



# BASIC ACCOUNTING CONCEPTS

**Accounting Principles** -These are called Generally Accepted Accounting Principles, or GAAP, which the companies must follow while reporting the financial data. Key GAAPs are as follows:-

- ❖ **Going Concern Concept:** This principle assumes that a business will continue in the foreseeable future – it has no finite life. We use this principle to project cash flows in the future.
- ❖ **Legal Entity:** The business is an entity separate from owners; even if it's a small, one person business running out of home. Therefore, the business accounts are taken separate from the owners.
- ❖ **Conservatism:** Be cautious and conservative while recording transactions. Recognize income only when it's definite.
- ❖ **Accrual Concept:** Income and expense are recognized/recorded when a transaction occurs- not when cash changes hands.
- ❖ **Matching Concept:** The business must match the expenses incurred for a period, to the income earned during that period.
- ❖ **Cost Concept:** All assets are recorded on the books at purchase price, not market price, with some exceptions.



# FINANCIAL STATEMENTS

## **ACCOUNTING EQUATION: Assets = Liabilities + Owner's Equity**

- It shows that all the assets that the business owns are financed by either the shareholder's funds or outsider's funds
- The balance is maintained because every business transaction affects at least two of the company's accounts.

For example, when a company borrows money from a bank, the company's assets will increase and its liabilities will increase by the same amount. Similarly, when an inventory is purchased, it can either be financed through loan (which will increase both assets and liabilities) or bought using cash (which will increase one asset and decrease another).

## **FINANCIAL STATEMENTS**

- Income Statement
- Balance Sheet
- Statement of Cash Flow
- Statement of Retained Earnings



# INCOME STATEMENT

The Income statement is a statement that presents the results of operations of a business over a specified period of time (e.g., one year, one quarter, one month)

Major components are as follows:-

- **Revenue**- Source of income that normally arises from the business operations, that is, from sale of goods or services and is recorded when it is earned
- **Expenses**- Costs incurred by a business over a specified period of time to generate the revenues earned during that same period of time. For example, in order for a manufacturing company to sell a product, it must buy the materials it needs to make the product.
- **Net income**-The Revenue a company earns, less its Expenses over a specified period of time, equals its Net Income. A positive Net Income number indicates a profit, while a negative Net Income number indicates that a company suffered a loss (called a "net loss").

<b>Revenue from operations (Sales)</b>
Other income
<b>Total income</b>
<b>Less: Expenses</b>
(-) Cost of goods sold
(-) Expenses other than Depreciation, Interest & Tax
<b>EBITDA</b>
(-) Depreciation
<b>EBIT ( Operating Profit)</b>
(-) Interest
<b>PBT (Profit before Tax)</b>
Tax
<b>PAT ( Profit after Tax)/ Net Profit</b>

**ASSETS VS. EXPENSES**- A purchase is considered an asset if it provides future economic benefit to the company, while expenses only relate to the current period. For e.g. Purchase of machinery- Asset, Employee salary- Expense

## BALANCE SHEET

The Balance Sheet presents the financial position of a company at a given point in time. It reflects the company's resources (assets) and funding for those resources (liabilities and stockholder's equity)

Major components are as follows:-

- **Assets-** They are the Resources which enable a firm to generate revenues. Assets are further classified into non-current assets and current assets
- **Liabilities-** It refers to the amount owed by the business to the external. It is also further classified as non-current liabilities and current liabilities
- **Equity-** It represents the ownership interest in the company and consists of equity capital and reserves and surplus

	LIABILITIES	ASSETS
Equity	Equity Capital	Plant & Machinery
	Reserves & Surplus	Furniture
Non-Current Liabilities	Long term debt	Long term Advances & Investment
	Debentures	Intangible Assets
Current Liabilities	Bills Payables	Debtors
	Creditors	Inventory
		Marketable Securities
		Cash & Cash Equivalents

## STATEMENT OF RETAINED EARNINGS

Retained earnings is the amount of profit that the company has retained and has not distributed as profits to the shareholders. Net income increases the Retained Earnings account. Net losses and dividend payments decrease Retained Earnings.

