to determine the type of analysis which would work best for your company.
- Research well about the methods for analysis. In order to perform a company analysis, it is important to understand the expected outcome for doing so. The analysis should provide answer about what is done right and wrong on the basis of a

thorough evaluation. It is, therefore, important to make the right choice for the analysis methods.

- The next step involves implementing the selected method for conducting the financial analysis. It is important for the analysis to include internal and external factors affecting the business.
- As a next step, all the major findings should be supported by use of statistics.
- The final step involves reviewing the results. The weaknesses are then attempted to be corrected. The company analysis is used in concluding issues and determining the possible solutions. The company analysis is conducted to provide a picture of the company at a specific time, thus providing the best way of enhancing a company, internally as well as externally.

Measuring Earnings

The portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability.

Calculated as:

$$= \frac{\text{Net Income - Dividends on Preferred Stock}}{\text{Average Outstanding Shares}}$$

When calculating, it is more accurate to use a weighted average number of shares outstanding over the reporting term, because the number of shares outstanding can change over time. However, data sources sometimes simplify the calculation by using the number of shares outstanding at the end of the period.

Diluted EPS expands on basic EPS by including the shares of convertibles or warrants outstanding in the outstanding shares number.

BREAKING DOWN 'Earnings Per Share - EPS'

Earnings per share is generally considered to be the single most important variable in determining a share's price. It is also a major component used to calculate the price-to-earnings valuation ratio.

For example, assume that a company has a net income of Rupees 25 million. If the company pays out Rupees 1 million in preferred dividends and has 10 million shares for half of the year and 15 million shares for the other half, the EPS would be Rupees 1.92 (24/12.5). First, the Rupees1 million is deducted from the net income to get $24 million, then a weighted average is taken to find the number of shares outstanding (0.5 x 10M+ 0.5 x 15M = 12.5M).

An important aspect of EPS that's often ignored is the capital that is required to generate the earnings (net income) in the calculation. Two companies could generate the same EPS number, but one could do so with less equity (investment) - that company would be more efficient at using its capital to generate income and, all other things being equal, would be a "better" company. Investors also need to be aware of earnings manipulation that will affect the quality of the earnings number. It is important not to rely on any one financial measure, but to use it in conjunction with statement analysis and other measures.

Forecasting Earnings

Many investors rely on earnings performance to make their investment decisions. Stocks are assessed according to their ability to increase earnings as well as to meet or beat analysts' consensus estimates. (For more on this, see *Why would my stock's value decline despite good news being released?*)

The basic measurement of earnings is earnings per share. This metric is calculated as the company's net earnings - or net income found on its income statement - less dividends on preferred stock, divided by the number of outstanding shares. For example, if a company (with no preferred stock) produces a net income of $12 million in the third quarter and has eight million shares

outstanding, its EPS would be $1.50 ($12 million /8 million). (To read more, see *Types Of EPS*, *How To Evaluate The Quality Of EPS* and *Getting The Real Earnings*.)

So, why does the investment community focus on earnings, rather than other metrics such as sales or cash flow? Any finance professor will tell you that the only proper way to value a stock is to predict the long-term free cash flows of a company, discount those free cash flows to the present day and then divide by the number of shares. But this is much easier said than done, so investors often shortcut the process by using accounting earnings as a "good enough" substitute for free cash flow. Accounting earnings certainly are a much better proxy for free cash flow than sales. Besides, accounting earnings are fairly well defined and public companies' earnings statements must go through rigorous accounting audits before they are released. As a result, the investment community views earnings as a fairly reliable - not to mention convenient - measure.

Technical Analysis

The methods used to analyze securities and make investment decisions fall into two very broad categories: fundamental analysis and technical analysis. Fundamental analysis involves analyzing the characteristics of a company in order to estimate its value. Technical analysis takes a completely different approach; it doesn't care one bit about the "value" of a company or a commodity. Technicians (sometimes called chartists) are only interested in the price movements in the market.

Despite all the fancy and exotic tools it employs, technical analysis really just studies supply and demand in a market in an attempt to determine what direction, or trend, will continue in the future. In other words, technical analysis attempts to understand the emotions in the market by studying the market itself, as opposed to its components.

If you understand the benefits and limitations of technical analysis, it can give you a new set of tools or skills that will enable you to be a better trader or investor.

In this tutorial, we'll introduce you to the subject of technical analysis. It's a broad topic, so we'll just cover the basics, providing you with the foundation you'll need to understand more advanced concepts down the road.

The Basic Assumptions

Technical analysis is a method of evaluating securities by analyzing the statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security's intrinsic value, but instead use charts and other tools to identify patterns that can suggest future activity.

Just as there are many investment styles on the fundamental side, there are also many different types of technical traders. Some rely on chart patterns, others use technical indicators and oscillators, and most use some combination of the two. In any case, technical analysts' exclusive use of historical price and volume data is what separates them from their fundamental counterparts. Unlike fundamental analysts, technical analysts don't care whether a stock is undervalued - the only thing that matters is a security's past trading data and what information this data can provide about where the security might move in the future.

The field of technical analysis is based on three assumptions:

1. The market discounts everything.
2. Price moves in trends.
3. History tends to repeat itself.

1. The Market Discounts Everything

A major criticism of technical analysis is that it only considers price movement, ignoring the fundamental factors of the company. However, technical analysis assumes that, at any given time,

a stock's price reflects everything that has or could affect the company - including fundamental factors. Technical analysts believe that the company's fundamentals, along with broader economic factors and market psychology, are all priced into the stock, removing the need to actually consider these factors separately. This only leaves the analysis of price movement, which technical theory views as a product of the supply and demand for a particular stock in the market.

2. Price Moves in Trends

In technical analysis, price movements are believed to follow trends. This means that after a trend has been established, the future price movement is more likely to be in the same direction as the trend than to be against it. Most technical trading strategies are based on this assumption.

3. History Tends To Repeat Itself

Another important idea in technical analysis is that history tends to repeat itself, mainly in terms of price movement. The repetitive nature of price movements is attributed to market psychology; in other words, market participants tend to provide a consistent reaction to similar market stimuli over time. Technical analysis uses chart patterns to analyze market movements and understand trends. Although many of these charts have been used for more than 100 years, they are still believed to be relevant because they illustrate patterns in price movements that often repeat themselves.

