KARPAGAM ACADEMY OF HIGHER EDUCATION
(Deemed to be University Established Under Section 3 of UGC Act 1956)
Coimbatore – 641 021

Semester IV

		L	T	P	C
17CCU403 B	**STOCK MARKET INVESTMENTS**	**6**	**-**	**-**	**4**

Course Objectives:

- Describe the current global business and investment environment (domestic and international), including the impact of currency rates, interest rates, interest rates, culture, ethics and human behavior on investment decisions;
- Obtain and interpret investment information from various sources;
- Demonstrate a basic understanding of various investment vehicles such as common stock, fixed income securities, derivative securities, derivative securities and mutual funds.
- To evaluate the performance of a portfolio;

Programme Outcome: Learn about Financial markets and instruments, investment strategies. Apply standard models of Financial economics to problems of portfolio optimization, diversification, immunization, and risk management.

UNIT- I

Investing Fundamentals: Types of Investment – Equity Shares, IPO/ FPO, Bonds. Indian Securities Market: the Market participants, Trading of Securities, Security market Indices. Sources of Financial Information. Stock Exchanges in India: BSE, NSE, MCX. Buying and Selling of Stocks: Using brokerage and analysts' recommendations. Use of Limit order and Market order.

UNIT- II

Stock Analysis and Valuation: Online Trading of Stocks. Understanding Stock Quotations, Types and Placing of Order. Risk: its Valuation and Mitigation, Analysis of the company: financial characteristics (as explained by Ratio analysis, Future prospects of the company, Assessing quality of management using Financial and Non-Financial data, Balance Sheet and Quarterly results, Cash flows and Capital Structure).

UNIT- III

Comparative analysis of companies, Stock valuations: using ratios like PE ratio, PEG ratio, and Price Revenue ratio. Use of Historic prices, simple moving average, basic and advanced interactive charts. Examining the shareholding pattern of the company. Pitfalls to avoid while investing: high P/E stocks, low price stocks, stop loss, excess averaging,

UNIT- IV

Investing in Mutual Funds: Background of Mutual Funds: Needs and advantages of investing in Mutual Funds. Net Asset Value, Types of Mutual funds: Open ended, closed ended, equity, debt, hybrid, money market, Load vs. no load funds, Factors affecting choice of mutual funds. CRISIL Mutual Fund Ranking and its Usage.

UNIT- V:

Share price indices: need, importance, compiling and their interpretation. Derivative Trading: Meaning, importance, Methods of trading. Types of traders, specification of derivative contracts and Derivative market in India. Options: Types, option trading, margin. Future: Futures contracts, future market and trading. Swaps: mechanics and valuation.

Suggested Readings :

Text Book:

1. Chandra, Prasanna (2008). *Investment Analysis and Portfolio Management* [3rd Edition]. New Delhi, Tata McGraw Hill

Reference Book:

1. Gitman and Joehnk.(2014). *Fundamentals of Investing* [12th Edition]. New Delhi, Pearson Publications.
2. Madura, Jeff. (2014). *Personal Finance*, [5th Edition] New Delhi, Pearson Publications
3. Damodaran, Aswath (2012). *Investment Valuation: Tool and Techniques for Determining the Value of Any Asset* [3rd Edition]. India, Wiley Finance
4. Bodie, Alex, Marcus and Mohanty. (2010). *Investments* [9th Edition]. New Delhi, McGraw Hill.
5. Hirt and Block. (2010). *Fundamentals of Investment Management*. [9th Edition]. New Delhi, McGraw Hill
6. Pandiyan, Punithavathy (2009). *Security Analysis and Portfolio Management* [1st Ed]. New Delhi, Vikas Publications.

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LECTURE PLAN

DEPARTMENT OF COMMERCE (COMPUTER APPLICATION)

STAFF NAME: SUGANYA. J SUBJECT CODE: 16CCU403B
SUBJECT NAME: STOCK MARKET INVESTMENT CLASS: II B.COM CA

SEMESTER: IV

Sl. No.	Lecture Duration	Topics to be covered	Support Materials
1	1	Investing fundamentals, Types of Investment	R1 1-5
2	1	Investing fundamentals, Types of Investment	R1 1-5
3	1	Equity shares- New Issue market, secondary market, IPO/IFO	R1 61-63
4	1	Equity shares- New Issue market, secondary market, IPO/IFO	R1 61-63
5	1	Bonds and its types	R1 12-14
6	1	Bonds and its types	R1 12-14
7	1	Indian securities market, market participation and trading of securities, buying and selling of stocks	R1 63-65 R2 -46
8	1	Indian securities market, market participation and trading of securities, buying and selling of stocks	R1 63-65 R2 -46
9	1	Stock Market Indices	T 68-73
10	1	Stock Market Indices	T 68-73
11	1	Sources of Financial Information	R1 231-233
12	1	Sources of Financial Information	R1 231-233
13	1	Stock exchanges in India, BSE, NSE,MCX	R1 85-89
14	1	Stock exchanges in India, BSE, NSE,MCX	R1 85-89
15	1	Stock brokers and their role	R3 38-42
16	1	Secondary market and types of orders	R1 65,91
17	1	Secondary market and types of orders	R1 65,91
18	1	Recapitulation of important questions	
		Total no. of Hours planned for unit- I	18

		UNIT II	
Sl. No.	**Lecture Duration**	**Topics to be covered**	**Support Materials**
1	1	Secondary market- Online trading of stocks	R3 69-74
2	1	Secondary market- Online trading of stocks	R3 69-74
3	1	Understanding stock Quotations	R3 88-92
4	1	Understanding stock Quotations	R3 88-92
5	1	Stock valuation, Risk analysis in stocks	R3 286-295
6	1	Stock valuation, Risk analysis in stocks	R3 286-295
7	1	Types of order, Placing order, Risk	R3 94-100
8	1	Types of order, Placing order, Risk	R3 94-100
9	1	Fundamentals & Technical Analysis of the company	R1 215-217
10	1	Fundamentals & Technical Analysis of the company	R1 215-217
11	1	Financial analysis and equity valuation	R1 189-201
12	1	Financial analysis and equity valuation	R1 189-201
13	1	Financial analysis and equity valuation	R1 189-201
14	1	Balance sheet analysis	R2 292-301
15	1	Balance sheet analysis	R2 292-301
16	1	Financial Ratios	R2 286-291
17	1	Financial Ratios	R2 286-291
18	1	Recapitulation of Important Questions	
		Total no. of Hours planned for unit- II	18
		UNIT III	
Sl. No.	**Lecture Duration**	**Topics to be covered**	**Support Materials**
1	1	Fundamentals of share valuation	R1 164-166
2	1	Fundamentals of share valuation	R1 164-166
3	1	Valuation using PE Ratio, PEG Ratio and Price revenue Ratio	R2 286- 291
4	1	Valuation using PE Ratio, PEG Ratio and Price revenue Ratio	R2 286- 291
5	1	Valuation using PE Ratio, PEG Ratio and Price revenue Ratio	R2 286- 291
6	1	Use of Historical Price, Simple moving average	R3 601-608
7	1	Use of Historical Price, Simple moving average	R3 601-608
8	1	Basic and advanced interactive charts	T 186-188
9	1	Basic and advanced interactive charts	T 186-188
10	1	Basic and advanced interactive charts	T 186-188
11	1	Share holding pattern of the company	T 189-192
12	1	Share holding pattern of the company	T 189-192
13	1	Things to avoid during investing in High P/E	T 396

		stocks, Low price stocks	
14	1	Things to avoid during investing in High P/E stocks, Low price stocks	T 396
15	1	Things to avoid during investing in High P/E stocks, Low price stocks	T 396
16	1	Things to consider during investment in stop loss and excess averaging stocks	T 397
17	1	Things to consider during investment in stop loss and excess averaging stocks	T 397
18	1	Recapitulation of Important Questions	
		Total no. of Hours planned for unit- III	18
		UNIT IV	
Sl. No.	**Lecture Duration**	**Topics to be covered**	**Support Materials**
1	1	Mutual fund- History and Development	T 38-41
2	1	Mutual fund- History and Development	T 38-41
3	1	Advantages of Investing in Mutual fund schemes	R1 96-98
4	1	Advantages of Investing in Mutual fund schemes	R1 96-98
5	1	NAV, open ended, closed ended funds	R1 99
6	1	NAV, open ended, closed ended funds	R1 99
7	1	NAV, open ended, closed ended funds	R1 99
8	1	NAV, open ended, closed ended funds	R1 99
9	1	Equity, Debt and Hybrid funds	R1 100-101
10	1	Equity, Debt and Hybrid funds	R1 100-101
11	1	Money Market, Load and no load funds	R1 102-103
12	1	Money Market, Load and no load funds	R1 102-103
13	1	Factors affecting choice of Mutual fund	R2 428-429
14	1	Factors affecting choice of Mutual fund	R2 428-429
15	1	Credit rating agencies and their role	T 560-561
16	1	Credit rating agencies and their role	T 560-561
17	1	CRISIL ranking of Mutual fund and its uses	T 562-563
18	1	Recapitulation of Important Questions	
		Total no. of Hours planned for unit- IV	18
		UNIT V	
Sl. No.	**Lecture Duration**	**Topics to be covered**	**Support Materials**
1	1	Share Price indices, Computation	R1 109-117
2	1	Share Price indices, Computation	R1 109-117
3	1	Introduction to derivatives	R2 431-432
4	1	Introduction to derivatives	R2 431-432
5	1	Difference between futures and options, Methods of trading	R1 295-310
6	1	Difference between futures and options,	R1 295-310

		Methods of trading	
7	1	Derivatives markets in India	T 361
8	1	Derivatives markets in India	T 361
9	1	Options- Meaning, trading, procedure	R3 752-754
10	1	Options- Meaning, trading, procedure	R3 752-754
11	1	Futures contract, markets and trading procedures	R3 755-760
12	1	Futures contract, markets and trading procedures	R3 755-760
13	1	SWAP valuation and mechanism	R3 800-806
14	1	SWAP valuation and mechanism	R3 800-806
15	1	Recapitulation of Important Questions	
16	1	Previous year question paper discussion	
17	1	Previous year question paper discussion	
18	1	Previous year question paper discussion	
		Total no. of Hours planned for unit- V	18

Textbooks:

Chandra Prasanna (2013) "Investment Analysis and Portfolio Management", Tata McGraw Hill, 3rd Edition, 2008.

Reference Books:

Pandian, Punithavathy(2009), "Security analysis and Portfolio Management", Vikas Publications, Edition-1

Preeti singh "Investment Management- Security analysis and Portfolio Management"- Himalaya Publishing House.

Bodie, Alex,Marcus and Mohanty (2010) "Investments", MC Grawhill Publishing Co. 9th Edition

Unit I

INVESTING FUNDAMENTAL

Types of Investment- Equity shares, IPO/FPO, Bonds- Indian Securities Market- The Market participants- Trading of securities- Security market Indices- Sources of financial Information- Stock Exchanges in India: BSE, NSE, MCX- Buying and selling of stocks- Using brokerage and analysts' recommendations- Use of Limit Order and Market Order.

Types of Investments

There are many types of investments and investing styles to choose from. Mutual funds, ETFs, individual stocks and bonds, closed-end mutual funds, real estate and various alternative investments.

Stocks

Buying shares of stock represent ownership in the company and the opportunity to participate in the company's success via increases in the stock's price plus any dividends that the company might declare. Shareholders have a claim on the company's assets.

Holders of common stock have voting rights at shareholders' meetings and the right to receive dividends if they are declared. Holders of preferred stock don't have voting rights but do receive preference in terms of the payment of any dividends over common shareholders. They also have a higher claim on company assets than holders of common stock.

Bonds

Bonds are debt instruments whereby an investor effectively is loaning money to a company or agency (the issuer) in exchange for periodic interest payments plus the return of the bond's face

amount when the bond matures. Bonds are issued by corporations, the government,municipalities, and governmental agencies.

Bonds can be purchased as new offerings or on the secondary market, just like stocks. A bond's value can rise and fall based on a number of factors, the most important being the direction of interest rates. Bond prices move inversely in the direction of interest rates.

Mutual funds

A mutual fund is a pooled investment vehicle managed by an investment manager that allows investors to have their money invested in stocks, bonds or other investment vehicles as stated in the fund's prospectus.

Mutual funds are valued at the end of the trading day and any transactions to buy or sell shares are executed after the market close as well.

Mutual funds can make distributions in the form of dividends, interest and capital gains. These distributions will be taxable if held in a non-retirement account. Selling a mutual fund can result in a gain or loss on the investment, just as with individual stocks or bonds.

Alternative investments

Beyond stocks, bonds & mutual funds there are many other ways to invest. We will discuss a few of these here.

Real estate investments can be made by buying a commercial or residential property directly. Real estate investment trusts (REITs) pool investor's money and purchase properties. REITs are traded like stocks. There are mutual funds and ETFs that invest in REITs as well.

Hedge funds and private equity also fall into the category of alternative investments, although they are only open to those who meet the income and net worth requirements of being an

accredited investor. Hedge funds may invest almost anywhere and may hold up better than conventional investment vehicles in turbulent markets.

Private equity allows companies to raise capital without going public. There are also private real estate funds that offer shares to investors in a pool of properties. Often alternatives have restrictions in terms of how often investors can have access to their money.

In recent years, alternative strategies have been introduced in mutual fund allowing for lower minimum investments and great liquidity for investors. These vehicles are known as liquid alternatives.

Equity Shares

Equity shares were earlier known as ordinary shares. The holders of these shares are the real owners of the company. They have a voting right in the meetings of holders of the company. They have a control over the working of the company. Equity shareholders are paid adividend after paying it to the preference shareholders.

The rate of dividend on these shares depends upon the profits of the company. They may be paid a higher rate of dividend or they may not get anything. These shareholders take more risk as compared to preference shareholders.

Equity capital is paid after meeting all other claims including that of preference shareholders. They take risk both regarding dividend and return of capital. Equity share capital cannot be redeemed during the lifetime of the company.

Features of Equity Shares*:*

Equity shares have the following features:

(i) Equity share capital remains permanently with the company. It is returned only when the company is wound up.

(ii) Equity shareholders have voting rights and elect the management of the company.

(iii) The rate of dividend on equity capital depends upon the availability of surplus funds. There is no fixed rate of dividend on equity capital.

Advantages of Equity Shares:

1. Equity shares do not create any obligation to pay a fixed rate of dividend.

2. Equity shares can be issued without creating any charge over the assets of the company.

3. It is a permanent source of capital and the company has to repay it except under liquidation.

4. Equity shareholders are the real owners of the company who have the voting rights.

5. In case of profits, equity shareholders are the real gainers by way of increased dividends and appreciation in the value of shares.

Disadvantages of Equity Shares:

1. If only equity shares are issued, the company cannot take the advantage of trading on equity.

2. As equity capital cannot be redeemed, there is a danger of over capitalisation.

3. Equity shareholders can put obstacles for management by manipulation and organising themselves.

4. During prosperous periods higher dividends have to be paid leading to increase in the value of shares in the market and it leads to speculation.

5. Investors who desire to invest in safe securities with a fixed income have no attraction for such shares.

Initial Public Offering – IPO

An initial public offering (IPO) is the first time that the stock of a private company is offered to the public. IPOs are often issued by smaller, younger companies seeking capital to

expand, but they can also be done by large privately owned companies looking to become publicly traded. In an IPO, the issuer obtains the assistance of an underwriting firm, which helps determine what type of security to issue, the best offering price, the amount of shares to be issued and the time to bring it to market.

An IPO is also referred to as a public offering. When a company initiates the IPO process, a very specific set of events occurs. The chosen underwriters facilitate all of these steps.

• An external IPO team is formed, consisting of an underwriter, lawyers, certified public accountants (CPAs) and Securities and Exchange Commission (SEC) experts.

• Information regarding the company is compiled, including financial performance and expected future operations. This becomes part of the company prospectus, which is circulated for review.

• The financial statements are submitted for official audit.

• The company files its prospectus with the SEC and sets a date for the offering.

The Risk of Investing in an IPO

IPOs can be a risky investment. For the individual investor, it is tough to predict what the stock will do on its initial day of trading and in the near future because there is often little historical data to use to analyze the company. Also, most IPOs are for companies that are going through a transitory growth period, which means that they are subject to additional uncertainty regarding their future values.

Follow On Public Offer – FPO

A follow-on public offer (FPO) is an issuing of shares to investors by a **public company** that is already listed on an exchange. An FPO is essentially a stock issue of supplementary shares made by a company that is already publicly listed and has gone through the IPO process. FPOs are popular methods for companies to raise additional **equity**capital in the **capital markets** through a stock issue.

Two Main Types of Follow-On Public Offers

There are two main types of follow-on public offers. The first type is dilutive to investors, as the company's Board of Directors agrees to increase the share float level. This type of follow-on public offering seeks to raise money to pay debt or expand the business. This increases the number of shares outstanding.

The other type of follow-on public offer is non-dilutive. This approach is used when directors or large shareholders sell privately held shares. This is non-dilutive, as no additional shares are sold. This method is commonly referred to as a secondary market offering. There is no benefit to this method for the company or current shareholders.

Knowing that there are two main types of follow-on public offers, and knowing the different effects they have, makes it incredibly important to pay attention to the identity of the sellers on offerings. Investors can tell from this whether or not the offering will be dilutive.

Follow-On Offerings Common

Follow-on offerings are common in the investment world. This is an easy way for companies to raise equity that can be used for common purposes. Companies that announce secondary offerings can see their share price fall as a result. Shareholders often react negatively to secondary offerings, as many come at below-market prices or dilute their existing shares.

Security Markets

- Companies raise resources through public issues.

- Buyers and sellers enter into transactions and make profit or loss.
- Examples of Securities: Bonds, Stocks(also known as share, equity share), Mutual funds, derivatives of Securities etc.
- Derivatives of Securities: Futures, Options(Call, Put).

Regulators of Indian Securities market

- SEBI- Securities and Exchange Board of India
- RBI- Reserve Bank of India
- DEA- Department of Economic Affairs
- DCA-Department of Company Affairs

Types of Security Markets

Primary Market

A primary market issues new securities on an exchange for companies, governments and other groups to obtain financing through debt-based or equity-based securities. Primary markets are facilitated by underwriting groups consisting of investment banksthat set a beginning price range for a given security and oversee its sale to investors. Once the initial sale is complete, further trading is conducted on the secondary market, where the bulk of exchange trading occurs each day.