# STATEMENT OF CASH FLOW

The Statement of Cash Flows presents a detailed summary of all of the cash inflows and outflows during the period and is divided into three sections based on three types of activity:

## **Cash flows from operating activities:**

**operating activities:** It makes adjustments & translates net income into operating profits earned on cash basis. If the current assets/ working capital increases, amount is subtracted from operating activities as it means more investment in business (decrease in working capital/ increase in current liabilities means less cash requirement so added)

## **Cash flows from investing activities:**

**investing activities:** It includes the purchase and sale of equipment and investments and any income generated from the same. Negative cash flow from investing activities refers to the fact that a company is investing in its business. Companies with high capital expenditures are generally in a state of growth

## **Cash flows from financing activities:**

**financing activities:** It shows the net flows of cash that are used to fund the company. It provides investors with insight into the financial strength of the company. Positive cash flow from financing activities may indicate firm's intention of expansion and negative flow may be a sign of improving liquidity

# FINANCIAL RATIOS



## LIQUIDITY RATIOS

Current Ratio	$\text{Current Assets} / \text{Current Liabilities}$	Used to examine short term liquidity of the firm. Usually higher the ratio, better it is.
Quick Ratio	$(\text{Cash \& Cash Equivalent} + \text{Accounts Receivables}) / \text{Current Liabilities}$	More conservative measure, it measures the amount of liquid assets available to cover current liabilities
Cash Ratio	$\text{Cash and Cash Equivalents} / \text{Current Liabilities}$	Represents the amount of cash available to pay the current liabilities

## SOLVENCY RATIOS

Debt to Equity Ratio	$\text{Debt} / \text{Equity}$	Shows the amount of shareholders fund available to cover the debt. Higher ratio indicates financial risk
Interest Coverage Ratio	$\text{EBIT} / \text{Interest}$	Measures the firm's ability to pay the interest. A higher ratio indicates better financial health

# FINANCIAL RATIOS



## TURNOVER/ ACTIVITY RATIOS

Inventory Turnover Ratio	Cost of Goods Sold/ Average Inventory	Shows how many times a company's stock is sold and replaced over a given period of time. A high ratio implies either strong sales or ineffective buying. A low ratio implies poor sales, thus excess inventory
Inventory Days	Number of days in a period/ Inventory Turnover	Measures the number of days funds are tied up in inventory. A higher value indicates that a firm is not able to manage its inventory efficiently
Accounts Receivables Turnover Ratio	Net credit sales/ Average Accounts Receivables	Shows the company's effectiveness in collecting its receivable. Usually, higher the ratio, better it is
Days Receivables	Number of days in a period/ Receivable Turnover	Measures the number of days a company takes to collect payments
Payables Turnover Ratio	Purchases/ Average Accounts Payables	Indicates the rate at which a company pay off its suppliers
Days Payables	Number of days in a period/ Payable Turnover	Indicates the average time taken by a company to pay to its creditors.

# FINANCIAL RATIOS



## PROFITABILITY RATIOS

Net Profit Ratio	Net Profit/ Revenue from operations	Indicates how much net income is generated as a percentage of revenues. Higher the ratio, better it is.
Operating Margin	Operating Income (EBIT) / Revenue from operations	Measures the income generated by the company from its core operations. Higher the margin, better it is.
Return on Equity	Net Profit (PAT)/ Equity	Measures the return generated for the equity holders. Higher value indicates more value is generated for shareholders
Return on Capital Employed	EBIT/ Capital Employed	Measures the efficiency of the capital invested in the firm. ROCE should be more than the company's cost of capital, to generate value for its shareholders
Return on Assets	Net Profit/ Total Assets	Indicates income generated by a company relative to its total assets. Higher the return, better it is.

**DuPont Analysis-** It analysis Return on Equity by breaking into 3 parameters

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

Net Profit Margin (Operating Efficiency) × Asset Turnover Ratio (Asset Utilization Efficiency) × Equity Multiplier (Financial Leverage)



# BANKING BUSINESS



## BANK

The term 'bank' is used generally to refer to any financial institution that is licensed to accept deposits that are repayable on demand, and lend money.

## CATEGORIES OF BANKS IN INDIA

- **Scheduled banks:**

Banks which have deposits > INR 200 crore are 'Scheduled Banks'.