Technical analysis can be used on any security with historical trading data. This includes stocks, **futures** and **commodities**, fixed-income securities, **forex**, etc. In this tutorial, we'll usually analyze stocks in our examples, but keep in mind that these concepts can be applied to any type of security. In fact, technical analysis is more frequently associated with commodities and forex, where the participants are predominantly **traders**. Now that you understand the philosophy behind technical analysis, we'll get into explaining how it really works. One of the best ways to understand what technical analysis is (and is not) is to compare it to fundamental analysis. We'll do this in the next section.

Types of Trend

There are three types of trend:

- Uptrends
- Downtrends

Sideways/Horizontal Trends As the names imply, when each successive peak and trough is higher, it's referred to as an upward trend. If the peaks and troughs are getting lower, it's a downtrend. When there is little movement up or down in the peaks and troughs, it's a sideways or horizontal trend. If you want to get really technical, you might even say that a sideways trend is actually not a trend on its own, but a lack of a well-defined trend in either direction. In any case, the market can really only trend in these three ways: up, down or nowhere.

The Importance of Trend

It is important to be able to understand and identify trends so that you can trade with rather than against them. Two important sayings in technical analysis are "the trend is your friend" and "don't buck the trend," illustrating how important trend analysis is for technical traders.

The Purpose of Technical Analysis

The purpose of technical analysis is to carry out price forecasts. By processing historical market data of any instrument, you can try to anticipate how it should be traded. There are several premises in favor of the reliability of technical analysis that are based on the experience and prolonged observation. These premises are the following:

1. A market trend in motion is more likely to persist than to reverse.

This is obvious by simply looking at any price chart. Of course the aim of any trader is to be aware of the overall market direction, to lock into the prevailing trend and trade it for profit.

2. Markets are discounting mechanisms.

In other words, technical analysts assume that market fundamentals are already represented in the price so what you perceive in the charts is a reflection on any fundamental variable impacting the market. Nowadays, with instant communications this is truer than ever.

Either the unidirectional price move during a trend or the rapid reaction to any new fundamental data throws evidence that markets show up human behavior. From the above premises we can derive that human psychology is always at work in the markets and that technical analysis aims to visualize and quantify it.

3. What has happened in the past will happen again.

This third premise is based on the assumption that human behavior as well as human psychology never change, and that price will reflect it through the repeated emergence of certain price action patterns and trends.

Price action, as a result of human decision making, can be thus considered as being purposeful. Although some people believe that price movement is completely random and unpredictable, technical analysts are always prone to identify and quantify those behavior patterns by examining past markets. While markets are unpredictable in essence, market participants are typically considered to adhere to certain habits, which are rarely broken. As a trader, your goal is to make use of this information in order to gain a slight advantage over the eventual unpredictability of the market.

Drawbacks of technical analysis

Despite the fact it represents a true edge for the trader, technical analysis presents some disadvantages. Those who oppose technical analysis point out several problems related to the application of its methods.

1. The failure to know the underlying fundamentals.

A common argument is that technical analysis is aimed at predicting a certain outcome for a chart pattern, ignoring the reasons of the movements which are due to fundamental factors. This is an obvious limitation of technical analysis and any trader feeling uncomfortable with this handicap should find support in the next chapter dedicated to fundamental analysis.

2. The lack of scientific objectivity.

Although some theories offer a certain objectivity to the analysis, other studies may not necessarily lead to an objective interpretation. That is why technical analysis is sometimes referred to as being more an art than a science. It is also where individual and mass biases come into play.

In Chapter A4, we wrotte about the self-fulfilling prophecy referring to the fact that the more people approaching markets with technical analytical methods, the more likely the expected move in price occurs. This is a common argument that points out the lack of a proven thesis. The fact that traders operate with different time horizons, different expectations and risk profiles makes it difficult to find a common approach to the self-fulfilling prophecy.

3. The uniqueness of the pattern occurrences.

Another legitimate argument in favor of the unreliability of technical analysis is based on the true observation that past price action upon which technical methods are based does not often repeat exactly the same way. This can lead to incongruities in the analysis and to inconsistency in the methods.

At this point, however, you should ask yourself whether these arguments can be dealt with in order to make money in the markets. Of course they can, and we are going to show you how!

It's true that traders will never be 100% correct when using any strategy based on technicals. However, more often than not technical studies do create a positive expectancy.

Technical Analysis

The methods used to analyze securities and make investment decisions fall into two very broad categories: fundamental analysis and technical analysis. Fundamental analysis involves analyzing the characteristics of a company in order to estimate its value. Technical analysis takes a completely different approach; it doesn't care one bit about the "value" of a company or a commodity. Technicians (sometimes called chartists) are only interested in the price movements in the market.

Despite all the fancy and exotic tools it employs, technical analysis really just studies supply and demand in a market in an attempt to determine what direction, or trend, will continue in the future. In other words, technical analysis attempts to understand the emotions in the market by studying the market itself, as opposed to its components.

If you understand the benefits and limitations of technical analysis, it can give you a new set of tools or skills that will enable you to be a better trader or investor.

In this tutorial, we'll introduce you to the subject of technical analysis. It's a broad topic, so we'll just cover the basics, providing you with the foundation you'll need to understand more advanced concepts down the road.

The Basic Assumptions

Technical analysis is a method of evaluating securities by analyzing the statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security's intrinsic value, but instead use charts and other tools to identify patterns that can suggest future activity.

1. Just as there are many investment styles on the fundamental side, there are also many different types of technical traders. Some rely on chart patterns, others use technical indicators and oscillators, and most use some combination of the two. In any case, technical analysts' exclusive use of historical price and volume data is what separates them from their fundamental counterparts. Unlike fundamental analysts, technical analysts don't care whether a stock is undervalued - the only thing that matters is a security's past trading data and what information this data can provide about where the security might move in the future.

The Importance of Trend

It is important to be able to understand and identify trends so that you can trade with rather than against them. Two important sayings in technical analysis are "the trend is your friend" and "don't buck the trend," illustrating how important trend analysis is for technical traders.

The Purpose of Technical Analysis

The purpose of technical analysis is to carry out price forecasts. By processing historical market data of any instrument, you can try to anticipate how it should be traded. There are several premises in favor of the reliability of technical analysis that are based on the experience and prolonged observation. These premises are the following:

1. A market trend in motion is more likely to persist than to reverse.

This is obvious by simply looking at any price chart. Of course the aim of any trader is to be aware of the overall market direction, to lock into the prevailing trend and trade it for profit.

