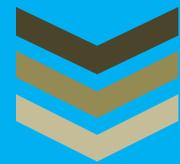


Referencer for Quick Revision



Final Course Paper-2: Strategic Financial Management

A compendium of subject-wise capsules published in the
monthly journal "The Chartered Accountant Student"



**Board of Studies
(Academic)
ICAI**

INDEX

Page No.	Edition of Students' Journal	Topics
<i>1-3</i>	<i>September 2022</i>	<i>Risk Management</i>
<i>4-7</i>	<i>August 2018</i>	<i>Security Valuation</i>
<i>7-11</i>	<i>August 2018</i>	<i>Portfolio Management</i>
<i>12-14</i>	<i>September 2022</i>	<i>Securitization</i>
<i>14-18</i>	<i>September 2022</i>	<i>Mutual Funds</i>
<i>19-21</i>	<i>August 2018</i>	<i>Derivatives</i>
<i>21-25</i>	<i>August 2018</i>	<i>Foreign Exchange Exposure and Risk Management</i>
<i>26-27</i>	<i>August 2018</i>	<i>Interest Rate Risk Management</i>
<i>28-30</i>	<i>September 2022</i>	<i>Corporate Valuation</i>
<i>31-33</i>	<i>August 2018</i>	<i>Mergers, Acquisitions and Corporate Restructuring</i>

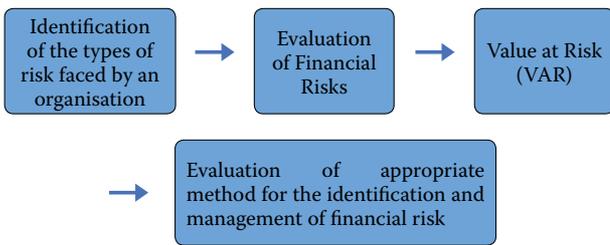
CA FINAL - PAPER 2 - STRATEGIC FINANCIAL MANAGEMENT

The subject "Strategic Financial Management" basically involves applying the knowledge and techniques of financial management to the planning, operating and monitoring of the finance function in particular as well as the organisation in general. So, strategic financial management basically involves planning the utilisation of company's resources in such a manner that it brings maximum value to the shareholders in the long run.

In this regard, an attempt has been made to convey the concepts of Strategic Financial Management to the students in a lucid and simple manner in the form of capsules. It will help the students in undergoing a quick revision of a particular chapter. Although every effort has been made to portray the concepts to the students in the capsule form in the simplest possible manner, it cannot be taken as a substitute for the Study Material. Students are therefore advised to refer the ICAI Study Material and other publications such as Suggested Answers, Revisionary Test Papers, Mock Test Papers, etc.