- **Non-scheduled banks:**

Banks which have deposits  $\leq$  INR 200 crore are 'Nonscheduled Banks'.

## BANKING STRUCTURE IN INDIA

**Public Sector Banks:** PSBs are those where the government holds a majority (>50%) ownership.

**Private Banks:** Private banks, are banks owned by private (i.e. non-government) Indian entities such as corporates and individuals.

**Foreign Banks:** Foreign Banks are those owned by multinational/non-Indian entities.

**Regional Rural Banks:** RRBs are also banks with a Government ownership.

**Urban Co-operative Banks:** Co-operative banks are formed by a group of members.

**State Co-operative Banks:** SCBs are set up with state government partnership to help agricultural and rural development.

## SERVICES OFFERED BY BANKS TO CORPORATES

- Loans
- Cash Deposits
- Foreign Exchange Transactions
- Advisory Services
- Trade Services

## RESERVE REQUIREMENTS

- Cash Reserve Ratio- Percentage of all deposits to be kept with Central Bank in the form of cash
- Statutory Liquid Ratio- Percentage of all deposits to be held in liquid assets



### THE CENTRAL BANK

The 'Central Bank' (CB) of any country is the banker's bank. It acts as a regulator for other banks, while providing various facilities to facilitate their functioning. It also acts as the government's bank.

#### RESPONSIBILITIES OF A CENTRAL BANK:

- a. Conducting the Monetary Policy of the country: i.e. directing interest rates in the economy
- b. Ensuring sufficient pool of funds: increase or decrease money supply to manage inflation.
- c. Maintaining the stability of financial system: by regulating banks
- d. Monitoring the foreign currency assets & liabilities: managing the money which India has invested in other countries
- e. Providing financial services to the government

## KEY CONCEPTS FOR BANKS



- **Net Owned Funds:** Money Belonging To The Owners (Owner's Equity– Losses)
- **Capital Adequacy Ratio:** A measure of a bank's capital. It is expressed as a percentage of a bank's risk weighted credit exposures. This ratio is used to protect depositors and promote the stability and efficiency of financial systems around the world. Two types of capital are measured: tier one capital, which can absorb losses without a bank requiring to cease trading, and tier two capital, which can absorb losses in the event of a winding-up and so provides a lesser degree of protection to depositors.

$$\text{CAR} = (\text{Tier one Capital} + \text{Tier Two Capital}) / \text{Risk Weighted Assets}$$

- **Bank Rate:** It is the rate of interest which is levied on long-term loans and Advances taken by commercial banks from the Central Bank.
- **Repo Rate:** Repo rate is the rate of interest which is levied on Short-Term loans taken by commercial banks from the Central bank. A reduction in the Repo rate will help banks to get money at a cheaper rate. When the repo rate increases, borrowing from RBI becomes more expensive.
- **Reverse Repo Rate:** This is exact opposite of Repo rate. Reverse repo rate is the rate which Central Bank pays to the commercial banks on their surplus funds with Central Bank. An increase in Reverse repo rate can cause the banks to transfer more funds to RBI due to these attractive interest rates.

# PERFORMANCE METRIC FOR BANKS



Ratio	Formula	Interpretation
Net Interest Margin	$(\text{Interest Income} - \text{Interest Expenses}) / \text{Total Assets}$	Measures the net interest income generated by the financial institution. Higher margin indicates profitability of the entity
Return On Assets	$\text{Net Income} / \text{Total Assets}$	Indicates managerial efficiency in converting assets into net earnings
Return on Equity	$\text{Net Income} / \text{Total Equity Capital}$	Measures the rate of return generated for the equity capital holders
Earning Spread	$(\text{Total Interest Income} / \text{Total Earning Assets}) - (\text{Total Interest Expense} / \text{Total interest Bearing Liabilities})$	Measures the effectiveness of a financial firm in lending and borrowing functions.

## BASEL NORMS



A set of international banking regulations put forth by the Basel Committee on Bank Supervision, which set out the minimum capital requirements of financial institutions with the goal of minimizing credit risk.

### TIER 1 CAPITAL

Tier I capital is core capital, this includes equity capital and disclosed reserves. Equity capital includes instruments that can't be redeemed at the option of the holder.