2. Markets are discounting mechanisms.

In other words, technical analysts assume that market fundamentals are already represented in the price so what you perceive in the charts is a reflection on any fundamental variable impacting the market. Nowadays, with instant communications this is truer than ever.

Either the unidirectional price move during a trend or the rapid reaction to any new fundamental data throws evidence that markets show up human behavior. From the above premises we can derive that human psychology is always at work in the markets and that technical analysis aims to visualize and quantify it.

3. What has happened in the past will happen again. This third premise is based on the assumption that human behavior as well as human psychology never change, and that price will reflect it through the repeated emergence of certain price action patterns and trends.

Price action, as a result of human decision making, can be thus considered as being purposeful. Although some people believe that price movement is completely random and unpredictable, technical analysts are always prone to identify and quantify those behavior patterns by examining past markets. While markets are unpredictable in essence, market participants are typically considered to adhere to certain habits, which are rarely broken. As a trader, your goal is to make use of this information in order to gain a slight advantage over the eventual unpredictability of the market.

Drawbacks of technical analysis

Despite the fact it represents a true edge for the trader, technical analysis presents some disadvantages. Those who oppose technical analysis point out several problems related to the application of its methods.

1. The failure to know the underlying fundamentals.

A common argument is that technical analysis is aimed at predicting a certain outcome for a chart pattern, ignoring the reasons of the movements which are due to fundamental factors. This is an obvious limitation of technical analysis and any trader feeling uncomfortable with this handicap should find support in the next chapter dedicated to fundamental analysis.

2. The lack of scientific objectivity.

Although some theories offer a certain objectivity to the analysis, other studies may not necessarily lead to an objective interpretation. That is why technical analysis is sometimes referred to as being more an art than a science. It is also where individual and mass biases come into play.

In Chapter A4, we wrotte about the self-fulfilling prophecy referring to the fact that the more people approaching markets with technical analytical methods, the more likely the expected move in price occurs. This is a common argument that points out the lack of a proven thesis. The fact that traders operate with different time horizons, different expectations and risk profiles makes it difficult to find a common approach to the self-fulfilling prophecy.

3. The uniqueness of the pattern occurrences.

Another legitimate argument in favor of the unreliability of technical analysis is based on the true observation that past price action upon which technical methods are based does not often repeat exactly the same way. This can lead to incongruities in the analysis and to inconsistency in the methods.

At this point, however, you should ask yourself whether these arguments can be dealt with in order to make money in the markets. Of course they can, and we are going to show you how!

It's true that traders will never be 100% correct when using any strategy based on technicals. However, more often than not technical studies do create a positive expectancy.

Market Indicators

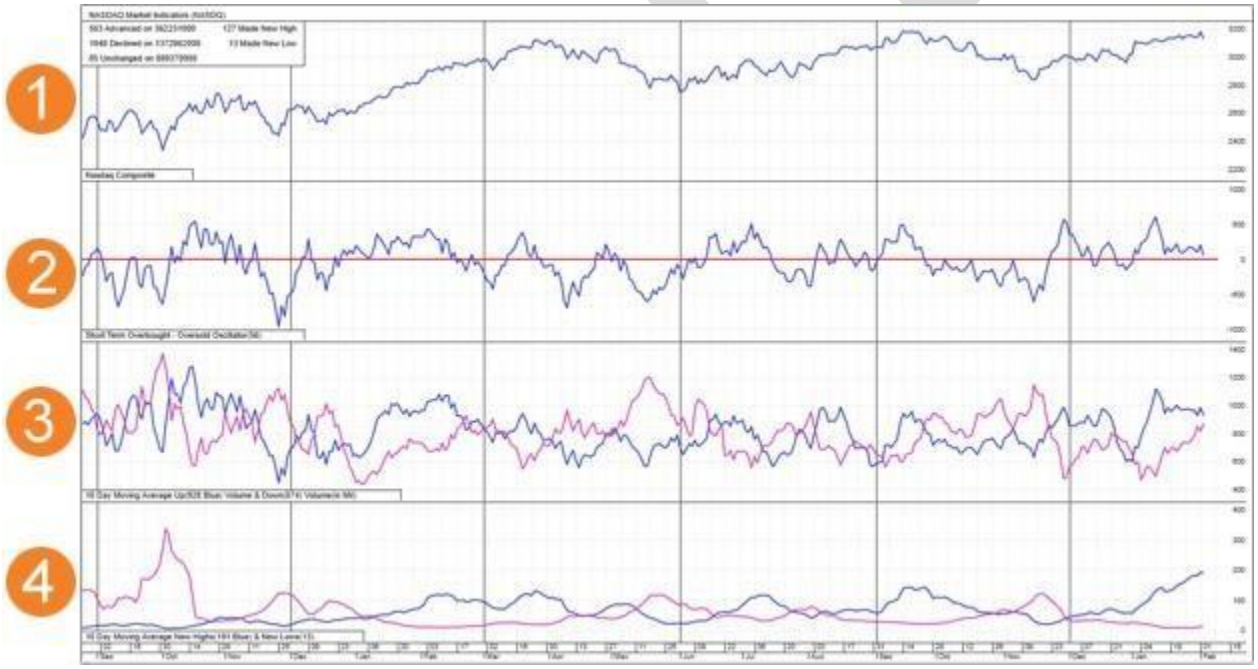
Market Indicators are datasets that contain meta data about the health of various markets or groups of related stocks. Examples include “Advancers,” “Decliners,” and the “McClellan Summation Index”. A list of our important market indicators can be found below:

Primary Indicators

Most investors rely on a few favorite stock market indicators, and new ones seem to pop up all the time, but the two most reliable ones for determining the strength of the market are price and volume. Most other stock market indicators are derived from price and volume data. So it stands to reason that if you follow the price and volume action on the major market indices each day, you will always be in sync with the current trend.

Using price and volume to analyze stock market trends, while incorporating historical stock market data, should be all you need to discern the current market‟s strength and direction. That said, secondary indicators can also help clarify the picture.

Secondary Indicators



1. Advance/Decline Line

Plots the number of advancing shares versus the number of declining shares. At times, a small number of larger weighted stocks may experience significant moves, up or down, that skew the price action on the index. This line, and its accompanying data, reveals whether a majority of stocks followed the direction of the major indexes on that day.

2. Short Term Overbought — Oversold Oscillator

A 10-day moving average of the number of stocks moving up in price less the number of stocks moving down in price (for a specific exchange). Stocks with prices that did not change from the previous close are not included in this calculation. Some investors may use this indicator to take a contrarian position when the market has moved too in far in one direction over a short period of time.