Secondary Market

The secondary market is where investors buy and sell securities they already own. It is what most people typically think of as the "stock market," though stocks are also sold on the primary market when they are first issued.

Market Participants

- **Broker-Dealers** - Broker-dealers charge a fee to handle trades between the buyers and sellers of securities. A broker-dealer may buy securities from their customer who is selling or sell from their own inventory to its customer who is buying.
- **Clearing Agencies** - Clearing Agencies are Self-Regulatory Organizations (SROs) that are required to register with the SEC. Like all SROs, they are responsible for writing and enforcing their rules and disciplining members. There are two types of clearing agencies-- clearing corporations and depositories. Clearing corporations, such as the National Securities Clearing Corporation (NSCC) and the Fixed Income Clearing Corporation (FICC), compare member transactions, clear those trades and prepare instructions for automated settlement of those trades. Clearing corporations often act as intermediaries in making securities settlements. Depositories, namely The Depository Trust Company (DTC), hold securities certificates for their participants, transfer positions between participants, and maintain ownership records.
- **Credit Rating Agencies** - Credit Rating Agencies provide opinions on the creditworthiness of a company or security. They indicate the credit quality by means of a grade. Generally, credit ratings distinguish between investment grade and non-investment grade. For example, a credit rating agency may assign a "triple A" credit rating as its top "investment grade" rating, and a "double B" credit rating or below for "non-investment grade" or "high-yield" corporate bonds. Credit rating agencies registered as such with the SEC are known as "Nationally Recognized Statistical Rating Organizations."

- **ECNs/ATSs** - Electronic Communications Networks, or ECNs, are electronic trading systems that automatically match buy and sell orders at specified prices for users of the system. ECNs register with the SEC as broker-dealers and are subject to Regulation ATS. ATSs are Alternative Trading Systems. This term encompasses all systems that perform securities exchange functions and are not registered with the Commission as exchanges.
- **Investment Advisers** - Investment advisers are persons or firms that are in the business of providing investment advice to investors or issuing reports or analyses regarding securities. They do these activities for compensation.
- **Securities Exchanges** - Securities exchanges are markets where securities are bought and sold. Currently, there are fifteen securities exchanges registered with the SEC as national securities

exchanges, including NYSE Euronext, NASDAQ, The Chicago Board Options Exchange, and BATS Exchange. Securities Exchanges are also SROs.

- **Self-Regulatory Organizations (SROs) -** An SRO manages its industry through the adoption of rules governing the conduct of its members. SROs also enforce the rules they adopt and discipline members for violating SRO rules. Two well-known SROs are the Financial Industry Regulatory Authority (FINRA) and the Municipal Securities Rulemaking Board (MSRB). FINRA is the largest SRO in the securities industry. It is the frontline regulator of broker-dealers. MSRB makes rules regulating dealers of municipal securities. The SEC oversees both FINRA and the MSRB. Other SROs include clearing agencies and securities exchanges.
- **Transfer Agents** -Transfer agents record changes of security ownership, maintain the issuer's security holder records, cancel and issue certificates, and distribute dividends. Transfer agents stand between issuing companies and security holders. Transfer agents are required to be registered with the SEC, or if the transfer agent is a bank, with a bank regulatory agency. There is no SRO that governs transfer agents. The SEC has announced rules and regulations for all registered transfer agents. The intent is to facilitate the prompt and accurate clearance and settlement of securities transactions and assure the safeguarding of securities and funds.

Stock Market Indices

From among the stocks listed on the exchange, some similar stocks are selected and grouped together to form an index. This classification may be on the basis of the industry the companies belong to, the size of the company, market capitalization or some other basis. For example, the BSE Sensex is an index consisting of 30 stocks. Similarly, the BSE 500 is an index consisting of 500 stocks.

The values of the grouped stocks are used to calculate the value of the index. Any change in the price of the stocks leads to a change in the index value. An index is thus indicative of the changes in the market.

Some of the important indices in India are:

- Benchmark indices – BSE Sensex and NSE Nifty
- Sectoral indices like BSE Bankex and CNX IT
- Market capitalization-based indices like the BSE Smallcap and BSE Midcap
- Broad-market indices like BSE 100 and BSE 500

The Trading procedure involves the following steps:

1. Selection of a broker:

The buying and selling of securities can only be done through SEBI registered brokers who are members of the Stock Exchange. The broker can be an individual, partnership firms or corporate bodies. So the first step is to select a broker who will buy/sell securities on behalf of the investor or speculator.

2. Opening Demat Account with Depository:

Demat (Dematerialized) account refer to an account which an Indian citizen must open with the depository participant (banks or stock brokers) to trade in listed securities in electronic form. Second step in trading procedure is to open a Demat account.

The securities are held in the electronic form by a depository. Depository is an institution or an organization which holds securities (e.g. Shares, Debentures, Bonds, Mutual (Funds, etc.) At present in India there are two depositories: NSDL (National Securities Depository Ltd.) and CDSL (Central Depository Services Ltd.) There is no direct contact between depository and investor. Depository interacts with investors through depository participants only.

Depository participant will maintain securities account balances of investor and intimate investor about the status of their holdings from time to time.

3. Placing the Order:

After opening the Demat Account, the investor can place the order. The order can be placed to the broker either (DP) personally or through phone, email, etc.

Investor must place the order very clearly specifying the range of price at which securities can be bought or sold. e.g. "Buy 100 equity shares of Reliance for not more than Rs 500 per share."

4. Executing the Order:

As per the Instructions of the investor, the broker executes the order i.e. he buys or sells the securities. Broker prepares a contract note for the order executed. The contract note contains the name and the price of securities, name of parties and brokerage (commission) charged by him. Contract note is signed by the broker.

5. Settlement:

This means actual transfer of securities. This is the last stage in the trading of securities done by the broker on behalf of their clients. There can be two types of settlement.

(a) On the spot settlement:

It means settlement is done immediately and on spot settlement follows. T + 2 rolling settlement. This means any trade taking place on Monday gets settled by Wednesday.

(b) Forward settlement:

It means settlement will take place on some future date. It can be T + 5 or T + 7, etc. All trading in stock exchanges takes place between 9.55 am and 3.30 pm. Monday to Friday.

Sources of Financial Information

To effectively evaluate the financial performance of the business requires financial information from three sources: a balance sheet, an income statement and a cash flow statement. Each of these financial summaries gives important, information of somewhat different type, for making that overall assessment of how the business is doing.

Balance Sheet The balance sheet is a summary of what the business owns (its assets) and what it owes (its liabilities) and the difference between the two (net worth, also called owner's equity). Assets are categorized into two kinds, current and non-current. Current assets are those that are cash or can readily be converted to cash within the next year. They can include cash and checking account balances, growing crops or market livestock, and monies owed to the business. Non-current assets include intermediate assets and long term assets. Intermediate assets will include breeding livestock, farm machinery and equipment and titled vehicles. Intermediate assets are those assets that could be sold, used up or might last from one to five years. Long term assets include land and farm buildings. Intermediate and long term assets can be valued on a cost basis or a market value basis. Cost basis valuation uses purchase price less accumulated depreciation. Market value reflects the expected selling price of the asset if it were sold. Liabilities are also categorized as current and non-current. Current liabilities cover a period over the next year. They include interest on debts which is accumulating and is due to be paid in the

next year, principal payments on term debts which will be due in the next year and taxes to be due in the next year.

Income Statement The income statement summarizes the income and expenses of the dairy farm business and usually covers periods from one month to one year.

Cash Flow Statement The cash flow statement is a log of cash inflows (cash coming in to the business as income) and cash outflows (cash going out of the business as cash expenses). The cash of the business coming in and leaving is generally categorized in the cash income and expense categories used in the income statement. It tracks the cash position of the business on a monthly basis. A positive cash flow position is one where cash inflows are greater than cash outflows. The cash flow statement can be a history of the cash flow for the business. Predicted cash income and outgo can also be a planning tool for the dairy farm business as well and can be constructed from historical cash data from the business.

India Stock Exchanges

Bombay Commodity Exchange (estwhile the Bombay Oilseeds and Oils Exchange)
Bombay Stock Exchange (BSE)
Calcutta Stock Exchange (CSE)
Cochin Stock Exchange
Inter-Connected Stock Exchange of India (ISE)
Multi Commodity Exchange of India (MCX)
National Commodity & Derivatives Exchange (NCDEX)
National Stock Exchange of India (NCE)
OTC Exchange of India (Exchange for Technology and Growth Stocks)
Pune Stock Exchange (PSE)

The Bombay Stock Exchange

The Indian stock market is one of the oldest market in Asian markets. Its history dates back to nearly two centuries when the records of security dealings in India were meagre and

obscure. The East India Company was the dominant institution in those days and business in its loan securities was transacted towards the close of the eighteenth century. By the 1830s, business in corporate stocks and shares in bank and cotton presses took place in Bombay. Though the trading list was broader in 1839, there were only half a dozen brokers recognised by banks and merchants. In 1860-61, the American Civil War broke out and cotton supply from the United States of America and Europe was stopped. This resulted in the "Share Mania" for cotton trading in India. The number of brokers increased to between 200 and 250. However, at the end of the American Civil War, in 1865, a disastrous slump began— for example, a Bank of Bombay's share that had touched Rs. 2,850 could only be sold at Rs. 87. At the same time, brokers found a place in Dalal Street, Bombay, where they could conveniently assemble and transact business. In 1875, they formally established the "Native Share and Stock Brokers' Association". In 1895, the association acquired premises in the same street; it was inaugurated in 1899 as the Bombay Stock Exchange. The Bombay Stock Exchange has been converted into company for very recently. Now it is known as Mumbai Stock Exchange Ltd. The executive director is in charge of the administration of the exchange and is supported by elected directors, Securities Exchange Board of India (SEBI) nominees, and public representatives.

The National Stock Exchange

The National Stock Exchange of India Limited was set up to provide access to investors from across the country on an equal footing. NSE was promoted by leading financial institutions at the behest of the Government of India and was incorporated in November 1992 as a tax-paying company, unlike other stock exchanges in the country. On its recognition as a stock exchange under the Securities Contracts (Regulation) Act, 1956 in April 1993, NSE commenced operations in the wholesale debt market (WDM) segment in June 1994. The capital market (equities) segment commenced operations in November 1994, and operations in the derivatives segment commenced in June 2000. The organisational structure of NSE is through the link between National Securities Clearing Corporation Ltd. (NSCCL), India Index Services and Products Ltd. (IISL), National Securities Depository Ltd. (NSDL), DotEx International Limited (DotEx) and NSE.IT Ltd. Figure 4.2. Organisational structure of National Stock Exchange

Source: NSE website: www.nse-india.com Clearing House NHSCCL NSE Depository NSDL Index Service IISL Technical Support NSEIT/DotEx The National Securities Clearing Corporation Ltd., a wholly owned subsidiary of NSE, was incorporated in August 1995. It was set up to bring and sustain confidence in the clearing and settlement of securities, to promote and maintain short and consistent settlement cycles, and to provide counterparty risk guarantee. India Index Services and Products Limited, a joint venture between NSE and the Credit Rating Information Services of India Limited (CRISIL), was set up in May 1998 to provide a variety of indices and index-related services and products for the Indian capital market. It has a consulting and licensing agreement with Standard and Poor's (S & P) for co-branding equity indices. In order to counteract the problems associated with trading in physical securities, NSE joined hands with the Industrial Development Bank of India (IDBI) and Unit Trust of India (UTI) to promote dematerialisation of securities. Together they set up the National Securities Depository Limited the first depository in India. NSDL commenced operations in November 1996. It has since established a national infrastructure of international standard to handle trading and settlement in dematerialised form and thus has completely eliminated the risks associated with fake/bad/stolen paper documents. NSE.IT, a 100 per cent subsidiary of NSE, provides technical services and solutions in the area of trading, broker front-end and back-office, clearing and settlement, web-based trading, risk management, treasury management, asset liability management, banking, insurance, and so on. The company also plans to provide consultancy and implementation services in the areas of data warehousing, business continuity plans, mainframe facility management, site maintenance and backups, real time market analysis and financial news, and so on. NSE.IT is an export-oriented unit with Straight Through Processing (STP). NSE.IT and i-flex Solutions Limited, a leader in e-enabling the global financial services industry, promoted DotEx International Limited. DotEx provides customer fulfilment infrastructure for the securities industry. The initial offering of DotEx is the DotEx Plaza where multiple market participants such as brokers, depository participants, and banks can offer web-based services to their customers. As a neutral aggregator and infrastructure provider, DotEx offers choice and convenience to investors.

Multi Commodity Exchange of India Ltd (**MCX**)

It is an independent commodity exchange based in India. It was established in 2003 and is based in Mumbai. It is India's largest commodity futures exchange where the clearance and settlements of the exchange happens and the turnover of the exchange for quarter ended June 2017 was 12.01 trillion rupees. MCX offers futures trading in bullion, non-ferrous metals, energy, and a number of agricultural commodities (mentha oil, cardamom, crude palm oil, cotton and others).

In 2016, MCX was seventh among the global commodity bourses in terms of the number of futures contracts traded, the latest yearly data from Futures Industry Association (FIA) showed.

In February 2012, MCX had come out with a public issue of 6,427,378 Equity Shares of Rs. 10 face value in price band of Rs. 860 to Rs. 1032 per equity share to raise around $134 million. It was the first ever IPO by an Indian exchange and made MCX India's only publicly listed exchange.

From September 28, 2015, MCX is being regulated by the Securities and Exchange Board of India (SEBI). Earlier MCX was regulated by the Forward Markets Commission (FMC), which got merged with the SEBI on September 28, 2015.

Multi-Commodity Exchange appointed of Mrugank Paranjape as MD & CEO of the exchange on February 29, 2016 for a period of three years. Mrugank Paranjape has earlier working with Deutsche Bank for last 14 years. Last he was heading DB Center of the bank.[1]

METAL
Aluminium, Aluminium Mini, Copper, Copper Mini, Lead, Lead Mini, Nickel, Nickel Mini, Zinc, Zinc Mini
BULLION

Gold, Gold Mini, Gold Guinea, Gold Petal, Gold Petal (New Delhi), Gold Global, Silver, Silver Mini, Silver Micro, Silver 1000
AGRO COMMODITIES
Cardamom, Cotton, Crude Palm Oil, Kapas, Mentha Oil, Castorseed, RBD Palm oil
ENERGY
Brent Crude Oil, Crude Oil, Crude Oil Mini, Natural Gas

Limit Order

A limit order is a take-profit order placed with a bank or brokerage to buy or sell a set amount of a financial instrument at a specified price or better; because a limit order is not a **market order**, it may not be executed if the price set by the **investor** cannot be met during the period of time in which the order is left open. Limit orders also allow an investor to limit the length of time an order can be outstanding before being canceled.

Stop Loss

A stop loss order is the opposite of a take profit order: It is left to ensure that a transaction does not take place at a price worse than the indicated target. It can be used to sell an existing instrument or to enter into a new transaction.

Conditional Orders

Limit orders can have specific conditions added to them. An investor may indicate that the order must be executed immediately or canceled, which is called a fill or kill (FOK) order. They may also require that all desired shares be bought or sold at the same time if the trade is to be executed, which is called an all or none order. A limit order can be paired with a stop loss order for the same amount, with the stipulation that if one of the paired order is done, the other will be called automatically. This is commonly called "one cancels the other" or OCO.

A contingent order can also be called an "if/then" order. If the first part of the order is executed, the second part becomes a live order. If the first part is not executed, the second part is never executed, even if the market trades at the indicated level.

Timing

An order usually includes an indication of how long it will remain in effect. The term "good till cancelled," abbreviated GTC, means that the order will remain in effect until the investor cancels it. It is common to have an order cancel automatically at the end of the trading day; however, in the foreign exchange market, which trades around the clock, orders can be filled 24 hours a day.

An investor makes a market order through a broker or brokerage service to buy or sell an investment immediately at the best available current price. A market order is the default option and is likely to be executed because it does not contain restrictions on the price or the time frame in which the order can be executed. A market order is also sometimes referred to as an unrestricted order.

Market order guarantees execution, and it often has low commissions due to the minimal work brokers need to do. Avoid using market orders on stocks with a low average daily volume. These stocks usually have large spreads and result in large amounts of slippage when executing trades at the market price.

Security broker/dealers (market-makers) quote market prices using a bid price and an ask price.

The bid is always lower than the ask, and the difference between the two prices is the spread. When a trader wants to execute a trade using a market order, the trader is willing to buy at the ask, or sell at the bid. Thus, the trade is immediately out of the money by the amount of the spread. This amount may increase in the form of slippage if the market order that is placed cannot be satisfied with the current volume that is associated with the current bid/ask price quoted.

STOCK MARKET INVESTMENT
POSSIBLE QUESTIONS
UNIT 1

SECTION B

2 MARKS

Answer the following questions:

1. What is a primary market?
2. What is a secondary market?
3. Explain IPO&FPO
4. What are market indices? What is the market index for BSE and NSE?
5. What is a market order
6. What is an Investment? What are its types?
7. What do you mean by Bonds?
8. What is a Stock Exchange?
9. What are BSE and NSE?
10. Who is a stock broker
11. What is a limit order?
12. What is a MCX?
13. What is an Equity share?
14. Explain in brief about Indian securities market.
15. What are stock market indices?

SECTION C

6 MARK

Answer the following questions:

1. Who are stock brokers? Explain their role.
2. What do you mean by stock market indices? How is the index calculated?
3. What is an investment? Explain different types of investment options.
4. What is MCX? How does it function? Explain different commodities traded in MCX.
5. What is a stock exchange? Explain about BSE and NSE.
6. Explain steps involved in listing and trading of securities.
7. What is an Order? Briefly explain Limit order and Market Order.
8. What is a stock market? What are its types?
9. Explain in detail steps involved in trading of stocks.
10. Explain steps involved in listing and trading of securities

Unit II

Stock Analysis and Valuation

Online trading of stocks- Understanding Quotations, Tyoes and Placing of Order- Risk- Valuation and Mitigation- Analysis of the Company: Financial Characteristics (as explained by ratio analysis, future prospects of the company, assessing quality of management using financial and non-financial data, balance sheet and quarterly results, cash flow and capital structure)

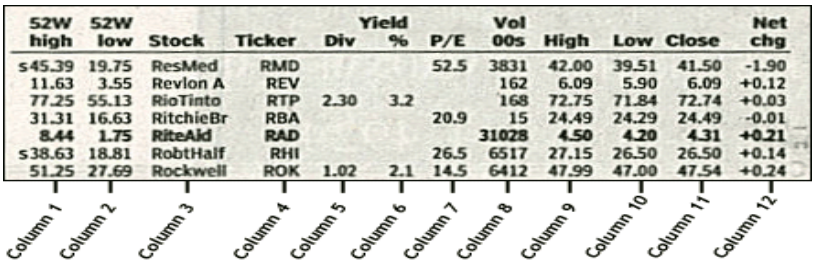
Online Trading:

Online trading is the act of placing buy/sell orders for financial securities and/or currencies with the use of a brokerage's internet-based proprietary trading platforms. The use of online trading increased dramatically in the mid- to late-'90s with the introduction of affordable high-speed computers and internet connections.Stocks, bonds, options, futures and currencies can all be traded online.