### TIER 2 CAPITAL

Tier 2 capital is supplementary bank capital that includes items such as revaluation reserves, undisclosed reserves, hybrid instruments and subordinated term debt.

### BASEL 1

It was issued in 1988 and focused mainly on credit risk by creating a bank asset classification system. This classification system grouped a bank's assets into five risk categories:

**0%** - cash, central bank and government debt and any OECD government debt

**10%, 20% or 50%** - public sector debt

**20%** - development bank debt, OECD bank debt, OECD securities firm debt, non-OECD bank debt (under one year maturity) and non-OECD public sector debt, cash in collection

**50%** - residential mortgages

**100%** - private sector debt, non-OECD bank debt (maturity over a year), real estate, plant and equipment, capital instruments issued at other banks

**The bank must maintain capital (Tier 1 and Tier 2) equal to at least 8% of its risk-weighted assets.**

For example, if a bank has risk-weighted assets of \$100 million, it is required to maintain capital of at least \$8 million.

## BASEL 2

Basel II is the second of the Basel Committee on Bank Supervision's recommendations, and unlike the first accord, Basel I, where focus was mainly on credit risk, the purpose of Basel II was to create standards and regulations on how much capital financial institutions must have put aside. Banks need to put aside capital to reduce the risks associated with its investing and lending practices.

## BASEL 3

Post crisis, with a view to improving the quality and quantity of regulatory capital, it has been decided that the predominant form of Tier 1 capital must be Common Equity; since it is critical that banks' risk exposures are backed by high quality capital base. Non-equity Tier 1 and Tier 2 capital would continue to form part of regulatory capital subject to eligibility criteria as laid down in Basel III.

### COMMON EQUITY TIER 1 CAPITAL

#### ELEMENTS OF COMMON EQUITY TIER 1 CAPITAL

- Common shares (paid-up equity capital)
- Stock surplus (share premium) resulting from the issue of common shares;
- Statutory reserves;
- Capital reserves representing surplus arising out of sale proceeds of assets;
- Other disclosed free reserves, if any;
- Balance in Profit & Loss Account at the end of the previous financial year.

## **ELEMENTS OF ADDITIONAL TIER 1 CAPITAL**

Additional Tier 1 capital consists of the sum of the following elements:

- Perpetual Non-Cumulative Preference Shares (PNCPS)
- Stock surplus (share premium) resulting from the issue of instruments included in Additional Tier 1 capital;
- Debt capital instruments eligible for inclusion in Additional Tier 1 capital
- Any other type of instrument generally notified by the Reserve Bank from time to time for inclusion in Additional Tier 1 capital

## **ELEMENTS OF TIER 2 CAPITAL**

- General Provisions and Loss Reserves
- Preference Share Capital Instruments
- Stock surplus (share premium) resulting from the issue of instruments included in Tier 2 capital
- While calculating capital adequacy at the consolidated level, Tier 2 capital instruments issued by consolidated subsidiaries of the bank and held by third parties which meet the criteria for inclusion in Tier 2 capital;
- Revaluation reserves at a discount of 55%;

# RISK



Risk is the probability that financial loss will occurred.

## TYPES OF RISK

- Credit risk -This is the risk of default by a borrower.
- Regulatory risk - This refers to the risk of loss if a Financial Institution (FI) does not comply with the regulations needed by a country's regulator.
- Liquidity risk -This is the risk of not having cash when it is needed. This risk is critical for a bank, as it needs to always have sufficient money on hand to repay withdrawals by depositors.
- Operational risk - This is the risk of loss occurring from inefficiency in a bank's people, process and systems. This includes risk of theft, fraud, process inefficiency and so on.
- Legal risk - This is the risk of loss resulting from not being adequately protected by legal contract.
- Market risk - Any entity when trading in a market is exposed to the risk of loss, and a bank is no different, if it trades in financial markets. Depending on the specific market, the market risk can be further categorized into:
  1. Equity risk (risk of loss in the stock markets),
  2. Interest rate risk (risk of loss in bond markets), etc.





## NON-BANKING FINANCIAL COMPANIES

Non-Banking Finance Companies (NBFCs) are financial institutions that provide services, similar to banks, but they do not hold a banking license.