3.10 Day Moving Average Up & Down Volume

Two 10-day moving average lines are presented to illustrate the volume of all stocks on an exchange (AMEX, NASDAQ, NYSE) that are moving up or down in price. Blue line: A 10-day moving average of the total volume of all stocks on an exchange moving up in price. Pink line: A 10-day moving average of the total volume of all stocks on an exchange moving down in price. When the two lines cross, this may indicate a trend change in favor of whichever line is moving up.

4. 10 Day Moving Average New Highs & New Lows

Two 10-day moving average lines are presented to illustrate stocks reaching new highs and new lows, corresponding to their specific exchange (AMEX, NASDAQ, and NYSE). Blue line: a 10-day moving average of the number of stocks making new price highs. Pink line: a 10-day moving average of the number of stocks reaching new price lows (based on prices at market close). When the two lines cross, this may indicate a trend change in favor of whichever line is moving up.

Trend

Bar chart signals often conflict and it is difficult to separate the trend from the surrounding 'noise'. Trend indicators attempt to provide an objective measure of the direction of the trend. Price data is smoothed and the trend is represented by a single line, as in the case of a moving average. Because of the smoothing process the indicators tend to lag price changes and are often called *trend following indicators.*

Moving Average

Moving averages smooth the price data to form a trend following indicator. They do not predict price direction, but rather define the current direction with a lag. Moving averages lag because they are based on past prices. Despite this lag, moving averages help smooth price action and filter out the noise. They also form the building blocks for many other technical indicators and overlays, such as Bollinger Bands, MACD and the McClellan Oscillator. The two most popular types of moving averages are the **Simple Moving Average (SMA)** and the **Exponential Moving Average (EMA)**. These moving averages can be used to identify the direction of the trend or define potential support and resistance levels.

Here's a chart with both an SMA and an EMA on it:

Fundamental Vs Technical Analysis

Investors use techniques of **fundamental analysis** or **technical analysis** (or often both) to make stock trading decisions. Fundamental analysis attempts to calculate the intrinsic value of a stock using data such as revenue, expenses, growth prospects and the competitive landscape, while technical analysis uses past market activity and stock price trends to predict activity in the future.

Comparison chart

	Fundamental Analysis	Technical Analysis
Definition	Calculates stock value using economic factors, known as fundamentals.	Uses price movement of security to predict future price movements
Data gathered from	Financial statements	Charts
Stock bought	When price falls below intrinsic value	When trader believes they can sell it on for a higher price
Time horizon	Long-term approach	Short-term approach
Function	Investing	Trade
Concepts used	Return on Equity (ROE) and Return on Assets (ROA)	Dow Theory, Price Data
Vision	looks backward as well as forward	looks backward

Class: III BCOM **Course Name: Fundamental of Investment**
Course Code: 17CMU602A **Unit 4** **BATCH: 2019-20**

PART B

1. What is technical analysis?
2. What are the tools used in technical analysis?
3. What do you mean by trend?
4. Give the meaning of trend reversal.
5. Write short notes on oscillators.
6. How charts are helping to predict market movement?
7. What is APT?
8. What are the assumptions of CAPM?
9. Define the term return.
10. Differentiate fundamental analysis and technical analysis.

PART – C

1. Explain the concept of Company Analysis with suitable illustration?
2. Elucidate the difference between Fundamental Analysis and Technical Analysis?
3. Explain the Techniques used in analyzing a Company‟s Performance?
4. Enumerate the difference between Fundamental Analysis and Technical Analysis?
5. Enumerate the constituents of Company Analysis.
6. Explain the concept of industry life cycle. Describe the different stages in the industry life cycle.
7. Explain the Dow Theory with suitable example?
8. Describe the chart patterns that help to identify trend reversal.
9. Enumerate Dow Theory and Odd Lot Theory used in Technical Analysis?
10. Explain the way in ratio analysis an Indicator of a company‟s growth with example?

PART – D

CASE STUDY

1. From the following data calculate RSI and predict the market movement.

Share price of State Bank of India	
Date	**Adj Close**
1/1/2018	307.1
1/2/2018	303.25
1/3/2018	302.85
1/4/2018	308.5
1/5/2018	306.35
1/8/2018	305.8
1/9/2018	304.3
1/10/2018	301.1
1/11/2018	302.2
1/12/2018	302.25
1/15/2018	302.6
1/16/2018	296.15
1/17/2018	307.1
1/18/2018	303.25
1/19/2018	309.25
1/22/2018	306.5
1/23/2018	318.1
1/24/2018	329.9
1/25/2018	313.15
1/29/2018	312.1
1/30/2018	313.55
1/31/2018	313.25

Class :III BCOM **Course Name: Fundamental of Investement**
Course Code: 17CMU602A **Unit 5** **BATCH: 2017-20**

Portfolio theory – Portfolio construction – Markowitz diversification model – Performance evaluation – Portfolio revision- Portfolio evaluation: Sharpe Index, Treynor Index, Jensen's Model.

Portfolio Analysis

In financial terms,portfolio analysis‟ is a study of the performance of specific portfolios under different circumstances. It includes the efforts made to achieve the best trade-off between risk tolerance and returns. The analysis of a portfolio can be conducted either by a professional or an individual investor who may utilize specialized software.

What is Portfolio Analysis?

Portfolio analysis involves quantifying the operational and financial impact of the portfolio. It is vital to evaluate the performances of investments and timing the returns effectively.

The analysis of a portfolio extends to all classes of investments such as bonds, equities, indexes, commodities, funds, options and securities. Portfolio analysis gains importance because each asset class has peculiar risk factors and returns associated with it. Hence, the composition of a portfolio affects the rate of return of the overall investment.

What is involved in Portfolio Analysis?

Portfolio analysis is broadly carried out for each asset at two levels:

Risk aversion: This method analyzes the portfolio composition while considering the risk appetite of an investor. Some investors may prefer to play safe and accept low profits rather than invest in risky assets that can generate high returns.

Analyzing returns: While performing portfolio analysis, prospective returns are calculated through the average and compound return methods. An average return is simply the arithmetic average of returns from individual assets. However, compound return is the arithmetic mean that considers the cumulative effect on overall returns.

The next step in portfolio analysis involves determining dispersion of returns. It is the measure of volatility or standard deviation of returns for a particular asset. Simply put, dispersion refers is the difference between the real interest rate and the calculated average return.