The use of online trades has increased the number of discount brokerages because internet trading allows many brokers to further cut costs and part of the savings can be passed on to customers in the form of lower commissions.

Another benefit of online trading is the improvement in the speed of which transactions can be executed and settled, because there is no need for paper-based documents to be copied, filed and entered into an electronic format.

Understanding Stock Quotations



52W high	52W low	Stock	Ticker	Div	Yield %	P/E	Vol 00s	High	Low	Close	Net chg
s45.39	19.75	ResMed	RMD			52.5	3831	42.00	39.51	41.50	-1.90
11.63	3.55	Revlon A	REV				162	6.09	5.90	6.09	+0.12
77.25	55.13	RioTinto	RTP	2.30	3.2		168	72.75	71.84	72.74	+0.03
31.31	16.63	RitchieBr	RBA			20.9	15	24.49	24.29	24.49	-0.01
8.44	1.75	RiteAid	RAD				31028	4.50	4.20	4.31	+0.21
s38.63	18.81	RobtHalf	RHI			26.5	6517	27.15	26.50	26.50	+0.14
51.25	27.69	Rockwell	ROK	1.02	2.1	14.5	6412	47.99	47.00	47.54	+0.24

Column 1 Column 2 Column 3 Column 4 Column 5 Column 6 Column 7 Column 8 Column 9 Column 10 Column 11 Column 12

Columns 1 & 2: 52-Week High and Low - These are the highest and lowest prices at which a stock has traded over the previous 52 weeks (one year). This typically does not include the previous day's trading.

Column 3: Company Name & Type of Stock - This column lists the name of the company. If there are no special symbols or letters following the name, it is common stock. Different symbols imply different classes of shares. For example, "pf" means the shares are preferred stock.

Column 4: Ticker Symbol - This is the unique alphabetic name which identifies the stock. If you watch financial TV, you have seen the ticker tape move across the screen, quoting the latest prices alongside this symbol.

Column 5: Dividend Per Share - This indicates the annual dividend payment per share. If this space is blank, the company does not currently pay out dividends.

Column 6: Dividend Yield - The percentage return on the dividend. Calculated as annual dividends per share divided by price per share.

Column 7: Price/Earnings Ratio - This is calculated by dividing the current stock price by earnings per share from the last four quarters. For more detail on how to interpret this, see our P/E Ratio tutorial.

Column 8: Trading Volume - This figure shows the total number of shares traded for the day, listed in hundreds. To get the actual number traded, add "00" to the end of the number listed.

Column 9 & 10: Day High and Low - This indicates the price range at which the stock has traded at throughout the day. In other words, these are the maximum and the minimum prices that people have paid for the stock.

Column 11: Close - The close is the last trading price recorded when the market closed on the day. If the closing price is up or down more than 5% than the previous day's close, the entire listing for that stock is bold-faced. Keep in mind, you are not guaranteed to get this price if you buy the stock the next day because the price is constantly changing (even after the exchange is closed for the day). The close is merely an indicator of past performance and except in extreme circumstances serves as a ballpark of what you should expect to pay.

Column 12: Net Change - This is the dollar value change in the stock price from the previous day's closing price. When you hear about a stock being "up for the day," it means the net change was positive.

Types of Orders

Placing an order The buyer or seller of securities can place order by telegram, telephone, letter, fax etc. or in person. The orders can be of following types:

1. Limit Order, i.e., order to buy/sell at a fixed price specified by the client. This price may be inclusive or exclusive of brokerage.

2. Best rate order, i.e., order to buy/sell at the best possible price. The client may also fix a time frame within which the order is to be executed.

3. Immediate or cancel order, i.e., order to execute purchase/ sale immediately at the quoted price. If not executed immediately, the order gets cancelled.

4. Limited discretionary order, i.e., order to buy/sell within the specified price range and/or within the given time period as per the best judgement of the broker.

5. Stop loss order, i.e., order to sell as soon as price falls uptoaparticular level, so that the client does not suffer a loss more than the pre-specified amount.

6. Open order, i.e., an order where the client does not fix any price limit or time limit on the execution of the order and relies on the judgement of the broker.

Risks That Every Stock Faces

TypesofRisks

Here are some risks associated with investing in the stock markets:

- **Systematic risk** - also known as market risk, this is the potential for the entire market to decline. Systematic risk cannot be diversified away.
- **Unsystematic risk** - the risk that any one stock may go down in value, independent of the stock market as a whole. This risk may be minimized through diversification. This also incorporates business risk and event risk, as described in the "Bond Risks" section.
- **Other risks -** opportunity risk and liquidity risk (as described in the "Bond Risks" section) may also apply to stocks in a portfolio.

Quantitative Analysis

One of the concepts used in risk and return calculations is standard deviation**,** which measures the dispersion of actual returns around the expected return of an investment. Since standard deviation is the square root of the variance, this is another crucial concept to know. The variance is calculated by weighting each possible dispersion by its relative probability (take the difference between the actual return and the expected return, then square the number).

The standard deviation of an investment's expected return is considered a basic measure of risk. If two potential investments had the same expected return, the one with the lower standard deviation would be considered to have less potential risk.

Standard deviation takes into account both systematic risk and unsystematic risk and is considered to be a measure of an investment's total risk.

Risk measures

There are three other risk measures used to predict volatility and return:

- **Beta -** measures stock-price volatility based solely on general market movements. Beta is a relative measure of systematic risk. Typically, the market as a whole is assigned a beta of 1.0. So, a stock or a portfolio with a beta higher than 1.0 is predicted to have a higher risk, and potentially, a higher return than the market. Conversely, if a stock (or fund) had a beta of 0.85, this would indicate that if the market increased by 10%, this stock (or fund) would likely return only 8.5%. However, if the market dropped 10%, this stock would likely drop only 8.5%.

- **Alpha -** measures stock-price volatility based on the specific characteristics of the particular security. As with beta, the higher the number, the higher the risk.

- **Sharpe ratio -** a more complex measure that uses the standard deviation of a stock or portfolio to measure volatility. It is a measure of risk-adjusted return. This calculation measures the incremental reward of assuming incremental risk. The larger the Sharpe ratio, the greater the potential return. The formula is: Sharpe Ratio = (total return minus the risk-free rate of return) divided by the standard deviation of the portfolio.

There are many sector specific and even company specific risks in investing. In this article, however, we will look at some universal risks that every stock faces, regardless of its business.

Commodity Price Risk

Commodity price risk is simply the risk of a swing in commodity prices affecting the business. Companies that sell commodities benefit when prices go up, but suffer when they drop. Companies that use commodities as inputs see the opposite effect. However, even companies that have nothing to do with commodities, face commodities risk. As commodity prices climb, consumers tend to rein in spending, and this affects the whole economy, including the service economy.

Headline Risk

Headline risk is the risk that stories in the media will hurt a company's business. With the endless torrent of news washing over the world, no company is safe from headline risk. For example, news of the Fukushima nuclear crisis, in 2011, punished stocks with any related business, from uranium miners to U.S. utilities with nuclear power in their grid. One bit of bad news can lead to a market backlash against a specific company or an entire sector, often both. Larger scale bad news - such as the debt crisis in some eurozone nations in 2010 and 2011 - can punish entire economies, let alone stocks, and have a palpable effect on the global economy.

Rating Risk

Rating risk occurs whenever a business is given a number to either achieve or maintain. Every business has a very important number as far as its credit rating goes. The credit rating directly affects the price a business will pay for financing. However, publicly traded companies have another number that matters as much as, if not more than, the credit rating. That number is the analysts rating. Any changes to the analysts rating on a stock seem to have an outsized psychological impact on the market. These shifts in ratings, whether negative or positive, often cause swings far larger than is justified by the events that led the analysts to adjust their ratings.

Obsolescence Risk

Obsolescence risk is the risk that a company's business is going the way of the dinosaur. Very, very few businesses live to be 100, and none of those reach that ripe age by keeping to the same business processes they started with. The biggest obsolescence risk is that someone may find a way to make a similar product at a cheaper price. With global competition becoming increasingly technology savvy and the knowledge gap shrinking, obsolescence risk will likely increase over time.

Detection Risk

Detection risk is the risk that the auditor, compliance program, regulator or other authority will fail to find the bodies buried in the backyard until it is too late. Whether it's the company's management skimming money out of the company, improperly stated earnings or any other type of financial shenanigans, the market reckoning will come when the news surfaces. With detection risk, the damage to the company's reputation may be difficult to repair – and it's even possible that the company will never recover if the financial fraud was widespread

Legislative Risk

Legislative risk refers to the tentative relationship between government and business. Specifically, it's the risk that government actions will constrain a corporation or industry, thereby adversely affecting an investor's holdings in that company or industry. The actual risk can be realized in a number of ways - an antitrust suit, new regulations or standards, specific taxes and so on. The legislative risk varies in degree according to industry, but every industry has some.

In theory, the government acts as cartilage to keep the interests of businesses and the public from grinding on each other. The government steps in when business is endangering the public and seems unwilling to regulate itself. In practice, the government tends to over-legislate. Legislation increases the public image of the importance of the government, as well as providing the individual congressmen with publicity. These powerful incentives lead to a lot more legislative risk than is truly necessary.

Inflationary Risk and Interest Rate **Risk**

These two risks can operate separately or in tandem. Interest rate risk, in this context, simply refers to the problems that a rising interest rate causes for businesses that need financing. As their costs go up due to interest rates, it's harder for them to stay in business. If this climb in rates is occurring in a time of inflation, and rising rates are a common way to fight inflation, then a company could potentially see its financing costs climb as the value of the dollars it's bringing in decreases. Although this double trap is less of an issue for companies that can pass higher costs forward, inflation also has a dampening effect on the consumer. A rise in interest rates and inflation combined with a weak consumer can lead to a weaker economy, and, in some cases, stagflation.

Model Risk

Model risk is the risk that the assumptions underlying economic and business models, within the economy, are wrong. When models get out of whack, the businesses that depend on those models being right get hurt. This starts a domino effect where those companies struggle or fail, and, in turn, hurt the companies depending on them and so on. The mortgage crisis of 2008-2009 was a perfect example of what happens when models, in this case a risk exposure model, are not giving a true representation of what they are supposed to be measuring.

Risk-Reduction Strategies for Stocks

Given the risks outlined above, an IA can take advantage of the following risk-reduction strategies to help protect his or her clients' portfolios:

- **Diversification** - diversification was discussed in section 13 as a way to include different types of investments within an asset class. Here, diversification refers to investing in a sufficient number of different issues to minimize systematic (market) risk.

- **Dollar-cost averaging** - this strategy calls for a fixed dollar amount to be invested in the shares of a stock or mutual fund on a periodic basis (typically, monthly or quarterly). Therefore, the investor receives more shares when the security price is lower and fewer shares when the security price is higher. Assuming share prices fluctuate during the investment period, the end result is a lower overall cost per share over time compared to the average market price at the time of the purchases.

- **Income reinvestment -** interest and dividends from stocks, as well as all types of mutual funds, may end up sitting in a money market account earning very low interest until an amount accumulates that is sufficiently large to be invested.

- A better strategy is to set up automatic income reinvestment programs, such as:
    - **Mutual fund reinvestment -** when investing in mutual funds, you can set dividends and/or capital gains to be automatically reinvested in additional shares.
    - **Dividend reinvestment plans (DRIPS) -** some companies offer shareholders a plan to automatically reinvest dividends into additional shares of stock without paying brokerage commissions.

. ECONOMIC ANALYSIS

For the security analyst or investor, the anticipated economic environment, and therefore the economic forecast, is important for making decisions concerning both the timings of an investment and the relative investment desirability among the various industries in the economy. The key for the analyst is that overall economic activities manifest itself in the behaviour of the stocks in general. That is, the success of the economy will ultimately include the success of the overall market. For studying the Economic Analysis, the Macro Economic Factors and the Forecasting Techniques are studied in following paragraphs.

MACRO ECONOMIC FACTORS The macro economy is the study of all the firms operates in economic environment. The key variables to describe the state of economy are explained as below:

1. **Growth rate of Gross Domestic Product (GDP):** GDP is a measure of the total production of final goods and services in the economy during a year. It is indicator of economic growth. It consists of personal consumption expenditure, gross private domestic investment, government expenditure on goods and services and net export of goods and services. The firm estimates of GDP growth rate are available with a time lag of one or two years. The expected rate of growth of GDP will be 7.5 percent in year 2005-06. Generally, GDP growth rate ranges from 6-8 percent. The growth rate of economy points out the prospects for the industrial sector and the returns investors can expect from investment in shares. The higher the growth rate of GDP, other things being equal, the more favorable it is for stock market.

2. **Savings and investment**: Growth of an economy requires proper amount of investments which in turn is dependent upon amount of domestic savings. The amount of savings is favorably related to investment in a country. The level of investment in the economy and the proportion of investment in capital market is major area of concern for investment analysts. The level of investment in the economy is equal to: Domestic savings + inflow of foreign capital - investment made abroad. Stock market (357) FM-304 is an important channel to mobilize savings, from the individuals who have excess of it, to the individual or corporate, who have deficit of it. Savings are distributed over various assets like equity shares, bonds, small savings schemes, bank deposits, mutual fund units, real estates, bullion etc. The demand for corporate securities has an important bearing on stock prices movements. Greater the allocation of equity in investment, favorable impact it have on stock prices.

3. **Industry Growth rate**: The GDP growth rate represents the average of the growth rate of agricultural sector, industrial sector and the service sector. The current contribution of industry sector in GDP in the year 2004-05 is 6.75 percent approximately. Publicly listed company play a major role in the industrial sector. The stock market analysts focus on the overall growth of

different industries contributing in economic development. The higher the growth rate of the industrial sector, other things being equal, the more favourable it is for the stock market.

4. **Price level and Inflation:** If the inflation rate increases, then the growth rate would be very little. The increasingly inflation rate significantly affect the demand of consumer product industry. The inflation rate in the Indian economy has been around 7 percent till 1990s. In recent years, the inflation rate has fallen significantly. At present it ranges from 4-5 percent (2005). The industry which have a weak market and come under the purview of price control policy of the government may lose the market, like sugar industry. On the other hand the industry which enjoy a strong market for their product and which do not come under purview of price control may benefit from inflation. If there is a mild level of inflation, it is good to the stock market but high rate of inflation is harmful to the stock market.

5. **Agriculture and monsoons**: Agriculture is directly and indirectly linked with the industries. Hence increase or decrease in agricultural production has a significant impact on the industrial production and corporate performance. Companies using agricultural raw materials as inputs or supplying inputs to agriculture are directly affected by change in agriculture production. For example- Sugar, Cotton, Textile and Food processing industries depend upon agriculture for raw material. Fertilizer and insecticides industries are supplying inputs to agriculture. A good monsoon leads to higher demand for inputs and results in bumper crops. This would lead to buoyancy in stock market. If the monsoon is bad, agriculture production suffers and cast a shadow on the share market.

6. **Interest Rate**: Interest rates vary with maturity, default risk, inflation rate, productivity of capital etc. The interest rate on money market instruments like Treasury Bills are low, long dated government securities carry slightly higher interest rate and interest rate on corporate debenture is still higher. With the deregulation interest rates are softened, which were quite high in regulated environment. Interest rate affects the cost of financing to the firms. A decrease in interest rate implies lower cost of finance for firms and more profitability and it finally leads to decline in discount rate applied by the equity investors, both of which have a favourable impact

on stock prices. At lower interest rates, more money at cheap cost is available to the persons who do business with borrowed money, this leads to speculation and rise in price of share.

7. **Government budget and deficit**: Government plays an important role in the growth of any economy. The government prepares a central budget which provides complete information on revenue, expenditure and deficit of the government for a given period. Government revenue come from various direct and indirect taxes and government made expenditure on various developmental activities. The excess of expenditure over revenue leads to budget deficit. For financing the deficit the government goes for external and internal borrowings. Thus, the deficit budget may lead to high rate of inflation and adversely affects the cost of production and surplus budget may results in deflation. Hence, balanced budget is highly favourable to the stock market.

8. The tax structure: The business community eagerly awaits the government announcements regarding the tax policy in March every year. The type of tax exemption has impact on the profitability of the industries. Concession and incentives given to certain industry encourages investment in that industry and have favourable impact on stock market.

9. **Balance of payment,**forex reserves and exchange rate: Balance of payment is the record of all the receipts and payment of a country with the rest of the world. This difference in receipt and payment may be surplus or deficit. Balance of payment is a measure of strength of rupee on external account. The surplus balance of payment augments forex reserves of the country and has a favourable impact on the exchange rates; on the other hand if deficit increases, the forex reserve depletes and has an adverse impact on the exchange rates. The industries involved in export and import are considerably affected by changes in foreign exchange rates. The volatility in foreign exchange rates affects the investment of foreign institutional investors in Indian Stock Market. Thus, favourable balance of payment renders favourable impact on stock market.

10. **Infrastructural facilities and arrangements**: Infrastructure facilities and arrangements play an important role in growth of industry and agriculture sector. A wide network of communication system, regular supply or power, a well developed transportation system

(railways, transportation, road network, inland waterways, port facilities, air links and telecommunication system) boost the industrial production and improves the growth of the economy. Banking and financial sector should be sound enough to provide adequate support to industry and agriculture. The government has liberalized its policy regarding the communication, transport and power sector for foreign investment. Thus, good infrastructure facilities affect the stock market favourable.

11. **Demographic factors:** The demographic data details about the population by age, occupation, literacy and geographic location. These factors are studied to forecast the demand for the consumer goods. The data related to population indicates the availability of work force. The cheap labour force in India has encouraged many multinationals to start their ventures. Population, by providing labour and demand for products, affects the industry and stock market.