### CLASSIFICATION OF NBFCs

1. Asset Finance Company (AFC): An AFC is an NBFC, whose principal business is the financing of physical assets. This includes financing of automobiles, tractors, lathe machines, generator sets, earth moving and material handling equipment and general purpose industrial machines.
2. Investment Company (IC): This is an NBFC whose primary business is purchase and sale of securities (financial instruments, such as stocks and bonds). A mutual fund would come under this category. Examples- Motilal Oswal, UTI Mutual Fund etc.
3. Loan Company(LC): Loan Company(LC) means any NBFC whose principal business is that of providing finance, by giving loans or advances. It does not include leasing or hire purchase. Example - Tata Capital Limited.

### KEY DIFFERENCES BETWEEN A BANK AND NBFC ARE:

1. An NBFC cannot accept deposits which are repayable on demand. Some can accept fixed-term deposits.
2. Any deposits accepted by NBFCs (these will be of fixed maturity as explained above) are not insured
3. Only banks can participate in the payment system; hence NBFCs cannot issue cheque books to their customers.



## INVESTMENT BANKING

Investment banking is concerned with assisting companies in raising debt and equity, and providing advice on mergers and acquisitions, major corporate restructurings, and other corporate finance decisions. Large banks are also often involved in securities trading (e.g., by providing brokerage services)

Key Features of Investment Banking :-

- Investment banking deals primarily with the creation of capital for other companies, governments, and other entities.
- Investment banking activities include underwriting new debt and equity securities for all types of corporations, aiding in the sale of securities, and helping to facilitate mergers and acquisitions, reorganizations, and broker trades for both institutions and private investors.
- Investment bankers help corporations, governments, and other groups plan and manage financial aspects of large projects

### AREAS COVERED UNDER INVESTMENT BANKING:

- 1.M&A ADVISORY
- 2.UNDERWRITING
3. EQUITY RESEARCH

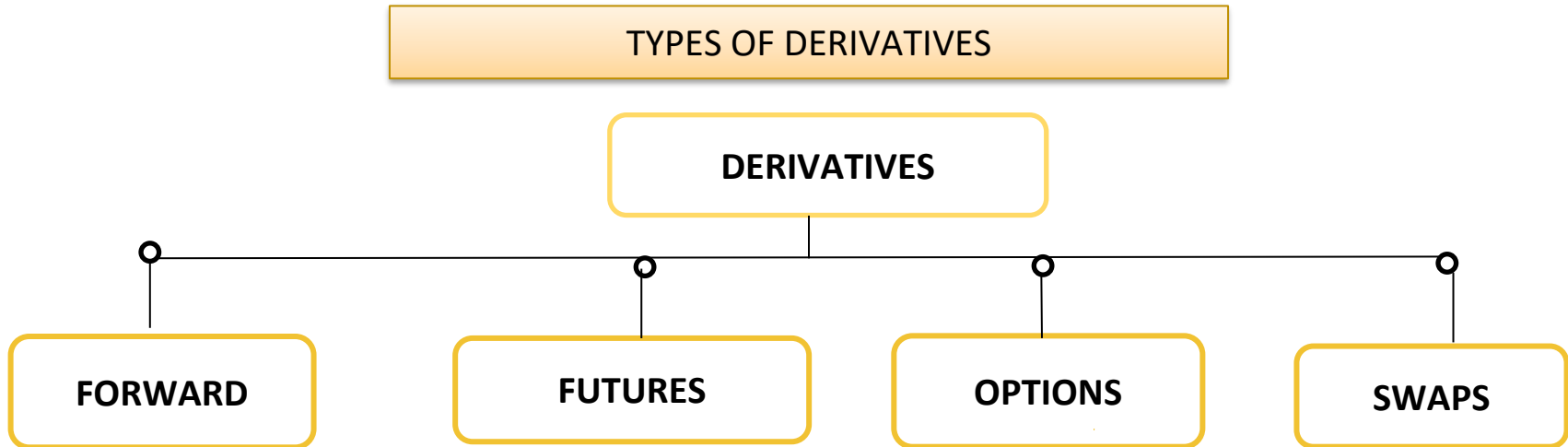
## KEY TERMINOLOGIES FOR INVESTMENT BANKING