Portfolio Analysis Tools

Several specialized portfolio analysis software‟s are available in the market to ease the task for an investor. These application tools can analyze and predict future trends for almost every investment asset. They provide essential data for decision making on the allocation of assets, calculation of risks and attainment of investment objectives.

Scope of Portfolio Analysis

- Monitoring the performance of portfolio by incorporating the latest market conditions.
- Identification of the investor‟s objective, constraints and preferences.
- Making an evaluation of portfolio income (comparison with targets and achievement).
- Making revision in the portfolio.
- Implementation of the strategies in tune with investment objectives.

Markowitz Theory

Harry Markowitz wrote an article titled *Portfolio Selection* that was published in 1952 and is the basis of *Modern Portfolio Theory*. In that paper, he laid out his mathematical arguments in favour of portfolio diversification. Markowitz shared the Nobel Prize in Economics in 1990 with two other scholars "for their pioneering work in the theory of financial economics."

The Modern Portfolio Theory Perspective

Modern Portfolio Theory (MPT) approaches investing by examining the entire market and the whole economy. The theory is an alternative to the older method of analyzing each investment‟s individual merits. When investors look at each investment‟s individual merits, they‟re analyzing one investment without worrying about the way different investments will perform relative to each other. On the other hand, MPT places a large emphasis on the correlation between

investments. *Correlation* is the amount we can expect various investments – and various asset classes – to change in value compared with each other. Here is a simple example of correlation:

A company that sells wool products like sweaters and blankets is more profitable when the price of wool is lower. A company that is a wool wholesaler is generally less profitable when the price of wool is lower, unless they are able to sell a lot more wool. Though the companies work together, their profits have a low correlation. In other words, the profitability of one company does not follow the same lines as the profitability of the other company. And sometimes they are even inversely related.

Risk

One important thing to understand about Markowitz"s calculations is that he treats *volatility* and *risk* as the same thing. In layman"s terms, Markowitz uses *risk* as ameasurement of the likelihood that an investment will go up and down in value – and how often and by how much. The theory assumes that investors prefer to minimize risk. The theory assumes that given the choice of two portfolios with equal returns, investors will choose the one with the least risk. If investors take on additional risk, they will expect to be compensated with additional return.

According to MPT, risk comes in two major categories:

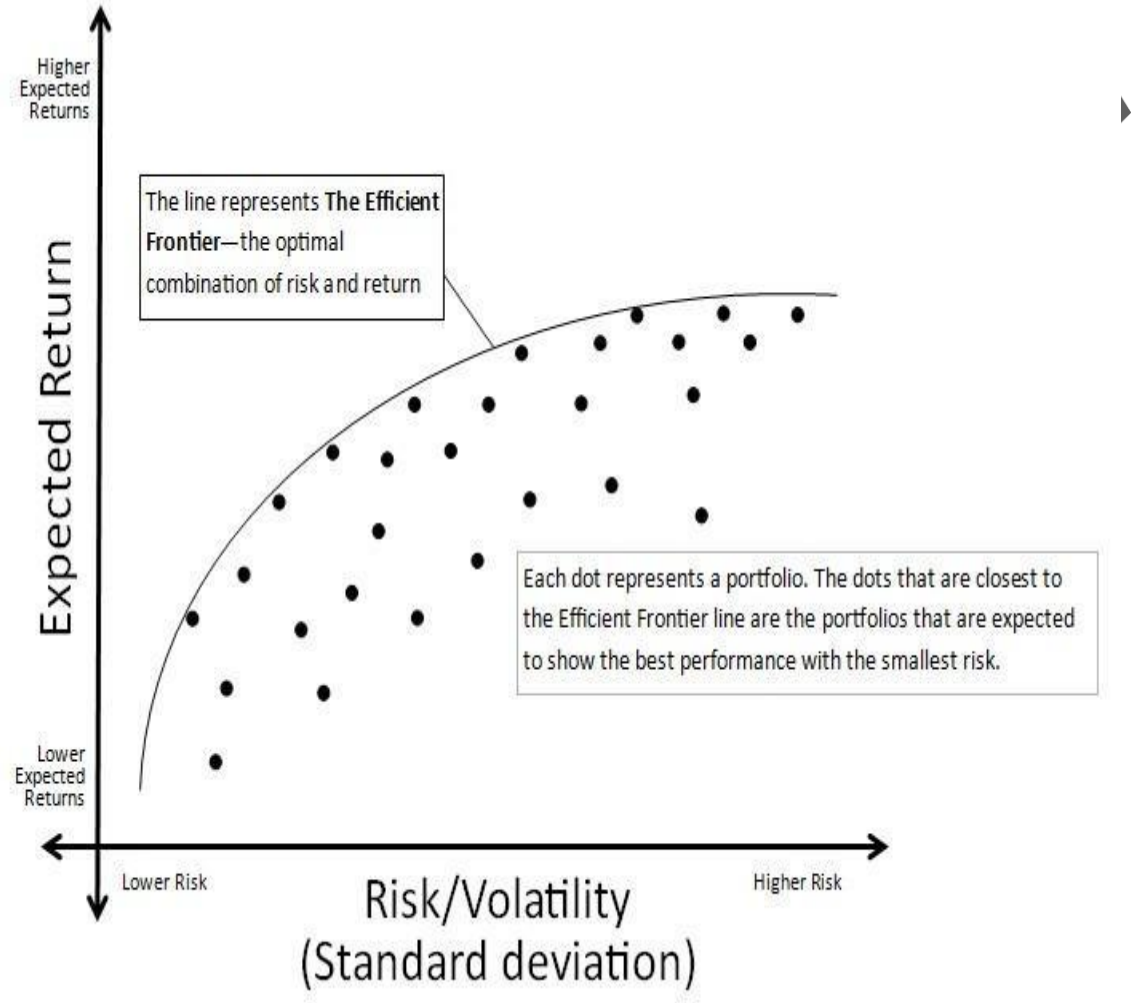
- **systematic risk** – the possibility that the entire market and economy will show losses negatively affecting nearly every investment; also called *market risk*
- **unsystematic risk** – the possibility that an investment or a category of investments will decline in value without having a major impact upon the entire market

Diversification generally does not protect against systematic risk because a drop in the entire market and economy typically affects all investments. However, diversification is designed to decrease unsystematic risk. Since unsystematic risk is the possibility that one single thing will decline in value, having a portfolio invested in a variety of stocks, a variety of asset classes and a variety of sectors will lower the risk of losing much money when one investment type declines in value.