12. **Sentiments:** The sentiments of consumers and business can have an important bearing on economic performance. Higher consumer confidence leads to higher expenditure and higher business confidence leads to greater business investments. All this ultimately leads to economic growth. Thus, sentiments influence consumption and investment decisions and have a bearing on the aggregate demand for goods and services.

INDUSTRY ANALYSIS

The mediocre firm in the growth industry usually out performs the best stocks in a stagnant industry. Therefore, it is worthwhile for a security analyst to pinpoint growth industry, which has good investment prospects. The past performance of an industry is not a good predictor of the future- if one look very far into the future. Therefore, it is important to study industry analysis. For an industry analyst- industry life cycle analysis, characteristics and classification of industry is important. All these aspects are enlightened in following sections:

INDUSTRY LIFE CYCLE ANALYSIS Many industrial economists believe that the development of almost every industry may be analyzed in terms of following stages

1. **Pioneering stage:** During this stage, the technology and product is relatively new. The prospective demand for the product is promising in this industry. The demand for the product attracts many producers to produce the particular product. This lead to severe competition and only fittest companies survive in this stage. The producers try to develop brand name, differentiate the product and create a product image. This would lead to non-price competition too. The severe competition often leads to change of position of the firms in terms of market share and profit.

2. **Rapid growth stage:** This stage starts with the appearance of surviving firms from the pioneering stage. The companies that beat the competition grow strongly in sales, market share and financial performance. The improved technology of production leads to low cost and good quality of products. Companies with rapid growth in this stage, declare dividends during this stage. It is always adisable to invest in these companies.

3. **Maturity and stabilization stage:** After enjoying above-average growth, the industry now enters in maturity and stabilization stage. The symptoms of technology obsolescence may appear. To keep going, technological innovation in the production process should be introduced. A close monitoring at industries events are necessary at this stage.

4. **Decline stage:** The industry enters the growth stage with satiation of demand, encroachment of new products, and change in consumer preferences. At this stage the earnings of the industry are started declining. In this stage the growth of industry is low even in boom period and decline at a higher rate during recession. It is always advisable not to invest in the share of low growth industry.

CLASSIFICATION OF INDUSTRY

Industry means a group of productive or profit making enterprises or organizations that have a similar technically substitute goods, services or source of income. Besides Standard Industry Classification (SIC), industries can be classified on the basis of products and business cycle i.e. classified according to their reactions to the different phases of the business cycle. These are classified as follows:

1**. Growth Industries:** These industries have special features of high rate of earnings and growth in expansion, independent of the business cycle. The expansion of the industry mainly (368) FM-304 depends on the technological change or an innovative way of doing or selling something. For example-in present scenario the information technology sector have higher growth rate. There is some growth in electronics, computers, cellular phones, engineering, petro-chemicals, telecommunication, energy etc.

2. **Cyclical Industries:** The growth and profitability of the industry move along with the business cycle. These are those industries which are most likely to benefit from a period of economic prosperity and most likely to suffer from a period of economic recession. These especially include consumer goods and durables whose purchase can be postponed until persona; financial or general business conditions improve. For exampleFast Moving Consumer Goods (FMCG) commands a good market in the boom period and demand for them slackens during the recession.

3. **Defensive Industries:** Defensive industries are those, such as the food processing industry, which hurt least in the period of economic downswing. For example- the industries selling necessities of consumers withstands recession and depression. The stock of defensive industries can be held by the investor for income earning purpose. Consumer nondurable and services, which in large part are the items necessary for existence, such as food and shelter, are products of defensive industry.

4. **Cyclical-growth Industries:** These possess characteristics of both a cyclical industry and a growth industry. For example, the automobile industry experiences period of stagnation, decline

but they grow tremendously. The change in technology and introduction of new models help the automobile industry to resume their growing path.

CHARACTERISTICS OF AN INDUSTRY ANALYSIS

In an industry analysis, the following key characteristics should be considered by the analyst. These are explained as below:

1. **Post sales and Earnings performance:** The two important factors which play an important role in the success of the security investment are sales and earnings. The historical performance of sales and earnings should be given due consideration, to know how the industry have reacted in the past. With the knowledge and understanding of the reasons of the past behaviour, the investor can assess the relative magnitude of performance in future. The cost structure of an industry is also an important factor to look into. The higher the cost component, the higher the sales volume necessary to achieve the firm's break-even point, and vice-versa.

2. **Nature of Competition:** The numbers of the firms in the industry and the market share of the top firms in the industry should be analyzed. One way to determine competitive conditions is to observe whether any barriers to entry exist. The demand of particular product, its profitability and price of concerned company scrip's also determine the nature of competition. The investor before investing in the scrip of a company should analyze the market share of the particular company's product and should compare it with other companies. If too many firms are present in the organized sector, the competition would be severe. This will lead to a decline in price of the product.

3. **Raw Material and Inputs**: Here, we have to look into the industries, which are dependent upon imports of scarce raw material, competition from other companies and industries, barriers

to entry of a new company, protection from foreign competition, import and export restriction etc. An industry which has a limited supply of materials domestically and where imports are restricted will have dim growth prospects. Labour is also an input and industries with labour problems may have difficulties of growth.

4. **Attitude of Government towards Industry:** It is important for the analyst or prospective investor to consider the probable role government will play in industry. Will it provide financial support or otherwise? Or it will restrain the industry's development through restrictive legislation and legal enforcement? The government policy with regard to granting of clearance, installed capacity and reservation of the products for small industry etc. are also factors to be considered for industry analysis.

5. **Management:** An industry with many problems may be well managed, if the promoters and the management are efficient. The management likes Tatas, Birlas, Ambanies etc. who have a reputation, built up their companies on strong foundations. The management has to be assessed in terms of their capabilities, popularity, honesty and integrity. In case of new industries no track record is available and thus, investors have to carefully assess the project reports and the assessment of financial institutions in this regard. A good management also ensures that the future expansion plans are put on sound basis.

6. **Labour Conditions and Other Industrial Problems:** The labour scenario in a particular industry is of great importance. If we are dealing with a labour intensive production process or a very mechanized capital intensive process where labour performs crucial operations, the possibility of strike looms as an important factor to be reckoned with. Certain industries (371) FM-304 with problems of marketing like high storage costs, high transport costs etc leads to poor growth potential and investors have to careful in investing in such companies.

7. **Nature of Product Line:** The position of the industry in the life cycle of its growth- initial stage, high growth stage and maturing stage are to be noted. It is also necessary to know the industries with a high growth potential like computers, electronics, chemicals, diamonds etc., and

whether the industry is in the priority sector of the key industry group or capital goods or consumer goods groups. The importance attached by the government in their policy and of the Planning Commission in their assessment of these industries is to be studied.

8. **Capacity Installed and Utilized:** The demand for industrial products in the economy is estimated by the Planning Commission and the Government and the units are given licensed capacity on the basis of these estimates. If the demand is rising as expected and market is good for the products, the utilization of capacity will be higher, leading to bright prospects and higher profitability. If the quality of the product is poor, competition is high and there are other constraints to the availability of inputs and there are labour problems, then the capacity utilization will be low and profitability will be poor.

9. **Industry Share Price Relative to Industry Earnings:** While making investment the current price of securities in the industry, their risk and returns they promise is considered. If the price is very high relative to future earnings growth, the investment in these securities is not wise. Conversely, if future prospects are dim but prices are low relative to fairly level future patterns of earnings, the stocks in this industry might be an attractive investment

10**. Research and Development**: For any industry to survive in the national and international markets, product and production process have to be technically competitive. This depends upon the research and development in the particular industry. Proper research and development activities help in obtaining economic of scale and new market for product. While making investment in any industry the percentage of expenditure made on research and development should also be considered.

11. **Pollution Standards:** These are very high and restricted in the industrial sector. These differ from industry to industry, for example, in leather, chemical and pharmaceutical industries the industrial effluents are more.

FINANCIAL STATEMENT ANALYSIS

Understanding the financial statements of a firm is critical since it is often the only source of information with which we must make investment decisions; i.e., whether or not to loan the company money or invest some equity. There is a rationale behind the construction of the financial statements that helps us to interpret the information that is contained within them.

Income Statements:

	Revenues	
Less:	Cost of Goods Sold	Manufacturing
	Gross Profit	
Less:	Salaries	
	Advertising	
	Rent	**Selling & Administrative**
	Depreciation	
	Utilities	
	Operating Income	
Less:	Interest Expense	Finance
	Taxable Income	
Less:	Taxes	Government (Tax accounting)
	Net Income	

The income statement is broken down by functional area. This allows us to more accurately determine where our strengths or weaknesses lie.

Balance Sheets

As with the income statement, the balance sheet is constructed in a very methodical manner. On the Asset side, the assets are listed in order from the most liquid to the least liquid. Similarly, on the Liability & Equity side, the accounts are listed in order from the most immediately due to the least.

Cash	Accounts Payable
Marketable Securities	Wages Payable
Accounts Receivable	Bank Note Payable
Inventory	Current Portion of L-T Debt
Prepaid Expenses	
Total Current Assets	**Total Current Liabilities**
Plant & Equipment	Long-Term Debt
(Accumulated Depr.)	Common Stock
Net Plant & Equip.	Retained Earnings
Total Assets	Total Liabilities & Equity

Statement of Cash Flows

From a financial perspective, the Statement of Cash Flows is the most important financial statement because it integrates the Income Statement and Balance sheet while adjusting the accounting figures based upon *accrual* accounting into actual cash flow.

From Operations:

Net Income

Plus: Depreciation

Plus: Amortization

Operating Cash Flow

Plus: Changes in Non-Cash Current Assets

Plus: Changes in Operations-related Current Liabilities

Total From Operations

From Investing Activities:

Changes In Gross Fixed Assets

Plus: Changes in Other Non-Current Assets

Total From Investing Activities

From Financing Activities:

Changes in Non-Operations-related current liabilities

Plus: Changes in Long-Term Debt

Plus: Changes in Other Capital Accounts

(except Retained Earnings)

Less: Dividends Paid

Total From Financing Activities

Total Change in Cash

Plus: Beginning Cash Balance

Ending Cash Balance

COMMON SIZE INCOME STATEMENTS

All Items Expressed as a Percentage of Revenues.

COMMON SIZE BALANCE SHEETS

All Accounts Expressed as a Percentage of Total Assets.

What's the purpose of calculating Common-Sized statements? (Comparison purposes.)

FINANCIAL RATIOS

The financial statements are often the only information upon which to base an investment decision (as an equityholder or a lender), so it is imperative that we be able to determine what economic information the statements contain. Financial Ratios are used as tools to help us squeeze as much information as possible from the financial statements. It must be kept in mind, however, that a financial ratio is only one number divided by another and only yields a number.

The ratio takes on meaning when compared with other firms or industry averages (a static analysis) or when compared with previous periods for trends to see if a firm's position is improving or deteriorating (a dynamic analysis). The ratios must also be taken together as a group – if a ratio appears to be "higher" than it normally is, it can be due to the numerator being large OR the denominator being small. By looking at other ratios we can determine which is the case.

Liquidity Ratios

Liquidity ratios are designed to measure the extent to which our short-term, or liquid, assets exist to cover our short-term obligations. While most ratios have definitions that vary (and, hence, one must be certain that the appropriate definition is being used for comparison purposes), the definition of the Current Ratio is standard:

$$\text{Current Ratio} = \frac{\text{Total Current Assets}}{\text{Total Current Liabilities}}$$

The current ratio is looking at those assets that are expected to be converted into cash with one year, relative to those liabilities that come due within a year. A more stringent measure is the Quick (or Acid Test) Ratio. This ratio recognizes that some current assets are more liquid than others. While the book defines the quick ratio's numerator as being the Current Assets less Inventories, the general definition used in practice excludes other current assets that are not liquid in nature, such as prepaid expenses. The idea behind excluding inventories is twofold: first, inventories are generally illiquid and can only be converted into cash by selling at steep discounts. Secondly, most companies sell inventories on credit, so they become an account receivable which must then be collected. By excluding inventories, the quick ratio is therefore recognizing the fact that they are one step further removed from becoming cash than other current assets.

$$\text{Quick (Acid Test) Ratio} = \frac{\text{Monetary Current Assets}}{\text{Total Current Liabilities}}$$

FINANCIAL LEVERAGE

The next set of financial ratios is designed to examine the extent to which a company utilizes debt in the financing of its assets. The use of debt is referred to as financial leverage.

Leverage (Solvency) Ratios

The Debt-to-Assets Ratio looks at how much of a company's assets are financed with debt; i.e., other people's money.

$$\text{Debt / Asset Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

A variation on the Debt-to-Asset Ratio that is more commonly used in practice is the Debt-to-Equity Ratio which simply expresses the debt as a percentage of equity rather than total assets. The two measures are equivalent as indicated by the second part of the equation:

$$\text{Debt/Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Net Worth}}$$

$$= \frac{D/A}{1 - D/A}$$

Sometimes it is desirable to break down the use of debt into short-term and long-term debt. Which type of debt do you think is more risky for the company to utilize? (To answer this, ask yourself whether you would prefer to buy a house using a one-year note that would have to be refinanced in twelve months, or a 30-year mortgage.)

$$\text{Current Liabs. to Net Worth} = \frac{\text{Total Current Liabilities}}{\text{Net Worth}}$$

Just as in accounting where changes in current liabilities are included as a part of operating cash flows (since accounts payable and accruals such as wages payable arise from operations), sometimes only the long-term portions of debt are considered. This is because oftentimes a company is viable in the long-run but faces short-term liquidity problems (consider when the Democrats and Republicans shut down the federal government for a few days in 1997). The capitalization ratio looks at the long-term debt financing that a company uses:

$$\text{Capitalization Ratio} = \frac{\text{Long-term Debt}}{\text{Long-term Capital}}$$

While short-term solvency is obviously important, the long-term aspects are relevant for long-term debt/investment considerations.

While the preceding measures of the extent to which a company uses debt to finance its assets are important, what is probably of more concern is the ability of the company to service its debt. The following ratios look at the ability of the company to make debt service payments to its creditors. The most common of these, particularly when only the financial statements are available, is the Times Interest Earned ratio:

$$\text{Times Interest Earned} = \frac{\text{EBIT}}{\text{Interest Expense}}$$

More important to many lenders is the ability of the company to not only make interest payments, but also to repay the principal of the loan. The Debt Service Coverage Ratio considers both interest and principal payments that are required. Note that the principal portion is "grossed up" to account for tax considerations. Why?

$$\text{Debt Service Coverage} = \frac{\text{EBIT}}{\text{Int. Exp.} + \frac{\text{Principal Pymt.}}{1-t}}$$

Finally, it is common for lenders (such as banks) to look more toward the cash flow coverage of debt payments that a company can make. For this reason, the Operating Income (EBIT) has the non-cash charges of Depreciation and Amortization added back (just like they are in the Operating Cash Flow section of the Statement of Cash Flows).

$$\text{Cash Coverage} = \frac{\text{EBIT} + \text{Depreciation \& Amortization}}{\text{Interest Expense}}$$

$$= \frac{\text{EBITDA}}{\text{Interest Expense}}$$

Asset Management (Utilization) Ratios

Asset utilization ratios are designed to give insight into how effectively a company is managing its assets. For many firms, inventories are its largest category of assets. Why is it bad to have too much inventory? Why is it bad to have too little? One way to look at the amount of assets that a firm holds in relation to its level of sales is the inventory turnover ratio:

$$\text{Inventory Turnover} = \frac{\text{Cost Of Goods Sold}}{\text{Inventory}}$$

The inventory turnover ratio can, alternatively, be stated as the Average Age of Inventory; i.e., how long on average does an inventory item sit in the warehouse before it is sold:

$$\text{Average Age of Inventory} = \frac{\text{Inventory}}{\text{COGS}/365}$$

The second major category, at least of current assets, for most firms is the amount of money that is tied-up in Accounts Receivable. The Average Collection Period (or Days' Sales Outstanding)

tells you how long, on average, it takes for a firm to collect the money due on a sale made on credit:

$$\text{Average Collection Period (Days' Sales Outstanding)} = \frac{\text{Accounts Receivable}}{\text{Sales} / 365}$$

The final major category of assets, particularly manufacturing firms, is that of Property, Plant & Equipment, or Fixed Assets. The Fixed Asset Turnover ratio looks at the amount of productive equipment that a firm has relative to the amount of sales that it is generating. In one sense, this could be interpreted as a measure of the amount of capacity utilization that a firm has. What problems do you see with this measure?

$$\text{Fixed Asset Turnover} = \frac{\text{Sales}}{\text{Net Fixed Assets}}$$

A final measure looks at all of the firm's investment in assets relative to its sales level. This is the Total Asset Turnover ratio:

$$\text{Total Asset Turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

PROFITABILITY RATIOS

One of the best measures for evaluating management lies in their ability to control costs. Thus, profit margins are an important means of assessing this ability:

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Sales}}$$

$$\text{Operating Profit Margin} = \frac{\text{Operating Income}}{\text{Sales}}$$

$$\text{Net Profit Margin} = \frac{\text{Net Income}}{\text{Sales}}$$

Another important factor has to do with the amount of profit being made relative to the investment in assets that support the operations and sales. Note that this ratio can be decomposed into the Net Profit Margin and the Total Asset Turnover. This has two important implications: First, it illustrates that there are two ways to make money – have a high profit margin and a low turnover rate, or a low profit margin and a high turnover rate. Secondly, it provides us a means by which to determine where problems, or strengths, reside. If the net ROA is low, is it because we are not controlling costs (in which case, is it in production, selling and administrative, or financing costs), or is it because we have too many assets relative to sales (such as too much inventory, too long a collection period, too many unutilized fixed assets). This approach to locating the source(s) of the problems is known as the DuPont method of analysis. Your textbook gives you an example of its implementation.

$$\text{Net Return on Assets} = \frac{\text{Net Income}}{\text{Total Assets}}$$

$$= \text{Net Profit Margin} * \text{Total Asset Turnover}$$

$$= \frac{\text{Net Income}}{\text{Sales}} * \frac{\text{Sales}}{\text{Total Assets}}$$

Finally, equity investors are concerned with the rate of return that is being generated on their investment in the company.