1. **Buy-side Advisor** - The buy-side advisor is responsible for
  - Helping the company identify potential acquisition targets
  - Performing due diligence on proposed targets
  - Valuing the proposed benefits of the acquisition
  - Negotiating with target firms to establish the terms of the deal
  - Closing the deal .
1. **Sell-side Advisor** - A sell side advisor may prepare an analysis of the seller company and recommend steps that should be taken prior to the firm looking for potential suitors to make the firm more attractive. Secondly, a sell-side M&A advising focuses on marketing the firm.
2. **Leveraged Buy-out** - A leveraged buyout (LBO) is the acquisition of another company using a significant amount of borrowed money to meet the cost of acquisition.

# DERIVATIVES



Derivative Contract refers to the contract that derives its value from the underlying asset



## FORWARDS

A forward contract is an agreement between two parties to buy/sell a certain underlying asset at a certain price at a specific future date.

Following are some of its features:-

- Forward contracts are Over-the-Counter instruments and are not traded on exchange
- They are customized as per the specific requirements of the buyer and seller
- Counterparty risk is involved

## FUTURES

A future contract is a forward contract that is standardized and exchange traded. One party who commits to purchasing the underlying asset on the delivery date is said to be in a long position. Another party who takes the short position commits to delivering the underlying asset when the contract matures.

### Difference between forwards and futures

	Forwards	Futures
Trading	Forwards are private contracts and do not trade on exchange	Futures contracts trade on exchange
Type of Contract	Customized Contract	Standardized Contract
Counterparty Risk	High counterparty risk as they are a private contract	Low as the clearing house act as a counterparty for all futures contracts
Regulation	Are not usually regulated	Government regulates futures market

## OPTIONS

An option contract gives the buyer of the contract the right (but not the obligation) to buy/sell the asset. On the other hand, the seller of the option (called the option writer) is obliged to buy/sell the asset as per the wishes of the buyer.

### **Types of Option Contract:-**

- **Long Call**-The right to buy an asset at a certain price
- **Short Call**-The obligation to sell an asset at a certain price
- **Long Put**-The right to sell an asset at a certain price
- **Short Put**-The obligation to buy an asset at a certain price

### Key Terms

- **Option Premium**- Upfront payment made by the buyer of the option contract to the writer of the contract (seller)
- **Exercise Price/ Strike Price**- Predetermined price

	Call Option	Put Option
Exercise Price > Price in future	Buyer will not exercise option	Buyer will exercise option
Exercise Price < Price in future	Buyer will exercise option	Buyer will not exercise option



Increase in :	Effect on call option value	Effect on put option value
Price of underlying asset	Increase	Decrease
Exercise price	Decrease	Increase
Risk-free rate	Increase	Decrease
Volatility of underlying asset	Increase	Increase
Time to expiration	Increase	Increase (some exception)
Cost of holding underlying asset	Increase	Decrease
Benefits of holding underlying asset	Decrease	Increase

### SWAPS

Another derivative, a swap, is a simple exchange of future cash flows. Some popular forms of swaps include foreign exchange swaps and interest rate swaps. Interest rate swap includes exchange of fixed and variable interest rate.

Example of foreign exchange swaps. Say, XYZ, a US company, outsources its software development to India on a regular basis. In such a situation, it would make payments to the firms in India in rupees, thus find itself exposed to foreign exchange rate fluctuation risks. To hedge these exchange risks, XYZ would to enter into a foreign exchange swap - a predetermined exchange of currency - with another party who needs to make regular payment in US Dollar.

# BONDS



- **Par value or face value of a bond:** This is the total amount the bond issuer will commit to pay back at the end of the bond maturity period (when the bond expires).
- **Coupon payments:** The payments of interest that the bond issuer makes to the bondholder. These are often specified in terms of coupon rates. The coupon rate is the bond coupon payment divided by the bond's par value.
- **Bond price:** The price the bond holder (i.e. the lender) pays the bond issuer (i.e. the borrower) to hold the bond (to have a claim on the cash flows documented on the bond).
- **Default risk:** The risk that the company issuing the bond may go bankrupt, and default on its loans.
- **Investment grade bonds:** These bonds have high credit ratings, and pay a relatively low rate of interest.
- **Junk bonds:** Also known as high yield bonds, these bonds have poor credit ratings, and pay a relatively high rate of interest.
- **Zero-coupon bonds:** A debt security which do not pay any interest and is issued at deep discount and redeemed on par value

## PRICING OF BONDS

$$\text{Bond Value} = \sum_{t=1}^T \left( \frac{\text{Coupon}}{(1+r)^t} \right) + \frac{\text{Par Value}}{(1+r)^T}$$



# VALUATION

Valuation refers to the process of determining the current value of an asset or a company to know about its intrinsic value.