Class :III BCOM **Course Name: Fundamental of Investement**
Course Code: 17CMU602A **Unit 5** **BATCH: 2017-20**

The Efficient Frontier

In order to compare investment options, Markowitz developed a system to describe each investment or each asset class with math, using unsystematic risk statistics. Then he further applied that to the portfolios that contain the investment options. He looked at the expected rate-of-return and the expected volatility for each investment. He named his risk-reward equation *The Efficient Frontier*. The graph below is an example of what the Efficient Frontier equation looks like when plotted. The purpose of The Efficient Frontier is to maximize returns while minimizing volatility.



Portfolios along The Efficient Frontier should have higher returns than is typical, on average, for the level of risk the portfolio assumes.

Notice that The Efficient Frontier line starts with lower expected risks and returns, and it moves upward to higher expected risks and returns. So people with different Investor Profiles (determined by investment time horizon, tolerance for risk and personal preferences) can find an appropriate portfolio anywhere along The Efficient Frontier line.

The Efficient Frontier flattens as it goes higher because there is a limit to the returns investors can expect

Portfolios: Types

Stock investors constantly hear the wisdom of diversification. The concept is to simply not put all of your eggs in one basket, which in turn helps mitigate risk, and generally leads to better performance or return on investment. Diversifying your hard-earned dollars does make sense, but there are different ways of diversifying, and there are different portfolio types. We look at the following portfolio types and suggest how to get started building them: *aggressive, defensive, income, speculative* and *hybrid*. It is important to understand that building a portfolio will require research and some effort. Having said that, let's have a peek across our five portfolios to gain a better understanding of each and get you started.

The Aggressive Portfolio

An aggressive portfolio or basket of stocks includes those stocks with high risk/high reward proposition. Stocks in the category typically have a high beta, or sensitivity to the overall market. Higher beta stocks experience larger fluctuations relative to the overall market on a consistent basis. If your individual stock has a beta of 2.0, it will typically move twice as much in either direction to the overall market - hence, the high-risk, high-reward description.

Most aggressive stocks (and therefore companies) are in the early stages of growth, and have a unique value proposition. Building an aggressive portfolio requires an investor who is willing to seek out such companies, because most of these names, with a few exceptions, are not going to be common household companies. Look online for companies with earnings growth that is rapidly accelerating, and have not been discovered by Wall Street. The most common sectors to scrutinize would be technology, but many other firms in various sectors that are pursuing an aggressive growth strategy can be considered. As you might have gathered, risk management

becomes very important when building and maintaining an aggressive portfolio. Keeping losses to a minimum and taking profit are keys to success in this type of portfolio.

The Defensive Portfolio

Defensive stocks do not usually carry a high beta, and usually are fairly isolated from broad market movements. Cyclical stocks, on the other hand, are those that are most sensitive to the underlying economic "business cycle." For example, during recessionary times, companies that make the "basics" tend to do better than those that are focused on fads or luxuries. Despite how bad the economy is, companies that make products essential to everyday life will survive. Think of the essentials in your everyday life, and then find the companies that make these consumer staple products.

The opportunity of buying cyclical stocks is that they offer an extra level of protection against detrimental events. Just listen to the business stations and you will hear portfolios managers talking about "drugs," "defense" and "tobacco." These really are just baskets of stocks that these managers are recommending based upon where the business cycle is and where they think it is going. However, the products and services of these companies are in constant demand. A defensive portfolio is prudent for most investors. A lot of these companies offer a dividend as well which helps minimize downside capital losses.

The Income Portfolio

An income portfolio focuses on making money through dividends or other types of distributions to stakeholders. These companies are somewhat like the safe defensive stocks but should offer higher yields. An income portfolio should generate positive cash flow. Real estate investment trusts (REITs) and master limited partnerships (MLP) are excellent sources of income producing investments. These companies return a great majority of their profits back to shareholders in exchange for favorable tax status. REITs are an easy way to invest in real estate without the hassles of owning real property. Keep in mind, however, that these stocks are also subject to the economic climate. REITs are groups of stocks that take a beating during an economic downturn, as building and buying activity dries up.

An income portfolio is a nice complement to most people's paycheck or other retirement income. Investors should be on the lookout for stocks that have fallen out of favor and have still

maintained a high dividend policy. These are the companies that can not only supplement income but also provide capital gains. Utilities and other slow growth industries are an ideal place to start your search.

The Speculative Portfolio

A speculative portfolio is the closest to a pure gamble. A speculative portfolio presents more risk than any others discussed here. Finance gurus suggest that a maximum of 10% of one's investable assets be used to fund a speculative portfolio. Speculative "plays" could be initial public offerings (IPOs) or stocks that are rumored to be takeover targets. Technology or health care firms that are in the process of researching a breakthrough product, or a junior oil company which is about to release its initial production results, would also fall into this category.

Another classic speculative play is to make an investment decision based upon a rumor that the company is subject to a takeover. One could argue that the widespread popularity of leveraged ETFs in today's markets represent speculation. Again, these types of investments are alluring: picking the right one could lead to huge profits in a short amount of time. Speculation may be the one portfolio that, if done correctly, requires the most homework. Speculative stocks are typically trades, and not your classic "buy and hold" investment.

The Hybrid Portfolio

Building a hybrid type of portfolio means venturing into other investments, such as bonds, commodities, real estate and even art. Basically, there is a lot of flexibility in the hybrid portfolio approach. Traditionally, this type of portfolio would contain blue chip stocks and some high grade government or corporate bonds. REITs and MLPs may also be an investable theme for the balanced portfolio. A common fixed income investment strategy approach advocates buying bonds with various maturity dates, and is essentially a diversification approach within the bond asset class itself. Basically, a hybrid portfolio would include a mix of stocks and bonds in a relatively fixed allocation proportions. This type of approach offers diversification benefits across multiple asset classes as equities and fixed income securities tend to have a negative correlation with one another.