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Net Worth}}$$

$$= \frac{\text{Net ROA}}{1 - D/A}$$

$$= \text{Net ROA} * \frac{\text{Total Assets}}{\text{Total Equity}}$$

FUTURE PROSPECT OF THE COMPANY

A review of financial documents, industry trends and the state of the current economy helps with analyzing the future prospects of a company. A key to the most accurate analysis is having access to complete financial data. People considering purchasing or investing in a business should not do so without a thorough review of profit-and-loss statements and related documents. Startup companies without an established track record are judged on their business plan and the overall opportunity based on the state of the specific industry and success of similar, established companies.

ASSESSMENT USING NON-FINANCIAL DATA

Non-financial ratios are ratios in which neither figure is expressed in dollar terms. There are many different types of non-financial ratios - any data in your business that involves a number can likely be expressed as a ratio and analysed.

Staff turnover ratio

One example of a non-financial ratio is the staff turnover ratio. This can help you measure staff satisfaction levels.

A high staff turnover ratio can indicate your staff are not happy at work. Attempting to address the issues they have may help you reduce the amount of time and effort you need to spend on recruiting new staff.

Other non-financial ratios

Non-financial ratios include the:

- **product returns ratio** - the rate at which a particular product is returned as faulty or unwanted
- **customer reorder ratio** - the rate at which customers provide return business, or reorder particular products
- **absenteeism ratio** - the rate at which particular staff members are absent from work, or the overall rate of absenteeism in your business
- **days lost to injury ratio** - the amount of time off employees need to take due to injury suffered in the workplace
- **business plan KPIs ratio** - the rate at which a key performance indicator (KPI) is met in a certain department, for a certain product or generally across the business.

QUARTERLY EARNINGS REPORT

The quarterly earnings report is a quarterly filing made by public companies to report their performance. Earnings reports include items such as net income, earnings per share, earnings from continuing operations and net sales. By analyzing quarterly earnings reports, investors can begin to gauge the financial health of the company and determine whether it deserves their investment.

The Importance of the Quarterly Earnings Report

Every quarter, analysts wait for the announcement of company earnings, and analysts then base buy-and-sell recommendations on this announcement. The announcement of earnings for a large capitalization stock can move the market, and stock prices can fluctuate wildly on days when the quarterly earnings report is released. The ability to provide accurate estimates can greatly advance an analyst's career; likewise, a bad estimate can ruin one. In fact, the ability to beat earnings estimates is more important than the company's ability to grow earnings over the

prior year. For example, if the company grows earnings, but fails to meet analyst estimates, it may result in a sell-off of the stock. In many ways, analysts estimates are just as important as the earnings report itself.

What is a 'Quarterly Earnings Report'

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BREAKING DOWN 'Quarterly Earnings Report'

Fundamental analysts believe that good investments are identified with hard work in the form of ratio and performance analysis. One of the most important numbers for analysis is earnings-per-share, because it provides a ratio of the company's earnings compared to its shares outstanding. In other words, it compares earnings to market capitalization. While the number can be manipulated, it remains the holy grail of performance indicators.

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Quarterly Earnings Report Summary

Quarterly earnings reports generally provide a quarterly update of all three financial statements, including the income statement, the balance sheet and the cash flow statement. However, the number that analysts wait for is earnings. Every quarterly earnings report provides investors with three things: an overview of sales, expenses, and net income for the most recent quarter. It may also provide a comparison to the previous year, and possibly to the previous quarter. Some quarterly earnings reports include a brief summary and analysis from the CEO or company spokesman, as well as a summary of previous quarterly earnings results.

CAPITAL STRUCTURE

A company's capitalization (not to be confused with **market capitalization**) describes the composition of a company's permanent or long-term capital, which consists of a combination of debt and **equity**. A healthy proportion of **equity capital**, as opposed to debt capital, in a company's capital structure is an indication of financial fitness.

For stock investors that favor companies with good fundamentals, a "strong" balance sheet is an important consideration for investing in a company's stock. The strength of a company's balance sheet can be evaluated by three broad categories of investment-quality measurements: working capital adequacy; asset performance; and capital structure. In this article, we'll look at evaluating balance sheet strength based on the composition of a company's capital structure.

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Clarifying Capital Structure Related Terminology

The equity part of the debt-equity relationship is the easiest to define. In a company's capital structure, equity consists of a company's common and preferred stock plus retained earnings,

which are summed up in the shareholders' equity account on a balance sheet. This invested capital and debt, generally of the long-term variety, comprises a company's capitalization, i.e. a permanent type of funding to support a company's growth and related assets.

A discussion of debt is less straightforward. Investment literature often equates a company's debt with its liabilities. Investors should understand that there is a difference between operational and debt liabilities – it is the latter that forms the debt component of a company's capitalization – but that's not the end of the debt story.

Capital Ratios and Indicators

In general, analysts use three ratios to assess the financial strength of a company's capitalization structure. The first two, the so-called debt and debt/equity ratios, are popular measurements; however, it's the capitalization ratio that delivers the key insights to evaluating a company's capital position.

The debt ratio compares total liabilities to total assets. Obviously, more of the former means less equity and, therefore, indicates a more leveraged position. The problem with this measurement is that it is too broad in scope, which, as a consequence, gives equal weight to operational and debt liabilities.

The same criticism can be applied to the debt/equity ratio, which compares total liabilities to total shareholders' equity. Current and non-current operational liabilities, particularly the latter, represent obligations that will be with the company forever. Also, unlike debt, there are no fixed payments of principal or interest attached to operational liabilities.

The capitalization ratio (total debt/total capitalization) compares the debt component of a company's capital structure (the sum of obligations categorized as debt + total shareholders' equity) to the equity component. Expressed as a percentage, a low number is indicative of a healthy equity cushion, which is always more desirable than a high percentage of debt.

STOCK MARKET INVESTMENT

POSSIBLE QUESTIONS

UNIT II

SECTION B

Answer the following questions:

1. Define liquidity ratio
2. Explain Earnings per share.
3. Define Trend Analysis.
4. How do you place order in a stock market?
5. Define Risk. How does it affect investment?
6. What is a stock quotation?
7. What are the different types of placing an order?
8. What do you mean by future prospects of the company?
9. How financial data are used to analyze the company?
10. What are the financial data used to analyze the company financial position?
11. What are the ratios used to measure the liquidity of the company
12. What is a dept equity ratio?
13. What is a Quick ratio?
14. How are stocks traded online?
15. What is a capital structure?

SECTION -C

Answer the following questions:

1. What are the different sources of financial information?
2. What is a Fundamental Analysis? Explain in detail.
3. What are the types of analysis used to analyze financial statements?
4. What is a stock Quotation? Explain the columns present in the Quote in detail.
5. What is a market order? What are its types?
6. Explain Online trading. How is it carried out?
7. How are ratios used to analyze the company? Explain liquidity and turnover ratio.
8. Explain the following:
    i. Current Ratio
    ii. Investor turnover ratio
    iii. Net profit margin
    iv. Earnings per share
    v. Dividend yield
9. How is the quality of the management assessed using Financial and non-financial data?
10. What are the types of analysis used to analyze financial statements?

Unit III

COMPARATIVE ANALYSIS OF COMPANIES

Stock Valuation- Using ratios like PE ratio, PEG ratio, and Price Revenue Ratio. Use of historical pricing, Simple moving average, basic and advanced interactive charts- Examining the shareholding pattern of the company- Pitfalls to avoid while investing- High P/E Stocks, Low Price stocks, stop loss, excess averaging.

Price-Earnings Ratio

(P/E ratio) is the ratio for valuing a company that measures its current share price relative to its per-share earnings. The price-earnings ratio is also sometimes known as the price multiple or the earnings multiple.

In general, a high P/E suggests that investors are expecting higher earnings growth in the future compared to companies with a lower P/E. A low P/E can indicate either that a company may currently be undervalued or that the company is doing exceptionally well relative to its past trends. When a company has no earnings or is posting losses, in both cases P/E will be expressed as "N/A." Though it is possible to calculate a negative P/E, this is not the common convention.

The price-earnings ratio can also be seen as a means of standardizing the value of one dollar of earnings throughout the stock market. In theory, by taking the median of P/E ratios over a period of several years, one could formulate something of a standardized P/E ratio, which could then be seen as a benchmark and used to indicate whether or not a stock is worth buying.

Limitations of 'Price-Earnings Ratio - P/E Ratio'

Like any other metric designed to inform investors as to whether or not a stock is worth buying, the price-earnings ratio comes with a few important limitations that are important to take into account, as investors may often be led to believe that there is one single metric that will provide complete insight into an investment decision, which is virtually never the case.

One primary limitation of using P/E ratios emerges when comparing P/E ratios of different companies. Valuations and growth rates of companies may often vary wildly between sectors due both to the differing ways companies earn money and to the differing timelines during which companies earn that money. As such, one should only use P/E as a comparative tool when considering companies within the same sector, as this kind of comparison is the only kind that will yield productive insight. Comparing the P/E ratios of a telecommunications company and an energy company, for example, may lead one to believe that one is clearly the superior investment, but this is not a reliable assumption.

An individual company's P/E ratio is much more meaningful when taken alongside P/E ratios of other companies within the same sector. For example, an energy company may have a high P/E ratio, but this may reflect a trend within the sector rather than one merely within the individual company. An individual company's high P/E ratio, for example, would be less cause for concern when the entire sector has high P/E ratios.

Moreover, because a company's debt can affect both the prices of shares and the company's earnings, leverage can skew P/E ratios as well. For example, suppose there are two similar companies that differ primarily in the amount of debt they take on. The one with more debt will likely have a lower P/E value than the one with less debt. However, if business is good, the one with more debt stands to see higher earnings because of the risks it has taken.

Another important limitation of price-earnings ratios is one that lies within the formula for calculating P/E itself. Accurate and unbiased presentations of P/E ratios rely on accurate inputs of the market value of shares and of accurate earnings per share estimates. While the market determines the value of shares and, as such, that information is available from a wide variety of reliable sources, this is less so for earnings, which are often reported by companies themselves and thus are more easily manipulated. Since earnings are an important input in calculating P/E, adjusting them can affect P/E as well.

The price/earnings to growth ratio (PEG ratio) is a stock's price-to-earnings (P/E) ratio divided by the growth rate of its earnings for a specified time period. The PEG ratio is used to determine a stock's value while taking the company's earnings growth into account, and is considered to provide a more complete picture than the P/E ratio

A stock's price/earnings to growth (PEG) ratio may not be the first metrics that jump to mind when due diligence or stock analysis is discussed, but most would agree that the PEG ratio gives a more complete picture of stock valuation than simply viewing the price-earnings (P/E) ratio in isolation. (For related reading, see *Move Over P/E, Make Way For The PEG*.)

The PEG ratio is calculated easily and represents the ratio of the P/E to the expected future earnings growth rate of the company. This article will discuss the positive attributes of the metric, how to best use it in your research and what to watch out for when using it.

Determining a Stock's Value

Common stocks represent a claim to future earnings. The rate at which a company will grow its earnings going forward is one of the largest factors in determining a stock's intrinsic value. That future growth rate represents everyday market prices in stock markets around the world.

The P/E ratio shows us how much shares are worth compared to past earnings. Most will use 12-month trailing earnings to calculate the bottom part of the P/E ratio. Inferences may be made by looking at the P/E ratio; for instance, high P/E ratios represent growth stocks, while low ones highlight value oriented stocks. (For more insight, read *Understanding The P/E Ratio*.)

Example-Calculating the PEG

Let\'s look at two hypothetical stocks to see how the PEG ratio is calculated:

ABC Industries has a P/E of 20 times earnings. The consensus of all the analysts covering the stock is that ABC has an anticipated earnings growth of 12% over the next five years. **20 (x times earnings) / 12 (n % anticipated earnings growth) = 20/12 = 1.66**
XYZ Micro is a young company with a P/E of 30 times earnings. Analysts conclude that the company has an anticipated earnings growth of 40% over the next five years. **30 (x times earnings) / 40 (n % anticipated earnings growth) = 30/40 = 0.75**

What the PEG Ratio Tells Us

Using the examples above, the PEG ratio tells us that ABC Industries stock price is higher than its earnings growth. This means that if the company doesn't grow at a faster rate, the stock price will decrease. XYZ Micro's PEG ratio of 0.75 tells us that the company's stock is undervalued, which means it's trading in line with the growth rate and the stock price will increase.

Stock theory suggests that the stock market should assign a PEG ratio of one to every stock. This would represent theoretical equilibrium between the market value of a stock and anticipated earnings growth. For example, a stock with an earnings multiple of 20 and 20% anticipated earnings growth would have a PEG ratio of one.

PEG ratio results greater than one suggest one of the following:

- Market expectation of growth is higher than consensus estimates.
- Stock is currently overvalued due to heightened demand for shares.

PEG ratio results of less than one suggest one of the following:

- Markets are underestimating growth and the stock is undervalued.
- Analysts' consensus estimates are currently set too low.

A great feature of the PEG ratio is that by bringing future growth expectations into the mix, we can compare the relative valuations of different industries that may have very different prevailing P/E ratios. This makes it easier to compare different industries, which tend to each have their own historical P/E ranges.

The Risk of Estimating Future Earnings

Any data point or metric that uses underlying assumptions can be open to interpretation. This makes the PEG ratio more of a fluid variable and one that is best used in ranges as opposed to absolutes. The reason why five-year growth rate estimates are the norm rather than one-year forward estimates is to help smooth out the volatility that is commonly found in corporate earnings due to the business cycle and other macroeconomic factors. Also, if a company has little analyst coverage, good forward estimates may be hard to find. The enterprising investor may want to experiment with calculating PEG ratios across a range of earnings scenarios based on the available data and his or her own conclusions

Best Uses for the PEG

The PEG ratio is best suited to stocks with little or no dividend yield. Because the PEG ratio doesn't incorporate income received by the investor in its presentation of valuation, the metric may give unfairly inaccurate results for a stock that pays a high dividend.

Consider the scenario of an energy utility that has little potential for earnings growth. Analyst estimates may be five percent growth at best, but there is solid cash flow coming from years of consistent revenue. The company is now mainly in the business of returning cash to shareholders. The dividend yield is five percent. If the company has a P/E ratio of 12, the low growth forecasts would put the PEG ratio of the stock at 12/5, or 2.50. An investor taking just a

cursory glance could easily conclude that this is an overvalued stock. The high yield and low P/E make for an attractive stock to a conservative investor focused on generating income. Be sure to incorporate dividend yields into your overall analysis. One trick is to modify the PEG ratio by adding the dividend yield to the estimated growth rate during calculations. To give us a meaningful interpretation of the company's valuation, take a look a look at the following example.

Historic Pricing'

Some assets have their values calculated at a certain point or points during the day rather than in real time. This is referred to as the valuation point. If an investor happens to trade at the exact point that the net asset value is calculated then he or she does not have to worry about gaps in time. However, if an investor trades before or after the net asset value is calculated he or she will be working off an old calculation. This means that the valuation carries the risk of being inaccurate.

Mutual funds typically update their net asset values at the close of the trading day. Fund managers have the option of looking at the last calculated net asset value – the historic valuation point – or the net asset value of the next valuation point.

An investor looking to buy a fund based on historic pricing knows how many shares can be purchased for a certain amount of money because the valuation point has already been published. In turn, sellers know exactly how much money they can get for a specific number of shares. The risk facing the buyer is that the net asset value of the fund will decrease by the next valuation point, meaning that he or she will have spent more for a given number of shares. The risk for the seller is that the shares may increase in value at the next valuation point, meaning that the seller doesn’t make as much money for a given number of shares.

Forward pricing is the most commonly used net asset value calculation method. It entails buying or selling an asset based on the price at the next valuation period. The disadvantage to the buyer is that he or she does not know how many fund shares can be purchased for a certain amount of money.

A **moving average** can help cut down the amount of "noise" on a price chart. Look at the the direction of the moving average to get a basic idea of which way the price is moving. Angled up and price is moving up (or was recently) overall, angled down and price is moving down overall, moving sideways and the price is likely in a range.

A moving average can also act as support or resistance. In an uptrend a 50-day, 100-day or 200-day moving average may act as a support level, as shown in the figure below. This is because the average acts like a floor (support), so the price bounces up off of it. In a downtrend a moving average may act as resistance; like a ceiling, the price hits it and then starts to drop again.

The price won't always "respect" the moving average in this way. The price may run through it slightly or stop and reverse prior to reaching it.

As a general guideline, if the price is above a moving average the trend is up. If the price is below a moving average the trend is down. Moving averages can have different lengths though (discussed shortly), so one may indicate an uptrend while another indicates a downtrend.

Line Charts

Line charts are the most basic type of chart because it represents only the closing prices over a set period. The line is formed by connecting the closing prices for each period over the timeframe. While this type of chart doesn't provide much insight into intraday price movements, many investors consider the closing price to be more important than the open, high, or low price within a given period. These charts also make it easier to spot trends since there's less 'noise' happening compared to other chart types.

Figure 11 – Line Chart Example – Source: StockCharts.com

Bar Charts

Bar charts expand upon the line chart by adding the open, high, low, and close – or the daily price range, in other words – to the mix. The chart is made up of a series of vertical lines that represent the price range for a given period with a horizontal dash on each side that represents the open and closing prices. The opening price is the horizontal dash on the left side of the horizontal line and the closing price is located on the right side of the line. If the opening price is lower than the closing price, the line is often shaded black to represent a rising period. The opposite is true for a falling period, which is represented by a red shade.

Figure 12 – Bar Chart Example – Source: StockCharts.com

Candlestick Charts

Candlestick charts originated in Japan over 300 years ago, but have since become extremely popular among traders and investors. Like a bar chart, candlestick charts have a thin vertical line showing the price range for a given period that's shaded different colors based on whether the stock ended higher or lower. The difference is a wider bar or rectangle that represents the difference between the opening and closing prices.

Falling periods will typically have a red or black candlestick body, while rising periods will have a white or clear candlestick body. Days where the open and closing prices are the same will not have any wide body or rectangle at all. (To read more, see The Art of Candlestick Charting – Part 1, Part 2, Part 3, and Part 4).

Figure 13 – Candlestick Chart Example – Source: StockCharts.com

There are four primary types of charts used by investors and traders depending on the type of information they're seeking and their desired goals. These chart types include line charts, bar charts, candlestick charts, and point and figure charts. In the following sections, we will focus on the S&P 500 over the same period to illustrate the differences between the charts when the underlying data set is the same.