Market Capitalization- It refers to the value of the stock based on the current stock price

**Market Capitalization= Current Stock price\* Number of shares Outstanding**

## METHODS OF VALUATION

1. Discounted Cash Flow method
2. Comparable Company method
3. Precedent transaction method

## DISCOUNTED CASH FLOW (DCF)

**Discounted cash flow (DCF)** analysis is a method of valuing the intrinsic value of a company (or asset). In simple terms, discounted cash flow tries to work out the value today, based on projections of all of the cash that it could make available to investors in the future. It is described as "discounted" cash flow because of the principle of "time value of money" (i.e. cash in the future is worth less than cash today). The technique is widely used by companies, investment bankers and analysts to estimate the value of a firm, especially during mergers and acquisitions.

### STEPS

1. Estimating free cash flow
2. Calculating discount rate
3. Computing Terminal Value
4. Calculating Fair Value of Company and Equity

## 1. ESTIMATING FREE CASH FLOW

Free cash flow represents the cash flow that are available for distribution to all investors i.e. debtholders and equity holders.

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**EBIT \* ( 1 - Tax Rate)**

Add: Depreciation and Amortization

Less: Capital Expenditure

Less: Increase in Net Working Capital

**= Free Cash Flow**

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## 2. CALCULATING DISCOUNT RATE

The **discount rate** is a weighted-average of the returns expected by the different classes of capital providers (holders of both equity and debt). Thus, it is also called the **Weighted Average Cost of Capital(WACC)**.

$$WACC = K_e \times \frac{E}{V} + K_d \times (1 - T) \times \frac{D}{V}$$

Where:

$K_e$	=	Cost of equity
$K_d$	=	Cost of debt
$E$	=	Market value of equity
$D$	=	Market value of debt
$T$	=	Corporate tax rate
$V$	=	Market value of equity plus market value of debt



## **COST OF DEBT**

It refers to the cost a company has to pay to the debt holders

Computation Method

1. Cost of debt = Interest rate \* (1 - Tax rate)
2. Cost of debt = Treasury bond rate + Default Risk Premium

## **COST OF EQUITY**

Equity shareholders expect to obtain a certain return on their equity investment in a company. From the company's perspective, the equity holders' required rate of return is a cost.

Cost of equity ( as per CAPM) =  $R_f + \text{Beta} * (R_m - R_f)$

Where  $R_f$  = Risk free rate

$R_m$  = Market Return

$R_m - R_f$  is also known as Risk Premium

### 3. COMPUTING TERMINAL VALUE

The terminal value (TV) captures the value of a business beyond the projection period in a DCF analysis, and is the present value of all subsequent cash flows.

$$TV = \frac{FCF_n \times (1+g)}{WACC - g}$$

FCFn= Free Cash Flow of last year of projection year  
g= perpetual growth rate

### 4. CALCULATING INTRINSIC VALUE OF COMPANY AND EQUITY

**Enterprise Value=**  
PV of cash flow in  
projection period +  
PV of terminal value

$$EV = \frac{FCF_1}{(1+r)^1} + \frac{FCF_2}{(1+r)^2} + \dots + \frac{FCF_n}{(1+r)^n} + \frac{TV}{(1+r)^n}$$

**Value of Equity=** Enterprise Value – Value of Debt

## COMPARABLE COMPANIES METHOD

Comparable Companies method computes the value of the company based on the relative multiples of the peers/comparable companies. Basic assumption behind this method is identical assets should have similar price.