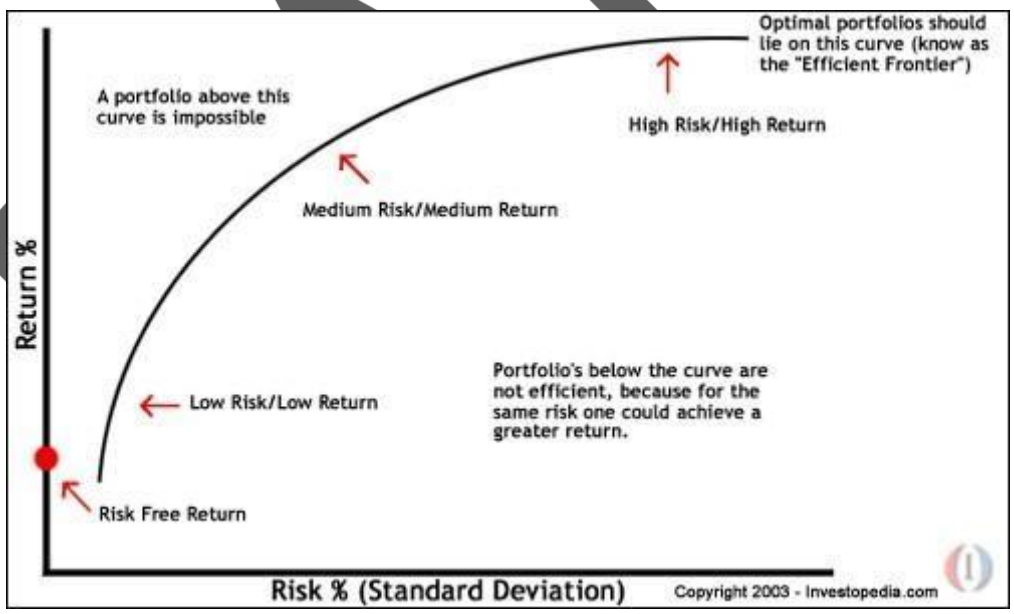
Class: III BCOM **Course Name: Fundamental of Investment**
Course Code: 17CMU602A **Unit 5** **BATCH: 2019-20**

Optimum Portfolio

The optimal portfolio concept falls under the modern portfolio theory. The theory assumes (among other things) that investors fanatically try to minimize risk while striving for the highest return possible. The theory states that investors will act rationally, always making decisions aimed at maximizing their return for their acceptable level of risk.

The optimal portfolio was used in 1952 by Harry Markowitz, and it shows us that it is possible for different portfolios to have varying levels of risk and return. Each investor must decide how much risk they can handle and thens allocate (or diversify) their portfolio.

The chart below illustrates how the optimal portfolio works. The optimal-risk portfolio is usually determined to be somewhere in the middle of the curve because as you go higher up the curve, you take on proportionately more risk for a lower incremental return. On the other end, low risk/low return portfolios are pointless because you can achieve a similar return by investing in risk-free assets, like government securities.



You can choose how much volatility you are willing to bear in your portfolio by picking any other point that falls on the efficient frontier. This will give you the maximum return for the amount of risk you wish to accept. Optimizing your portfolio is not something you can calculate in your head. There are computer programs that are dedicated to determining optimal portfolios

by estimating hundreds (and sometimes thousands) of different expected returns for each given amount of risk.

Portfolio Construction

Portfolio Construction is all about investing in a range of funds that work together to create an investment solution for investors. Building a portfolio involves understanding the way various types of investments work, and combining them to address your personal investment objectives and factors such as attitude to risk the investment and the expected life of the investment.

When building an investment portfolio there are two very important considerations.

- The first is asset allocation, which is concerned with how an investment is spread across different asset types and regions.
- The second is fund selection, which is concerned with the choice of fund managers and funds to represent each of the chosen asset classes and sectors.

The 4 steps to creating a portfolio

- **Create your risk profile –** Measure your perceived level of risk for an investment (scale of 1 to 10)
- **Asset Allocation –** Determining the right combination of assets – the most important part of the portfolio construction process.
- **Fine tune your portfolio –** Choose to invest in and/or review your existing portfolio to fit in with the asset allocation most suitable to you, potentially reducing your risk and increasing your returns.
- **Review your portfolio regularly –** Once you have constructed your portfolio, it is important to continue to review your asset allocation on a regular basis. Investors failing to do this, may find they become overweight in a particular asset class, potentially increasing the overall risk of their portfolio.

Performance Evaluation

Many investors mistakenly base the success of their portfolios on returns alone. Few consider the risk that they took to achieve those returns. Since the 1960s, investors have known how to

quantify and measure risk with the variability of returns, but no single measure actually looked at *both* risk and return together. Today, we have three sets of performance measurement tools to assist us with our portfolio evaluations. The Treynor, Sharpe and Jensen ratios combine risk and return performance into a single value, but each is slightly different. Which one is best for you? Why should you care? Let's find out.

Treynor-Measure

Jack L. Treynor was the first to provide investors with a composite measure of portfolio performance that also included risk. Treynor's objective was to find a performance measure that could apply to all investors, regardless of their personal risk preferences. He suggested that there were really two components of risk: the risk produced by fluctuations in the market and the risk arising from the fluctuations of individual securities.

Treynor introduced the concept of the security market line, which defines the relationship between portfolio returns and market rates of returns, whereby the slope of the line measures the relative volatility between the portfolio and the market (as represented by beta). The beta coefficient is simply the volatility measure of a stock portfolio to the market itself. The greater the line's slope, the better the risk-return tradeoff.

The Treynor measure, also known as the reward to volatility ratio, can be easily defined as:

(Portfolio Return – Risk-Free Rate) / Beta

The numerator identifies the risk premium and the denominator corresponds with the risk of the portfolio. The resulting value represents the portfolio's return per unit risk.

To better understand how this works, suppose that the 10-year annual return for the S&P 500 (market portfolio) is 10%, while the average annual return on Treasury bills (a good proxy for the risk-free rate) is 5%. Then assume you are evaluating three distinct portfolio managers with the following 10-year results:

Managers	Average Annual Return	Beta
Manager A	10%	0.90
Manager B	14%	1.03
Manager C	15%	1.20

Now, you can compute the Treynor value for each:

T(market) = (.10-.05)/1 = .05

T(manager A) = (.10-.05)/0.90 = .056

T(manager B) = (.14-.05)/1.03 = .087

T(manager C) = (.15-.05)/1.20 = .083

The higher the Treynor measure, the better the portfolio. If you had been evaluating the portfolio manager (or portfolio) on performance alone, you may have inadvertently identified manager C as having yielded the best results. However, when considering the risks that each manager took to attain their respective returns, Manager B demonstrated the better outcome. In this case, all three managers performed better than the aggregate market.