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Candlestick Chart Example

Point and Figure Charts

Point and figure charts are not very well known or used by the average investor, but they have a long history of use dating back to the first technical traders. The chart reflects price movements without time or volume concerns, which helps remove noise – or insignificant price movements – that can distort a trader's view of the overall trend. These charts also try to eliminate the skewing effect that time has on chart analysis. (For further reading, see Point and Figure Charting).

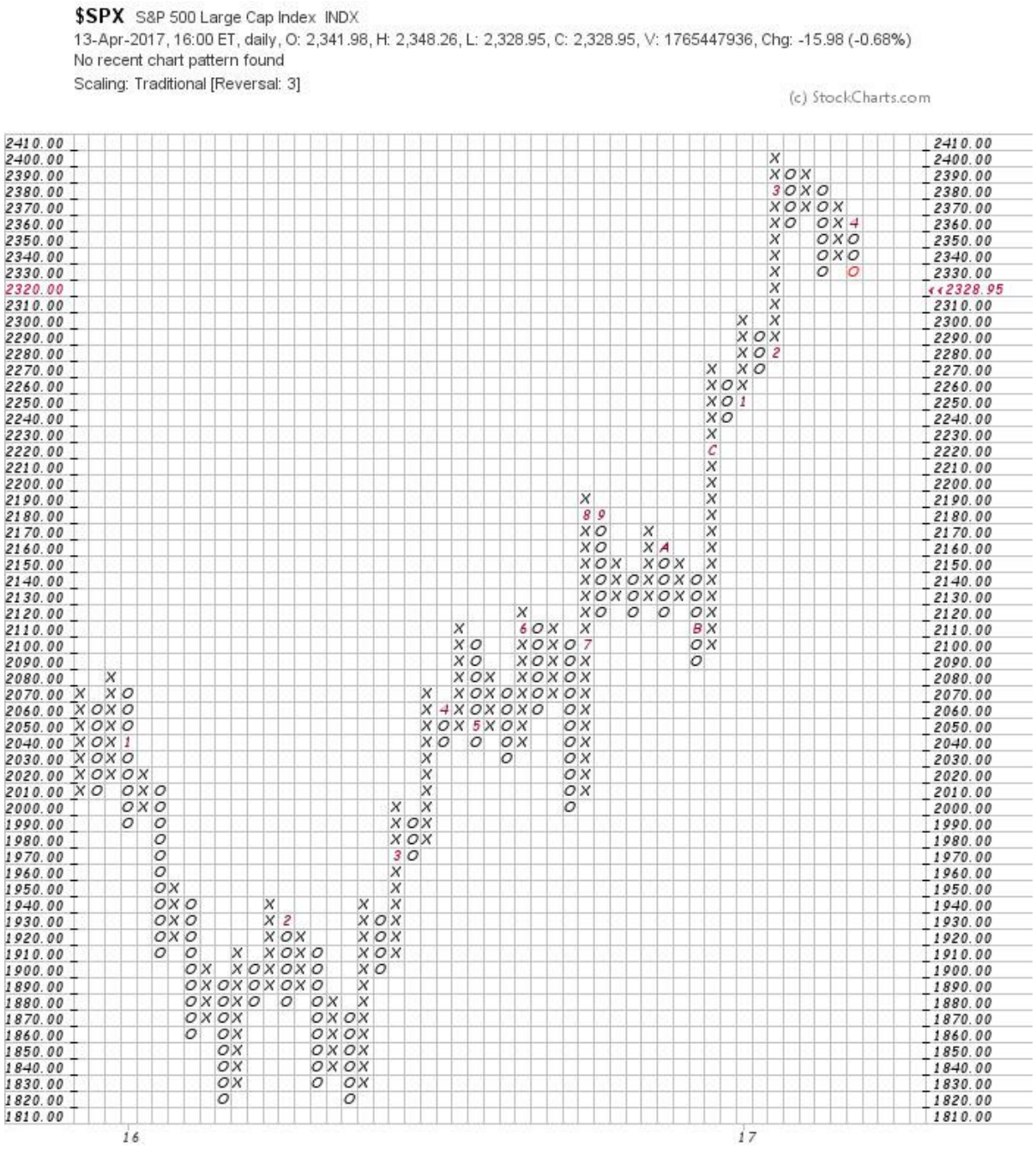

Figure 14 – Point and Figure Chart Example – Source: StockCharts.com

Point and figure charts are characterized by a series of Xs and Os. The Xs represent upward price trends and the Os represent downward price trends. There are also numbers and letters in the chart that represent months and given investors a rough idea of dates. Each box on the chart represents the price scale, which adjusts depending on the price of the stock: The higher the stock's price the more each box represents. On most charts, a box represents $1 or 1 point.

Another key point to remember is that point and figure charts have reversal criteria that must be set by the technical analyst – although it's usually set to three. The reversal criteria represents how much the price has to move away from the higher or low in the price to create a new trend, or in other words, how much the price has to move in order for a column of Xs to become a column of Os, or vice versa. When the price trend has moved from one trend to another, it shifts to the right, signaling a trend change.

Stop-Loss Order

An order placed with a broker to sell a security when it reaches a certain price. A stop-loss order is designed to limit an investor's loss on a position in a security. Although most investors associate a stop-loss order only with a long position, it can also be used for a short position, in which case the security would be bought if it trades above a defined price. A stop-loss order takes the emotion out of trading decisions and can be especially handy when one is on vacation or cannot watch his/her position. However, execution is not guaranteed, particularly in situations where trading in the stock is halted or gaps down (or up) in price. Also known as a "stop order" or "stop-market order."

What is a Stop-Loss Order?

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vacation or cannot watch his/her position. However, execution is not guaranteed, particularly in situations where trading in the stock is halted or gaps down (or up) in price. Also known as a "stop order" or "stop-market order."

Stop-Loss Order

With a stop-loss order for a long position, a market order to sell is triggered when the stock trades below a certain price, and it will be sold at the next available price. This type of order works well if the stock or market is declining in an orderly manner, but not if the decline is disorderly or sharp.

What are Excess Returns?

Excess returns are investment returns from a security or portfolio that exceed the riskless rate on a security generally perceived to be risk free, such as a certificate of deposit or a government-issued bond. Additionally, the concept of excess returns may also be applied to returns that exceed a particular benchmark or index with a similar level of risk.

Excess Returns and Long-Term Results

Critics of mutual funds and other actively managed portfolios contend that it is next to impossible to generate excess returns on a consistent basis over the long term, as a result of which, most fund managers underperform the benchmark index over time. Additionally, active funds often come with higher fees that can negate a portion of the gains experienced by the investor.

This has led to the tremendous popularity of index funds and exchange-traded funds and has resulted in some fund management companies, such as Legg Mason, offering additional hybrid products. The new offerings are designed to attract investors who were inclined to pull their funds out of managed funds and investing those funds into various index funds.

STOCK MARKET INVESTMENT

POSSIBLE QUESTIONS

UNIT III

SECTION B

2 MARK

1. Explain PE ratio
2. Define PEG ratio.
3. What are the things to be considered while investing in low price shares?
4. Explain stop loss order.
5. Explain in brief simple moving average.
6. What are the methods used to value stocks?
7. How are historic prices used to determine value of the stock?
8. How is a simple moving average used to determine the value of the stock?
9. What do you mean by interactive charts?
10. What are the different types of interactive charts?
11. What is a low price stock?
12. What is excess averaging?
13. What do you mean by share holding pattern of the company
14. What is a high P/E stocks
15. What is Price revenue ratio?

SECTION C

6 MARK

1. What is a simple moving average? What are its types?
2. Discuss the role of P/E ratio in making the sell and buy decision.
3. What are the things to avoid while investing in the High P/E stocks and Low price stocks?
4. What is an interactive chart? How is used to compare stocks?
5. Explain about the share holding pattern of the company.
6. How does a stop loss order work? How is the price determined to trigger the order?
7. What is shareholding pattern? What does a share holding pattern of the company reveal?
8. Discuss the role of PEG ratio and Price revenue ratio in buying and selling of stock
9. How is stocks valued using Historical pricing method?
10. Explain P/E Ratio and PEG Ratio. How is it helpful in valuing stocks?

Unit IV

INVESTING IN MUTUAL FUNDS

Background of Mutual funds- Needs and advantage of investing in Mutual funds, Net asset value, Types of Mutual funds, Open-ended, Closed-ended, Equity, Debt, Hybrid, Money market, Load Vs No Load funds, Factors Affecting Choice of Mutual funds. CRISIL- Mutual fund ranking and its usage.

Investing in Mutual Funds

Introduction

A mutual fund is a financial intermediary that pools the savings of investors for collective investment in a diversified portfolio of securities. A fund is "mutual" as all of its returns, minus its expenses, are shared by the fund's investors.

The Securities and Exchange Board of India (Mutual Funds) Regulations, 1996 defines a mutual fund as a 'a fund established in the form of a trust to raise money through the sale of units to the public or a section of the public under one or more schemes for investing in securities, including money market instruments'.

According to the above definition, a mutual fund in India can raise resources through thesale of units to the public. It can be set up in the form of a Trust under the Indian Trust Act. The definition has been further extended by allowing mutual funds to diversify their activities in the following areas:

- Portfolio management services
- Management of offshore funds
- Providing advice to offshore funds
- Management of pension or provident funds
- Management of venture capital funds
- Management of money market funds

- Management of real estate funds

A mutual fund serves as a link between the investor and the securities market by mobilizing savings from the investors and investing them in the securities market to generate returns. Thus, a mutual fund is akin to portfolio management services (PMS). Although both are conceptually same, they are different from each other. Portfolio management services are offered to high net worth individuals; taking into account their risk profile, their investments are managed separately. In the case of mutual funds, savings of small investors are pooled under a scheme and the returns are distributed in the same proportion in which the investments are made by the investors/unit-holders. A mutual fund is a collective savings scheme. Mutual funds play an important role in mobilizing the savings of small investors and channelizing the same for productive ventures in the Indian economy.

Advantages of Mutual Funds

An investor can invest directly in individual securities or indirectly through a financial intermediary. Globally, mutual funds have established themselves as the means of investment for the retail investor.

1. Professional management: An average investor lacks the knowledge of capital market operations and does not have large resources to reap the benefits of investment. Hence, he requires the help of an expert. It is not only expensive to 'hire the services' of an expert but it is more difficult to identify a real expert. Mutual funds are managed by professional managers who have the requisite skills and experience to analyze the performance and prospects of companies. They takepossibly an organized investment strategy, which is hardly possible for an individual investor.

2. Portfolio diversification: An investor undertakes risk if he invests all his funds in a single scrip. Mutual funds invest in a number of companies across various industries and sectors. This diversification reduces the riskiness of the investments.

3. Reduction in transaction costs: Compared to direct investing in the capital market, investing through the funds is relatively less expensive as the benefit of economies of scale is passed on to the investors.

4. Liquidity: Often, investors cannot sell the securities held easily, while in case of mutual funds, they can easily encash their investment by selling their units to the fund if it is an open-ended scheme or selling them on a stock exchange if it is a close-ended scheme.

5. Convenience: Investing in mutual fund reduces paperwork, saves time and makes investment easy.

6. Flexibility: Mutual funds offer a family of schemes, and investors have the option of transferring their holdings from one scheme to the other.

7. Tax benefits Mutual fund investors now enjoy income-tax benefits. Dividends received from mutual funds' debt schemes are tax-exempt to the overall limit of Rs 9,000 allowed under section 80L of the Income Tax Act.

8. Transparency Mutual funds transparently declare their portfolio every month. Thus an investor knows where his/her money is being deployed and in case they are not happy with the portfolio they can withdraw at a short notice.

9. Stability of the stock market Mutual funds hasa large number of funds which provide them economies of scale by which they can absorb any losses in the stock market and continue investing in the stock market. In addition, mutual funds increase liquidity in the money and capital market.

10. Equity research Mutual funds can afford information and data required for investments as they have a large number of funds and equity research teams available to them.

History of Mutual Funds

The history of mutual funds, dates back to 19th century Europe, in particular, Great Britain. Robert Fleming set up in 1868 the first investment trust called Foreign and Colonial

History of Mutual Funds

The history of mutual funds, dates back to 19th century Europe, in particular, Great Britain. Robert Fleming set up in 1868 the first investment trust called Foreign and Colonial Investment Trust which promised to manage the finances of the moneyed classes of Scotland by spreading the investment over a number of different stocks. This investment trust and other

investment trusts which were subsequently set up in Britain and the US resembled today's close-ended mutual funds. The first mutual fund in the US, Massachusetts Investors' Trust, was setup in March 1924. This was the first open-ended mutual fund. The stock market crash in 1929, the Great Depression, and the outbreak of the Second World War slackened the pace of growth of the mutual fund industry. Innovations in products and services increased the popularity of mutual funds in the 1950s and 1960s. The first international stock mutual fund was introduced in the US in 1940. In 1976, the first tax-exempt municipal bond funds emerged and in 1979, the first money market mutual funds were created. The latest additions are the international bond fund in 1986 and arm funds in 1990. This industry witnessed substantial growth in the eighties and nineties when there was a significant increase in the number of mutual funds, schemes, assets, and shareholders.

Growth of Mutual Funds in India

The Indian mutual fund industry has evolved over distinct stages. The growth of the mutual fund industry in India can be divided into four phases: Phase I (1964-87), Phase II (1987-92), Phase III (1992-97), and Phase IV (beyond 1997).

Phase I: The mutual fund concept was introduced in India with the setting up of UTI in 1963. The Unit Trust of India (UTI) was the first mutual fund set up under the UTI Act, 1963, a special act of the Parliament. It became operational in 1964 with a major objective of mobilising savings through the sale of units and investing them in corporate securities for maximising yield and capital appreciation. This phase commenced with the launch of Unit Scheme 1964 (US-64) the first open-ended and the most popular scheme. UTI's investible funds, at market value (and including the book value of fixed assets) grew from Rs 49 crore in1965 to Rs 219 crore in 1970-71 to Rs 1,126 crore in 1980-81 and further to Rs5,068 rore by une 1987. Its investor base had also grown to about 2 million investors. It launched innovative schemes during his phase. Its fund family included five income-oriented, open-ended schemes, which were sold largely through its agent network built up over the years. Master share, the equity growth fund launched in 1986, proved to be a grand marketing success. Master share was the first real close-ended scheme floated by UTI. It launched India Fund in 1986-the first Indian offshore fund for

overseas investors, which was listed on the London Stock Exchange (LSE). UTI maintained its monopoly and experienced a consistent growth till 1987.

Phase II: The second phase witnessed the entry of mutual fund companies sponsored by nationalised banks and insurance companies. In 1987, SBI Mutual Fund and Canbank Mutual Fund were set up as trusts under the Indian Trust Act, 1882. In 1988, UTI floated another offshore fund, namely, The India Growth Fund which was listed on the New York Stock Exchange (NYSB). By 1990, the two nationalised insurance giants, LIC and GIC, and nationalised banks, Namely, Indian Bank, Bank of India, and Punjab National Bank had started Coperations of wholly-owned mutual fund Subsidiaries. The assured return type of schemes floated by the mutual funds during this phase were perceived to be Another banking product offered by the arms of sponsor banks. In October 1989, the first regulatory guidelines were Issued by the Reserve Bank of India, but they were applicable only to the mutual funds sponsored by FIIs. Subsequently, The Government of India issued comprehensive guidelines in June 1990 covering all 'mutual funds. These guidelines Emphasised compulsory registration with SEBI and an arms length relationship be maintained between the sponsor and Asset management company (AMC). With the entry of public sector funds, there was a tremendous growth in the size of The mutual fund industry with investible funds, at market value, increasing to Rs 53,462 crore and the number of Investors increasing to over 23 million. The buoyant equity markets in 1991-92 and tax benefits under equity-linked Savings schemes enhanced the attractiveness of equity funds.

Phase III: The year 1993 marked a turning point in the History of mutual funds in India. Tile Securities and Exchange Board of India (SEBI) issued the Mutual Fund Regulations n January 1993. SEBI notified regulations bringing all mutual funds except UTI under a common regulatory framework. Private domestic and foreign players were allowed entry in the mutual fund industry. Kothari group of companies, in joint venture with Pioneer, a US fund company, set up the first private mutual fund the Kothari Pioneer Mutual Fund, in 1993. Kothari Pioneer introduced the first open-ended fund Prima in 1993. Several other private sector mutual funds were set up during this phase. UTI launched a new scheme, Master-gain, in May 1992, which

was a phenomenal success with a subscription of Rs 4,700 crore from 631akh applicants. The industry's investible funds at market value increased to Rs 78,655 crore and the number of investor Accounts increased to 50 million. However, the year 1995 was the beginning of the sluggish phase of the mutual fund industry. During 1995 and 1996, unit holders saw an erosion in the value of their investments due to a decline in the NA of the equity funds. Moreover, the service quality of mutual funds declined due to a rapid growth in the number of investor accounts, and the inadequacy of service infrastructure. A lack of performance of the public sector funds and miserable failure of foreign funds like Morgan Stanley eroded the confidence of investors in fund managers. Investors perception about mutual funds, gradually turned negative. Mutual funds found it increasingly difficult to raise money. The average annual sales declined from about Rs13,000 .crore in 1991-94 to about Rs 9,000 crore in 1995 and 1996.

Phase IV: During this phase, the flow of funds into the kitty of mutual funds sharply increased. This significant growth was aided by a more positive sentiment in the capital market, significant tax benefits, and improvement in the quality of investor service. Investible funds, at market value, of the industry rose by June 2000 to over Rs 1,10,000crore with UTI having 68% of the market share. During 1999-2000 sales mobilisation reached a record level of Rs 73,000 croreas againstRs 31,420 crore in the preceding year. This trend was, however, sharply reversed in 2000-01. The UTI dropped a bombshell on the investing public by disclosing the NAV of US-64-its flagship scheme as on December 28,2000, just at Rs 5.81 as against the face value of Rs 10 and the last sale price of Rs 14.50. The disclosure of NAV of the country's largest mutual fund scheme was the biggest shock of the year to investors. Crumbling global equity markets, a sluggish economy coupled with bad investment decisions made life tough for big funds across the world in 2001-02. The effect of these problems was felt strongly in India also. Pioneer m, JP Morgan and Newton Investment Management pulled out from the Indian market. Bank of India MF liquidated all its schemes in 2002. The Indian mutual fund industry has stagnated at around Rs 1,00,000crore assets since 2000-01. This stagnation is partly a result of stagnated equity markets and the indifferent performance by players. As against this, the aggregate deposits of Scheduled Commercial Banks (SCBs) as on May 3, 2002, stood at Rs 11,86,468 crore. Mutual funds assets under management (AUM) form just around 10% of deposits of SCBs. The Unit

Trust of India is losing out to other private sector players. While there has been an increase in AUM by around 11% during the year 2002, UTI on the contrary has lost more than 11% in AUM. The private sector mutual funds have benefited the most from the debacle ofUS-64 of UTI. The AUM of this sector grew by around- 60% for the year ending March 2002.