Features of Comparable companies-

- Similar profile – growth and risk
- Similar line of business
- Similar size

Steps in computation

1. Select comparable companies
2. Calculate relative value metric such as EV/EBITDA, P/E, etc.
3. Apply Metrics to the Target Company and estimate the value

Example: P/E of comparables= 20 times, P/BV of comparables= 3 times and P/Sales of comparable= 3 times

ABC LTD.		Valuation Of ABC LTD.	
Earnings	\$ 20 million	Based on Earning	= \$20 million * 20= \$ 400 million
Book value of equity	\$100 million	Based on Book Value	= \$100 million * 3 = \$ 300 million
Sales	\$ 150 million	Based On Sales	= \$150 million * 3= \$ 450 million



## COMPARABLE TRANSACTION METHOD

Comparable transaction method computes the value of the company based on the transaction already taken place in the industry. Basic assumption behind this method is value of a company should be similar to the price already paid in similar deals.

Features of Comparable transaction-

- Similar business model
- Similar financial state

Steps in computation

1. Select recent takeover transactions
2. Calculate multiples for comparable transactions
3. Estimate value of the company based on the company

Example: P/E of past transaction= 25 times, P/BV of past transaction = 4 times and P/Sales of past transaction = 3 times

XYZ LTD.		Valuation Of XYZ LTD.	
Earnings	\$ 20 million	Based on Earning	= \$20 million * 25= \$ 500 million
Book value of equity	\$100 million	Based on Book Value	= \$100 million * 4= \$ 400 million
Sales	\$ 150 million	Based On Sales	= \$150 million * 3= \$ 450 million

# SAMPLE INTERVIEW QUESTIONS



1. Is 10 a high P/E ratio?
2. Xeron Software Corporation's days sales outstanding have gone from 58 days to 42 days. Does this make you more or less likely to issue a Buy rating on the stock?
3. Which is riskier: a 30-year coupon bond or a 30-year zero coupon bond?
4. Why did the stock price of XYZ Company decrease yesterday when it
5. announced increased quarterly earnings?
6. Can you tell me about a recent IPO that you have followed?
7. If you read that a given mutual fund has achieved 50 percent returns last year, would you invest in it?
8. When should a company issue debt instead of issuing equity?
9. Why do companies resort to equity financing and don't fund their entire needs through debt financing?
10. What does a high debt-equity ratio indicate?
11. Why Income Statement is known as Profit and Loss Statement and not Profit or Loss Statement?
12. Why do we prepare Cash Flow Statement when we have Income Statement?

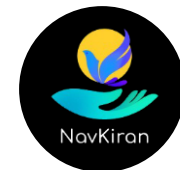


# SAMPLE INTERVIEW QUESTIONS



1. What is Investment Banking? How is different from Advisory/Research
2. What are the different types of Mergers and Acquisitions? Name a recent few.
3. What is the difference between Primary and Secondary equity offerings made by a company?
4. What a Balance Sheet (or Income Statement or Cash flow) of a restaurant (or any other place) would look like?
5. What is a red herring prospectus?
6. What are the sources of fund for a bank?
7. What is the difference between FCFF & FCFE?
8. What is NPV & IRR? How do you decide about a project based on its NPV or IRR?
9. Is high cash good for a company? What do you mean by Cash Ratio? What is the Ideal Cash Ratio?
10. Why is risk important?
11. What Are the Limitations Of A DCF Model?
12. Company A has a potential IRR of 23% and Company B has a potential IRR of 30%. What 2 questions would you ask before you decide which one to invest in?

# SAMPLE INTERVIEW QUESTIONS



1. What 3 questions would you ask a CEO of a company you were looking to invest in?
2. What will be the impact of depreciation of Rs. 10 on the financial statements (Income Statement, Balance sheet and Cash Flow Statement) ?
3. What will happen to the price / yield of a bond if its rating is downgraded? Upgraded?
4. Can you give an example where different debts raised by the same company have different credit ratings?
5. What kind of risks should Infosys hedge itself against?
6. Difference between futures and forwards
7. What is the difference between a commercial bank and an NBFC
8. What are the uses of excess cash flow?
9. What do you understand by NPA (non-performing assets) ?
10. Given two companies (A and B), How would you determine which one to invest it?
11. How would you invest a million dollars if it were given to you and why ?
12. What 3 questions would you ask a CEO of a company you were looking to invest in?