Because this measure only uses systematic risk, it assumes that the investor already has an adequately diversified portfolio and, therefore, unsystematic risk (also known as diversifiable risk) is not considered. As a result, this performance measure should really only be used by investors who hold diversified portfolios.

Sharpe-Ratio

The Sharpe ratio is almost identical to the Treynor measure, except that the risk measure is the standard deviation of the portfolio instead of considering only the systematic risk, as represented by beta. Conceived by Bill Sharpe, this measure closely follows his work on the capital asset pricing model (CAPM) and by extension uses total risk to compare portfolios to the capital market line.

The Sharpe ratio can be easily defined as:

(Portfolio Return – Risk-Free Rate) / Standard Deviation

Using the Treynor example from above, and assuming that the S&P 500 had a standard deviation of 18% over a 10-year period, let's determine the Sharpe ratios for the following portfolio managers:

Manager	**Annual Return**	**Portfolio Standard Deviation**
Manager X	14%	0.11
Manager Y	17%	0.20
Manager Z	19%	0.27

S(market) = (.10-.05)/.18 = .278

S(manager X) = (.14-.05)/.11 = .818

S(manager Y) = (.17-.05)/.20 = .600

S(manager Z) = (.19-.05)/.27 = .519

Once again, we find that the best portfolio is not necessarily the one with the highest return. Instead, it's the one with the most superior risk-adjusted return, or in this case the fund headed by manager X.

Unlike the Treynor measure, the Sharpe ratio evaluates the portfolio manager on the basis of both rate of return and diversification (as it considers total portfolio risk as measured by standard deviation in its denominator). Therefore, the Sharpe ratio is more appropriate for well diversified portfolios, because it more accurately takes into account the risks of the portfolio.

Jensen-Measure

Like the previous performance measures discussed, the Jensen measure is also based on CAPM. Named after its creator, Michael C. Jensen, the Jensen measure calculates the excess return that a portfolio generates over its expected return. This measure of return is also known as alpha.

The Jensen ratio measures how much of the portfolio's rate of return is attributable to the manager's ability to deliver above-average returns, adjusted for market risk. The higher the ratio, the better the risk-adjusted returns. A portfolio with a consistently positive excess return will have a positive alpha, while a portfolio with a consistently negative excess return will have a negative alpha

The formula is broken down as follows:

Jensen\'s Alpha = Portfolio Return – Benchmark Portfolio Return

Where: Benchmark Return (CAPM) = Risk-Free Rate of Return + Beta (Return of Market – Risk-Free Rate of Return)

So, if we once again assume a risk-free rate of 5% and a market return of 10%, what is the alpha for the following funds?

Manager	Average Annual Return	Beta
Manager D	11%	0.90
Manager E	15%	1.10
Manager F	15%	1.20

First, we calculate the portfolio's expected return:

ER(D)= .05 + 0.90 (.10-.05) = .0950 or 9.5% return

ER(E)= .05 + 1.10 (.10-.05) = .1050 or 10.50% return

ER(F)= .05 + 1.20 (.10-.05) = .1100 or 11% return

Then, we calculate the portfolio's alpha by subtracting the expected return of the portfolio from the actual return:

Alpha D = 11%- 9.5% = 1.5%

Alpha E = 15%- 10.5% = 4.5%

Alpha F = 15%- 11% = 4.0%

Which manager did best? Manager E did best because, although manager F had the same annual return, it was expected that manager E would yield a lower return because the portfolio's beta was significantly lower than that of portfolio F.

Of course, both rate of return and risk for securities (or portfolios) will vary by time period. The Jensen measure requires the use of a different risk-free rate of return for each time interval considered. So, let's say you wanted to evaluate the performance of a fund manager for a five-year period using annual intervals; you would have to also examine the fund's annual returns minus the risk-free return for each year and relate it to the annual return on the market portfolio, minus the same risk-free rate. Conversely, the Treynor and Sharpe ratios examine average returns for the *total period* under consideration for all variables in the formula (the portfolio, market and risk-free asset). Like the Treynor measure, however, Jensen's alpha calculates risk premiums in terms of beta (systematic, undiversifiable risk) and therefore assumes the portfolio is already adequately diversified. As a result, this ratio is best applied with diversified portfolios, like mutual funds.

Portfolio Revision

The art of changing the mix of securities in a portfolio is called as portfolio revision.

The process of addition of more assets in an existing portfolio or changing the ratio of funds invested is called as portfolio revision.

The sale and purchase of assets in an existing portfolio over a certain period of time to maximize returns and minimize risk is called as Portfolio revision.

Need for Portfolio Revision

- An individual at certain point of time might feel the need to invest more. The need for portfolio revision arises when an individual has some additional money to invest.
- Change in investment goal also gives rise to revision in portfolio. Depending on the cash flow, an individual can modify his financial goal, eventually giving rise to changes in the portfolio i.e. portfolio revision.
- Financial market is subject to risks and uncertainty. An individual might sell off some of his assets owing to fluctuations in the financial market.

PART B

1. What is portfolio analysis?
2. Write short notes on portfolio management.
3. What is portfolio revision?
4. How do portfolio evaluation done?
5. Why do we go for portfolio revision?
6. What is security market line?
7. Write short notes on capital market line.
8. What is EMH?
9. List out various techniques in portfolio construction.
10. List out the constraints in portfolio revision

PART – C

1. Explain the Markowitz Theory in detail?

2. What is portfolio revision? List out the constraints in portfolio revision

3. Explain the process of Portfolio Construction?

4. Enumerate the Efficient Market Hypothesis.

5. Elucidate Treyner‟s Performance Measurement in Portfolio Analysis.

6. Enumerate the Techniques used in Portfolio Evaluation.

7. Explain the difference between Traditional and Modern Portfolio Analysis?

8. Explain the concept and process of portfolio analysis.

9. Explain the Techniques used in Portfolio Revision?

10. Write short note on:

    i. Capital Market Line

    ii. Security Market Line

PART D

PART D

CASE STUDY

1. Illustrate the computation of stock index from the following data.

Market Price at N Period:

S. No	Company Name	Share Price	No. of Outstanding Shares
1	A	25	100
2	B	35	150
3	C	45	120
4	D	85	100
5	E	20	50

Market Price at N + 1 Period:

S. No	Company Name	Share Price	No. of Outstanding Shares
1	A	30	100
2	B	40	150
3	C	45	120
4	D	95	100
5	E	21	50

Assume the base index value is 100.