What is NAV?

NAV is nothing but the value of total assets held by a particular fund (net of its liabilities) divided by the total number of outstanding units. For instance if a fund's net assets are valued at Rs 100 crore and the total units outstanding in the same fund are 200000, then the NAV of the fund will be Rs. 50/- (10000000/200000). Thus in other words NAV is nothing but the amount, each unit holder is entitled to get in case the fund is liquidated and the proceeds of liquidation process are distributed to the unit holders in proportion of their holdings.

Net Asset Value The net asset value of a fund is the market value of the assets minus the liabilities on the day of valuation. In other words, it is the amount which the shareholders will collectively get if the fund is dissolved or liquidated. The net asset value of a unit is the net asset value of fund divided by the number of outstanding units.

Thus NAV = Market Price of Securities + Other Assets – Total Liabilities + Units Outstanding as at the NAV date.

NAV = Net Assets of the Scheme + Number of units outstanding, that is, Market value of investments + Receivables

+ Other Accrued Income + Other Assets - Accrued Expenses - Other Payables - Other Liabilities + No. of units outstanding as at the NAV date.

A fund's NAV is affected by four sets of factors: purchase and sale of investment securities, valuation of all investment

securities held, other assets and liabilities, and units sold or redeemed.

Types of Mutual funds

Types of Mutual Fund Schemes

Functional	*Portfolio*	*Geographical*	*Other*
Open-Ended Event	Income Funds	Domestic	Sectoral Specific
Close-Ended Scheme	Growth Funds	Off-shore	Tax Saving
Interval Scheme	Balanced Funds		ELSS
	Money Market		Special
	Mutual Funds		
			Gilt Funds
			Load Funds
			Index Funds
			ETFs
			PIE Ratio Fund

1. Open-ended schemes: In case of open-ended schemes, the mutual fund continuously offers to sell and repurchase its units at net asset value (NAV) or NAV-related prices. Unlike close-ended schemes, open-ended ones do not have to be listed on the stock exchange and can also offer repurchase soon after allotment. Investors can enter and exit the scheme any time during the life of the fund. Open-ended schemes do not have a fixed corpus. The corpus of fund increases or decreases, depending on the purchase or redemption of units by investors.

There is no fixed redemption period in open-ended schemes, which can be terminated whenever the need arises. The fund offers a redemption price at which the holder can sell units to the fund and exit. Besides, an investor can enter the fund again by buying units from the fund at its offer price. Such funds announce sale and repurchase prices from time-to-time. UTI's US-64 scheme is an example of such a fund.

The key feature of open-ended funds is liquidity. They increase liquidity of the investors as the units can be continuously bought and sold. The investors can develop their income or saving plan due to free entry and exit frame of funds. Open-ended schemes usually come as a family of schemes which enable the investors to switch over from one scheme to another of same family.

Close-ended schemes: Close-ended schemes have a fixed corpus and a stipulated maturity period ranging between 2 to 5 years. Investors can invest in the scheme when it is launched. The scheme remains open for a period not exceeding 45 days. Investors in close-ended schemes can buy units only from the market, once initial subscriptions are over and thereafter the units are listed on the stock exchanges where they dm be bought and sold. The fund has no interaction with investors till redemption except for paying dividend/bonus. In order to provide an alternate exit route to the investors, some close-ended funds give an option of selling back the units to the mutual fund through periodic epurchase at NAV related prices. If an investor sells units directly to the fund, he cannot enter the fund again, as units bought back by the fund cannot be reissued. The close-ended scheme can be converted into an open-ended one. The units can be rolled over by the passing of a resolution by a majority of the unit--holders.

Interval scheme: Interval scheme combines the features of open-ended and close-ended schemes. They are open for sale or redemption during predetermined intervals at NAVrelated prices.

Money market mutual funds: They specialise in investing in short-term money market instruments like treasury bills, and certificate of deposits. The objective of such funds is high liquidity with low rate of return.

Load funds: Mutual funds incur certain expenses such as brokerage, marketing expenses, and communication expenses. These expenses are known as 'load' and are recovered by the fund when it sells the units to investors or repurchases the units from withholders. In other words, load is a sales charge, or commission, assessed by certain mutual funds to cover their selling costs. Loads can be of two types-Front-end-load and back-endload. Front-end-load, or sale load, is a charge collected at the time when an investor enters into the scheme. Back-end, or repurchase, load is a charge collected when the investor gets out of the scheme. Schemes that do not charge a load are called 'No load' schemes. In other words, if the asset management company (AMC) bears the load during the initial launch of the scheme, then these schemes are known as no-load

schemes. However, these no-load schemes can have an exit load when the unit holder gets out of the scheme before a I stipulated period mentioned in the initial offer. This is done to prevent short-term investments and redemptions. Some funds may also charge different amount of loads to investors depending upon the time period the investor has stayed with the funds. The longer the investor stays with the fund, less is the amount of exit load charged. This is known as contingent deferred sales' charge (CDSL). It is a back-end (exit load) fee imposed by certain funds on shares redeemed with a specific period following their purchase and is usually assessed on a sliding scale.

Equity/ Growth - Equities are a popular mutual fund category amongst retail investors. Although it could be a high-risk investment in the short term, investors can expect capital appreciation in the long run. If you are at your prime earning stage and looking for long-term benefits, growth schemes could be an ideal investment.

Equity, Debt & Balanced/Hybrid Funds

Equity funds invest primarily in stocks with some cash allocation – 0 to 10%. Debt funds invest in bond papers of varying maturities – 6 months to 20 years, depending on the type, i.e. short-term or long-term debt fund. Balanced and hybrid funds have a mix of both equity and debt.

Balanced funds/ Hybrid Funds: The aim of balanced scheme is to provide both capital appreciation and regular income. They divide their investment between equity shares and fixed nicebearing instruments in such a proportion that, the portfolio is balanced. The portfolio of such funds usually comprises of companies with good profit and dividend track records.
Their exposure to risk is moderate and they offer a reasonable rate of return

Factors affecting to Select a Mutual Fund

1. Risk Tolerance

There is an inverse relationship between risk and return. Risk is the probability of a negative outcome, while return is compensation for taking on that risk.

2. Fund Performance

Mutual funds are required to compare performance to a benchmark index.

3. Fund Size

Usually the size of the fund doesn't affect returns, but there are instances where a fund can be either too small or too large for its own good.

4. Fees

Mutual funds make their money by charging investors fees. Some funds charge a sales fee, called a load fee, which can be assessed either when you buy or sell fund shares.

5. Turnover Rate

The turnover rate represents how often the fund manager keeps stocks in the fund's portfolio. A mutual fund incurs costs every time it makes a transaction, which is passed on to the investors.

6. Fund Type

Depending on your time horizon and objective, there are different types of mutual funds to consider. For example, a long-term investor might be more interested in a growth fund that has a high risk, high reward profile. This is because short-term losses will likely be made up for by long-term gains.

7. Timing

It's important to understand that timing mutual funds (not to be confused with market timing) is generally frowned upon. The idea of making a quick profit by buying low and selling high in the

short term is contrary to the purpose of a mutual fund, which is typically used as a long-term investment.

CRISIL(Credit Rating Society Of India Ltd) Mutual Fund Ranking

Methodology developed for mutual fund rankings in India are based on global best practices. Over the past 10 years, these have gained high acceptance among investors, intermediaries, and asset management companies. The performance criteria covers not only risk adjusted returns, but also portfolio characteristics like industry concentration, company concentration, liquidity etc. to make the analysis forward looking.

Customised Mutual Fund Rankings

Customised Mutual Fund Rankings are provided to wealth management, private banking and advisory firms. The benchmarking of Indian mutual fund schemes is based on a combination of qualitative and quantitative parameters. The customized rankings are based on the fund houses and fund categories shortlisted by the client. Monthly or quarterly mutual fund rankings are provided to the client based on mutually defined methodology and criteria.

CRISIL Mutual Fund Ranking Methodology

Methodology

CRISIL Mutual Fund Ranking is the relative ranking of mutual fund schemes within a peer group. The basic criteria for inclusion in the ranking universe are three-year NAV history (one-year for liquid, ultra short-term debt, short term income, credit oriented fund's and five years for consistent performers), assets under management in excess of cut-off limits and complete portfolio disclosure. Only open ended schemes are considered. Ranking is based on the following parameters:

Superior Return Score (SRS)

SRS is the relative measure of the schemes' returns and risk (volatility) compared with their peer group. It is computed for long term income, balanced, monthly income plan

(aggressive) and long term gilt categories. The three-year period of evaluation is divided into four overlapping periods - the latest 36, 27, 18 and 9 months. Each period has a progressive weight starting from the longest period: 32.5%, 27.5%, 22.5% and 17.5% respectively. In case of consistent performers (for balanced and debt categories), SRS is calculated for five years, with each one-year period being weighted progressively with the most recent period having the highest weightage.

Mean Return and Volatility

Mean return and volatility are considered as separate parameters in case of equity funds (large cap, small & mid-cap, equity diversified, equity linked savings schemes or ELSS and thematic infrastructure), consistent performers (equity as well as short term debt categories of liquid, ultra short-term debt and short term income) and credit opportunities funds. SRS is used for the rest of the categories. Mean return is the average of daily returns based on the scheme's NAV for the period under analysis and volatility is the standard deviation of these returns. While the period for analysis is three years for equity funds, it is one year for liquid, credit oriented, ultra short-term debt and short term income funds. The period of analysis is broken into four periods (latest 36, 27, 18 and 9 months for equity categories and latest 12, 9, 6 and 3 months for short term categories). Each period is assigned a progressive weight starting from the longest period as follows: 32.5%, 27.5%, 22.5% and 17.5% respectively. In case of consistent performers, equity, mean return and volatility are calculated for five years, with each one-year period being weighted progressively with the most recent period having the highest weight.

Portfolio Concentration Analysis

Concentration measures the risk arising out of improper diversification. For equity securities, diversity score is used as the parameter to measure industry and company concentration. In case of debt schemes, the company at an individual issuer specific limit of 10%.

Exposure to Sensitive Sector

In case of debt schemes, the industry concentration is analysed for any exposure to sensitive sectors which are arrived based on Industry Risk Score (IRS) for various sectors.

CRISIL's assessment of IRS quantifies the credit risk associated with an industry on a uniform scale to ensure comparability across industries. The score captures the influence of various industry variables on the debt repayment ability of companies in a particular sector over a 3-4 year time horizon.

Liquidity Analysis

It measures the ease with which a portfolio can be liquidated. The lower the score, the better it is. In case of equities, it measures the number of days to liquidate the portfolio. Liquidity is calculated by taking the average portfolio liquidity score of the past three months.

Equity liquidity is computed as follows:

Liquidity score of each stock = No. of shares held / Daily average trading volume of past six months

Portfolio liquidity score = Weighted average liquidity score of the above

Gilt liquidity is measured by analysing the number of days it will take to liquidate the portfolio based on turnover (volume) and number of securities in the portfolio, the number of days security has got traded and the number of trades in any security for a three - month period for that security. Corporate debt liquidity is computed by classifying each security into three categories - liquid, semi liquid and illiquid - and then evaluating a scheme's exposure to each category.

Asset Quality

Asset quality measures the probability of default by the issuer of a debt security to honour the debt obligation in time.

Modified Duration

Modified duration/Average maturity is considered across all debt categories except liquid to capture the interest rate risk of the portfolio. The lower the value, the better it is.

Tracking Error

This is used only for index schemes. The tracking error is an estimation of the variability in a scheme's performance vis-a-vis the index that it tracks. The lower the tracking error, the better it is.

Historic CRISIL Mutual Fund Ranking Performance

Historic CRISIL Mutual Fund Ranking performance is considered only for the consistent category. Quarterly mutual fund rankings during the five year period of analysis are broken into five blocks of one year each. Each block is differentially weighted with the most recent period having the highest weightage.

Eligibility Criteria

- Only open-ended funds are considered
- NAV History
  - Three years for equity, hybrid and long term debt schemes
  - One year for liquid, ultra short-term debt, short term income and index funds
  - Five years for consistent performers
- Schemes falling under 98 percentile of the category AUM are shortlisted
  - Quarterly average AUM is considered
  - Schemes meeting inception criteria are eligible schemes
- Complete portfolio disclosure for all three months in the last quarter
- Minimum five schemes in each category
- In case of long term gilt funds, only those funds that have an exposure in excess of 98% over the past three years to the following are considered for ranking:
  - Central and state government securities

- Cash and cash equivalents such as collateralised borrowing and lending obligations CBLOs), reverse repo, net receivables, etc.

• In case of credit opportunities funds, only the funds that have residual maturity of more than six months and having predominant exposure to papers rated below AAA are considered.

CRISIL Mutual Fund Ranking Category Definitions

Category	Interpretation
CRISIL Fund Rank 1	Very Good performance in the category (Top 10 percentile of the universe)*
CRISIL Fund Rank 2	Good performance in the category
CRISIL Fund Rank 3	Average performance in the category
CRISIL Fund Rank 4	Below average performance in the category

CRISIL Fund Rank 5	Relatively Weak performance in the category

* If the top 10 percentile figure is not an integer, the same is rounded off to the nearest integer. The same approach is adopted for CRISIL Fund Rank 2 (11^{th} to 30^{th} percentile), CRISIL Fund Rank 5 (last 91^{st} to 100th percentile) and CRISIL Fund Rank 4 (71^{st} to 90^{th}percentile) clusters. The residual funds in the universe are placed in the CRISIL Fund Rank 3 cluster.

STOCK MARKET INVESTMENT

POSSIBLE QUESTIONS

UNIT IV

SECTION B

2 MARK

1. Give a brief history of mutual fund development in India.
2. Write a note on closed ended mutual funds.
3. Write a note on open ended funds in mutual funds
4. Define NAV in Mutual funds.
5. Give advantages of investing in mutual funds
6. What is the need for mutual fund in India?
7. What are Equity funds?
8. What are Dept funds?
9. What are Hybrid funds?
10. What are Money market funds?
11. What do you mean by Load and No Load funds?
12. What is CRISIL?
13. How does CRISIL rate the Mutual funds?
14. Explain two factors affection choice of Mutual funds.
15. How are investments made in Mutual funds?

SECTION C

6 MARK

1. What is a Mutual Fund? Explain its types.
2. Explain the growth of mutual funds in India.
3. What is a Mutual fund? What are its types?
4. What are the advantages of investing in a mutual fund?
5. Explain in detail about Money market, Load and No load funds in Mutual funds.
6. Explain Money market and Hybrid Funds.
7. What are the factors affecting while choosing a mutual fund?
8. What is CRISIL? How are Mutual funds rated by CRISIL?
9. Explain Debt, Equity, Hybrid and money market Mutual funds.
10. What is a mutual fund? Explain about its growth in India.

UNIT V

SHARE PRICE INDICES & DERIVATIVES

Need, Importance, Compiling and their interpretation- Derivative Trading- Meaning, Importance, Method of Trading- Types of Traders, thespecification of Derivative contracts and Derivative market in India. Options: Types, options trading, Margin- future- future contracts- future market and trading. SWAPs:Mechanics and valuation.

SHARE PRICE INDEX

A measure of the change in the average prices of company shares over time. Share price indices reflect the corporate sector's underlying profit and growth record and also actlike a barometer of investor confidence in the state of industry and the economy. See price index.

Share price indices are calculated from the prices of common shares of companies traded on national or foreign stock exchanges. They are usually determined by the stock exchange, using the closing daily values for the monthly data, and normally expressed as simple arithmetic averages of the daily data. A share price index measures how the value of the stocks in the index is changing, a share return index tells the investor what their "return" is, meaning how much money they would make as a result of investing in that basket of shares. A price index measures changes in the market capitalisation of the basket of shares in the index whereas a return index adds on to the price index the value of dividend payments, assuming they are re-invested in the same stocks. Occasionally agencies such as central banks will compile share indices.

Stock Price Index (SPI), is a simple measure used to monitor the variation of your stock price and to compare it with those of your competitors.

SPI = Current Market Capitalization / Market Capitalization in Period 0

All competitors start with an SPI of 1000 in Period 0.

If SPI increases, the company has created shareholder value. If the SPI decreases, the company has reduced shareholder value.

Unfortunately, a simple 'Stock Price Index' formula does not exist. But there are ways to increase the stock price such as company's growth and generating a high net contribution.

This can be achieved by increasing your market shares in growing segments of existing markets or by investing successfully in new markets, while driving the costs down. This cannot be accomplished without high level of R&D activities.

In summary, the main factors driving the Stock Price Index are: profitability, growth in revenues and market share, level of R&D activities

Types of Traders

1. Greedy Traders: They trade too big and risk too much because their only goal is the easy money. They usually end up blowing up their account.
2. New Traders: They have no idea how the markets work so their only goal should be knowledge. New Traders do well to stay students until they have done their homework. Rushing in to make money without risk management, a winning method, the right mind set, and a trading plan will result eventually in failure 100% of the time.
3. Arrogant Traders: Their only goal is to prove they are right and satisfy their fragile egos. Arrogant traders will lie, delete tweets and posts, never admit when they are wrong. When they are wrong they will hide it under a cloak, when they are right they will scream it from the roof tops.
4. Trend Traders: Their only goal is to ride a trend and make money. Trend traders will buy high and sell much higher, they will short and cover much lower. They look like genius'

and prophets in a trending market either way it trends but they look like they can't even trade in choppy or whipsawing markets. In the long term they do very well.

5. Scared Traders: Their only goal is to not lose their capital. Scared traders will immediately close losing trades and also immediately take profits. They are very stressed out in trading due to not understanding the nature of trading itself or just cannot handle the uncertainty or risk. They either need to do their homework to develop their faith in or if they have done the homework trading may just no be for them.
6. Bull Traders: Their only goal is to go long stocks. Buy the best investment in the best stock. They have no desire to go short they always believe the next big rally is around the corner and love to buy lower and off support levels.
7. Bear Traders: Their only goal is to short stocks. They always think the market is on the verge of a major crash. They "know" the economy is in shambles and the markets are prone to fall. In a bull market they believe prices are too high and will reverse sharply. In a bear market they believe we will go much lower.
8. Prophet Traders: Their only goal is to rightly predict market movement then let everyone know they did. They always think they know the top or the bottom, they love targets and believe that charts show exactly what is going to happen next. They do not really discuss their own trading they just predict prices.
9. Paper Traders: They love the market and study more than anyone but never quite make the plunge into real trading. They stay in the comfy cozy world of paper trading and make it more of a hobby. They just can't make the transition into the real markets.
10. Rich Traders: Their only goal is to consistently make money and grow their capital over the long term. They do not ask for tips, or advice, they did their homework and they trade their method. They maintain confidence in themselves and their methods regardless of whether they are winning or losing.

Definition of Financial Derivatives

1. The derivatives are financial products.

2. Derivative is derived from another financial instrument/contract called the underlying. In the case of Nifty futures, Nifty index is the underlying. A derivative derives its value from the underlying assets. Accounting Standard SFAS133 defines a derivative as, 'a derivative instrument is a financial derivative or other contract with all three of the following characteristics:

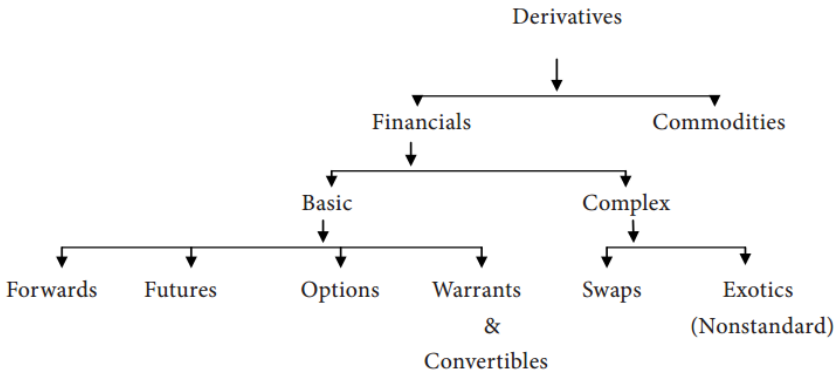
(i) It has (1) one or more underlings, and (2) one or more notional amount or payments provisions or both. Those terms determine the amount of the settlement or settlements.

(ii) It requires no initial net investment or an initial net investment that is smaller than would be required for other types of contract that would be expected to have a similar response to changes in market factors.

(iii) Its terms require or permit net settlement. It can be readily settled net by a means outside the contract or it provides for delivery of an asset that puts the recipients in a position not substantially different from net settlement

Features of a Financial Derivatives

1. A derivative instrument relates to the future contract between two parties. It means there must be a contract-binding on the underlying parties and the same to be fulfilled in future.
2. Normally, the derivative instruments have the value which derived from the values of other underlying assets, such as agricultural commodities, metals, financial assets, intangible assets, etc.
3. In general, the counter parties have specified obligation under the derivative contract. Obviously, the nature of the obligation would be different as per the type of the instrument of a derivative.
4. The derivatives contracts can be undertaken directly between the two parties or through the particular exchange like financial futures contracts.
5. Derivatives are mostly secondary market instruments and have little usefulness in mobilizing fresh capital by the corporate world



Classification of Derivatives

Evolution of Derivatives in India

Commodities futures' trading in India was initiated long back in 1950s; however, the 1960s marked a period of great decline in futures trading. Market after market was closed usually because different commodities' prices increases were attributed to speculation on these markets. Accordingly, the Central Government imposed the ban on trading in derivatives in 1969 under a notification issue. The late 1990s shows this signs of opposite trends—a large scale revival of futures markets in India, and hence, the Central Government revoked the ban on futures trading in October, 1995, The Civil Supplies Ministry agreed in principle for starting of futures trading in Basmati rice, further, in 1996 the Government granted permission to the Indian Pepper and Spice Trade Association to convert its Pepper Futures Exchange into an International Pepper Exchange. As such, on November 17, 1997, India's first international futures exchange at Kochi, known as the India Pepper and Spice Trade Association—International Commodity Exchange (IPSTA-ICE) was established.

Similarly, the Cochin Oil Millers Association, in June 1996, demanded the introduction of futures trading in coconut oils. The Central Minister for Agriculture announced in June 1996 that he was in favour of introduction of futures trading both domestic and international. Further,

a new coffee futures exchange (The Coffee Futures Exchange of India) is being started at Bangalore. In August, 1997, the Central Government proposed that Indian companies with commodity price exposures should be allowed to use foreign futures and option markets. The trend is not confined to the commodity markets alone, it has initiated in financial futures too.

The Reserve Bank of India set up the Sodhani Expert Group which recommended major liberalization of the forward exchange market and had urged the setting up of rupeebased derivatives in financial instruments. The RBI accepted several of its recommendations in August, 1996. A landmark step taken in this regard when the Securities and Exchange Board of India (SEBI) appointed a Committee named the Dr. L.C. Gupta Committee (LCGC 322) by its resolution, dated November 18, 1996 in order to develop appropriate regulatory framework for derivatives trading in India. While the Committee's focus was on equity derivatives but it had maintained a broad perspective of derivatives in general.

The Board of SEBI, on May 11, 1998, accepted the recommendations of the Dr. L.C. Gupta Committee and approved introduction of derivatives trading in India in the phased manner. The recommendation sequence is stock index futures, index options and options on stocks. The Board also approved the 'Suggestive Bye-Laws' recommended by the Committee for regulation and control of trading and settlement of derivatives contracts in India. Subsequently, the SEBI appointed J.R. Verma Committee to look into the operational aspects of derivatives markets. To remove the road-block of non-recognition of derivatives as securities under Securities Contract Regulation Act, the Securities Law (Amendment) Bill, 1999 was introduced to bring about the much needed changes. Accordingly, in December, 1999, the new framework has been approved and 'Derivatives' have been accorded the status of 'Securities'. However, due to certain completion of formalities, the launch of the Index Futures was delayed by more than two years. In June, 2000, the National Stock Exchange and the Bombay Stock Exchange started stock index based futures trading in India. Further, the growth of this market did not take off as anticipated. This is mainly attributed to the low awareness about the product and mechanism

among the market players and investors. The volumes, however, are gradually picking up due to active interest of the institutional investors.

Futures: A futures contract is an agreement between two parties to buy or sell an asset at a certain time in the future at a certain price. Futures contracts are special types of forward contracts in the sense that the former are standardized exchange-traded contracts. A speculator expects an increase in price of gold from current future prices of Rs. 9000 per 10 gm. The market lot is 1 kg and he buys one lot of future gold (9000 × 100) Rs. 9,00,000.Assuming that there is 10% margin money requirement and 10% increase occur in price of gold. the value of transaction will also increase i.e. Rs. 9900per 10 gm and total value will be Rs. 9,90,000. In other words, the speculator earns Rs. 90,000.

Features of financial futures contract

Financial futures, like commodity futures are contracts to buy or sell financial aspects at a future date at a specified price. The following features are there for future contracts: • Future contracts are traded on organized future exchanges. These are forwardcontractstraded on organized futures exchanges • Future contracts are standardized contracts in terms of quantity, quality and amount • Margin money is required to be deposited by the buyer or sellers in form of cash or securities. This practice ensures honor of the deal. • In case of future contracts, there is a dairy of opening and closing of position, known as marked to market. The price differences every day are settled through the exchange clearing house. The clearing house pays to the buyer if the price of a futures contract increases on a particular day and similarly seller pays the money to the clearing house. The reverse may happen in case of decrease in price.

Options: Options are of two types– calls and puts. Calls give the buyer the right but not the obligation to buy a given quantity of the underlying asset, at a given price on or before a given future date. Puts give the buyer the right, but not the obligation to sell a given quantity of the underlying asset at a given price on or before a given date.

Features of options

The following features are common in all types of options.

• Contract: Option is an agreement to buy or sell an asset obligatory on the parties.

• Premium: In case of option a premium in cash is to be paid by one party (buyer) to the other party (seller).

• Pay off: From an option in case of buyer is the loss in option price and the maximum profit a seller can have in the options price.

• Holder and writer Holder of an option is the buyer while the writer is known as seller of the option. The writer grants the holder a right to buy or sell a particular underlying asset in exchange for a certain money for the obligation taken by him in the option contract.

• Exercise price There is call strike price or exercise price at which the option holder buys (call) or sells (put) an underlying asset.

• Variety of underlying asset The underlying asset traded as option may be variety of instruments such as commodities, metals, stocks, stock indices, currencies etc.

• Tool for risk management Options are a versatile and flexible risk management tools which can mitigate the risk arising from interest rate, hedging of commodity price risk. Hence options provide custom-tailored strategies to fight against risks. Types of options There are various types of options depending upon the time, nature and exchange of trading. The following is a brief description of different types of options:

• Put and call option

• American and European option

• Exchange traded and OTC options.

Put option It is an option which confers the buyer the right to sell an underlying asset against another underlying at a specified time on or before predetermined date. The writer of a put must

take delivery if this option is exercised. In other words put is an option contract where the buyer has the right to sell the underlying to the writer of the option at a specified time on or before the option's maturity date.

Call option It is an option which grants the buyer (holder) the right to buy an underlying asset at a specific date from the writer (seller) a particular quantity of underlying asset on a specified price within a specified expiration/maturity date. The call option holder pays premium to the writer for the right

American option provides the holder or writer to buy or sell an expiry of the option. On the other hand a European option can be exercised only on the date of expiry or maturity. is clear that American options are more popular because there is timing flexibility to exercise the same. But in India, European options are prevalent and permitted.

Exchange traded options can be traded on recognized exchanges like the futures contracts. Over the counter options are custom tailored agreement traded directly by the dealer without the involvement of any organized exchange. Generally large commercial bankers and investment banks trade in OTC options. Exchange traded options have specific expiration date, quantity of underlying asset but in OTC traded option trading there is no such parties. Hence OTC traded options are not bound by strict expiration date, specific limited strike price and uniform underlying asset. Since exchange traded options are guaranteed by the exchanges, hence they have less risk of default because the deals are cleared by clearing houses

Meaning Options contract is a type of derivatives contract which gives the buyer or holder of the contract the right (but not the obligation) to buy or sell the underlying asset at a predetermined price within or at the end of a specified period. The buyer or holder of the option purchases the right from the seller or writer for a consideration which is called the premium. The seller or writer of an option is obliged to settle the option as per the terms of the contract when the buyer or holder exercises his right. The underlying asset could include securities, an index of prices of securities, currency, etc.

Definition Under Securities Contracts (Regulations) Act 1956, option on securities has been defined as ”option in securities” means a contract for the purchase or sale of a right to buy or sell, or a right to buy and sell, securities in futures”. The NSE and BSE have introduced index based options and stock options which facilitate hedging of risk exposures and speculations with high leverage.

Parties in Options Trading There are three parties involved in the options trading: The option seller or option writer¬The option buyer¬ The broker¬ The Option Seller (writer) is a person who grants someone else the option to buy or sell.¬ He receives a premium (option price) in return. The option writer is usually a skilled market player with an in-depth knowledge of the market. He is willing to take unlimited risk in return for a limited profit. The premium paid by the buyer of option is his limited income, but loss is unlimited. The Option Buyer pays a price to the option writer to induce him to write the option. The¬ trade between options writer and buyer is a zero-sum game. Writer’s profit is buyer’s loss. The securities broker acts as an agent to find the option buyer and the seller, and receives¬ a commission or fee for it.

Players in the Option Market

• Hedgers: The objective of many players in the options market is to reduce the risk. They are not in the options market to make profits. They want to safeguard their existing positions.

• Speculators: These are the traders whose objective is to make profits. They are willing to take risks and they bet upon whether the markets would go up or come down.

• Arbitrageurs: Risk-less profit making is the prime goal of arbitrageurs. Buying in one market and selling in another market. They could be making profits even without putting in their own money and such opportunities often come up in the market but they last for very short time frames.

Traders in derivatives markets

There are three types of traders in the derivatives market: 1. Hedger 2. Speculator 3. Arbitrageur **Hedger:** A hedge is a position taken in order to offset the risk associated with some other position. A hedger is someone who faces risk associated with price movement of an asset and who uses derivatives as a means of reducing that risk. A hedger is a trader who enters the futures market to reduce a pre-existing risk.

Speculators: While hedgers are interested in reducing or eliminating risk, speculators buy and sell derivatives to make profit and not to reduce risk. Speculators willingly take increased risks. Speculators wish to take a position in the market by betting on the future price movements of an asset. Futures and options contracts can increase both the potential gains and losses in a speculative venture. Speculators are important to derivatives markets as they facilitate hedging provide liquidity ensure accurate pricing, and help to maintain price stability. It is the speculators who keep the market going because they bear risks which no one else is willing to bear.

Arbitrageur: An arbitrageur is a person who simultaneously enters into transactions in two or more markets to take advantage of discrepancy between prices in these markets For example, if the futures price of an asset is very high relative to the cash price, an arbitrageur will make profit by buying the asset and simultaneously selling futures. Hence, arbitrage involves making profits from relative mispricing. Arbitrageurs also help to make markets liquid, ensure accurate and uniform pricing, and enhance price stability. All three types of trades and investors are required for a healthy functioning of the derivatives market. Hedgers and investors provide economic substance to this market, and without them the markets would become mere tools of gambling. Speculators provide liquidity and depth to the market. Arbitrageurs help in bringing about price uniformity and price discovery. The presence of Hedgers, speculators and arbitrageurs, not only enables the smooth functioning of the derivatives market but also helps in increasing the liquidity of the market.

Swaps:

Swaps are private agreements between two parties to exchange cash flows in the future according to a prearranged formula. They an be regarded as portfolios of forward contracts. The two commonly used

Types of Swaps There are two major types of swap structures (I) Interest-rate swaps and (ii) currency swaps.

Interest-rate swaps An interest rate swap (IRS) is a contractual agreement between counter-parties to exchange a series of interest payments for a stated period of time. The payments in a swap are similar to interest payments on a borrowing. A typical IRS involves exchanging fixed and floating interest payments in the same currency. Features of IRS There is no exchange of principal¬ Only the interest payments are exchanged. They are usually netted on the settlement dates¬ and only the net value is exchanged between counter parties. Any underlying loan or deposit is not affected by the swap. The swap is a separate¬ transaction.

(**ii) Currency Swap** A currency swap is a contractual agreement between counter parties in which one party makes payments in one currency and other party makes payments in a different currency for a stated period of time.

Commodity Swap A commodity swap is a contractual agreement between counter parties, wherein at least one set of payments involved is set by the price of the commodity or by the price of a commodity index.

Equity index Swap An equity swap or an equity index swap is a contractual agreement between counter parties, wherein at least one party agrees to pay the other a rate of return based on a stock index during the life of the swap.

SWAP PRICING

To price a swap, we need to determine the present value of cash flows of each leg of the transaction. In an interest rate swap, the fixed leg is fairly straightforward since the cash flows

are specified by the coupon rate set at the time of the agreement. Pricing the floating leg is more complex since, by definition, the cash flows change with future changes in the interest rates. The pricing both legs of the swap is examined in detail below.

Fixed Leg of a Swap

$$P_{\text{fix}} = \sum_{i=1}^{n} N \cdot R \cdot \alpha_{i-1,i} \cdot D_i,$$

where

P_{fix} = present value of cash flows for the fixed leg,
N = notional principal amount,
R = fixed coupon rate,
n = number of coupons payable between value date and maturity date,
$\alpha_{i-1,i}$ = accrual factor between dates i - 1 and i based on the specified accrual method, and
D_i = discount factor on cash flow date i.

Floating Leg of a swap

$$P_{\text{flt}} = \sum_{i=1}^{n} N \cdot F_{i-1,i} \cdot \alpha_{i-1,i} \cdot D_i,$$

and

$$F_{i-1,i} = \frac{1}{\alpha_{i-1,i}} \left(\frac{D_{i-1}}{D_i} - 1 \right),$$

where

P_{fit} = present values of cash flows for floating leg,
N = notional principal amount,

$F_{i-1,i}$ = (implied) forward rate from date i - 1 to date i,
$\alpha_{i-1,i}$ = accrual factor from date i - 1 to date i based on the specified accrual method, and
n = number of cash flows from settlement date to the maturity date, and
D_i = discount factor on cash flow date i.

Interest Rate Swap

A swap is a contractual agreement to exchange net cash flows for a specified pay leg and receive leg, each of which may be either fixed or floating. The present value of cash flows of the swap is the difference between the values of the two streams of cash flows. In other words,

pay floating, receive fixed

$P_{swap} = P_{fix} - P_{flt,}$

pay fixed, receive floating

$P_{swap} = P_{flt} - P_{fix.}$

Swap Risk Statistics

Several risk statistics are calculated for interest rate swaps including modified duration, convexity, and basis point value. These swap risk statistics are based on the risk statistics for the individual legs of the swap, as described below.

For the individual fixed and floating legs of the swap, the modified duration, convexity and basis point value are calculated numerically by bumping the accruing and discounting curves. The rates in the accruing and discounting curves are bumped up by a small amount Δ, and down by Δ. These bumped curves are then used to obtain the bumped up and bumped down fair value P_{Δ} and $P_{-\Delta}$, respectively.

STOCK MARKET INVESTMENT

POSSIBLE QUESTIONS

UNIT V

SECTION B

2 MARK

1. What is a derivative market?
2. What is an option market?
3. What is a futures market?
4. How are SWAPS carried out?
5. Explain futures contract.
6. What is a Call option?
7. What is a Put option?
8. Explain different types of traders involved in the derivatives market.
9. What do mean by derivative trading?
10. What are the advantages of derivative trading?
11. What are the specifications of derivative contract?
12. What is the importance of share price indices?
13. What is the need for share price Indices?
14. How is a share price indices interpreted?
15. What are the advantages of share price indices?

SECTION C

6 MARK

1. What are share price indexes? Explain their need and importance.
2. Explain about the derivative markets in India.
3. What is a SWAP? How is it carried out?
4. What is a futures contract? How is a futures contract carried out?
5. What is a derivative contract? What is an option?
6. What is a derivative contract? What are its types?
7. What is an option? What are its types? How are options traded?
8. What is a derivative market? What are the types of traders present in the market?
9. What is a derivative market? Explain about derivative market in India.
10. What is a SWAP? How is its value calculated?