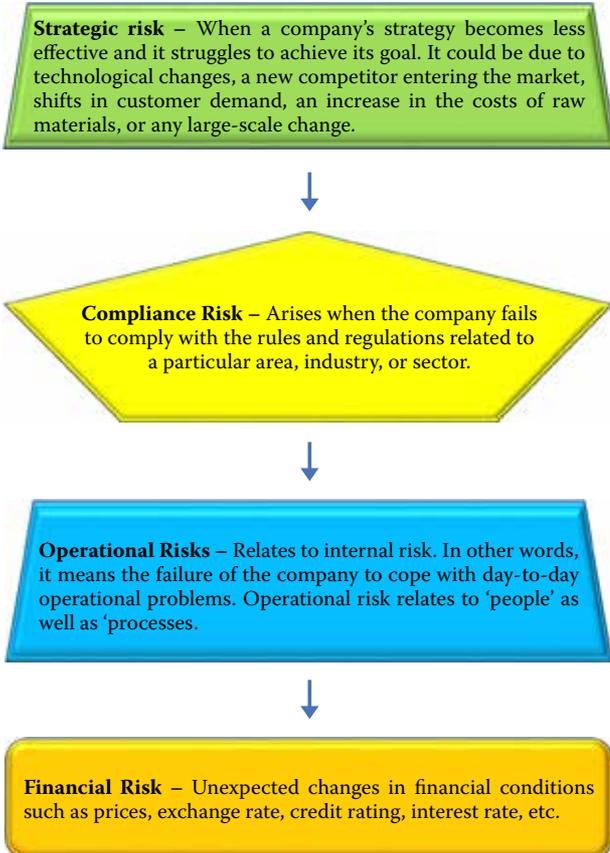
CHAPTER 2 – RISK MANAGEMENT

Chapter Overview

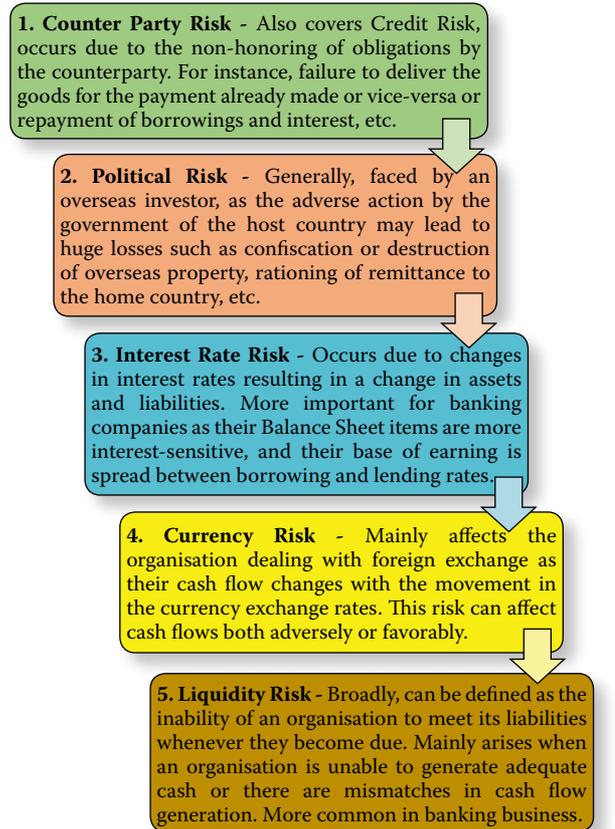


Identification of the types of Risk faced by an organisation

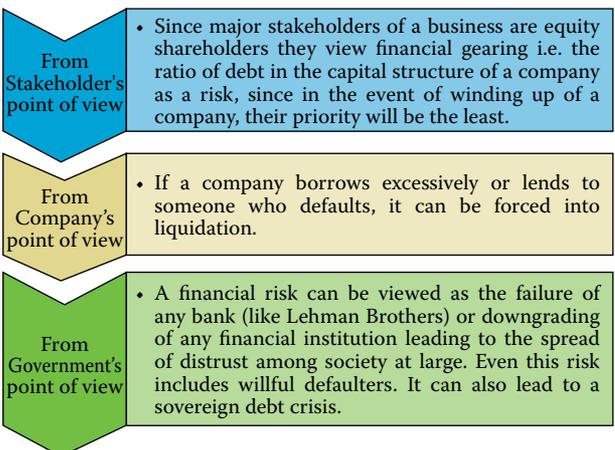
A business organisation faces many types of risks, important among them are discussed as below:



Broad categories of Financial Risk



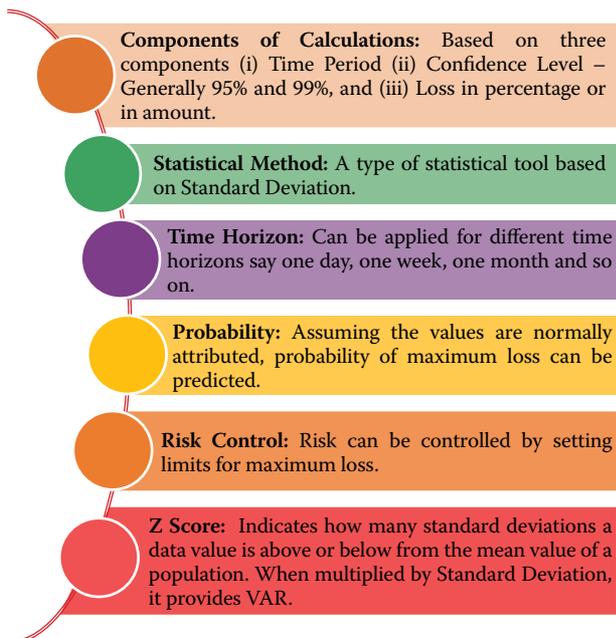
Evaluation of Financial Risk



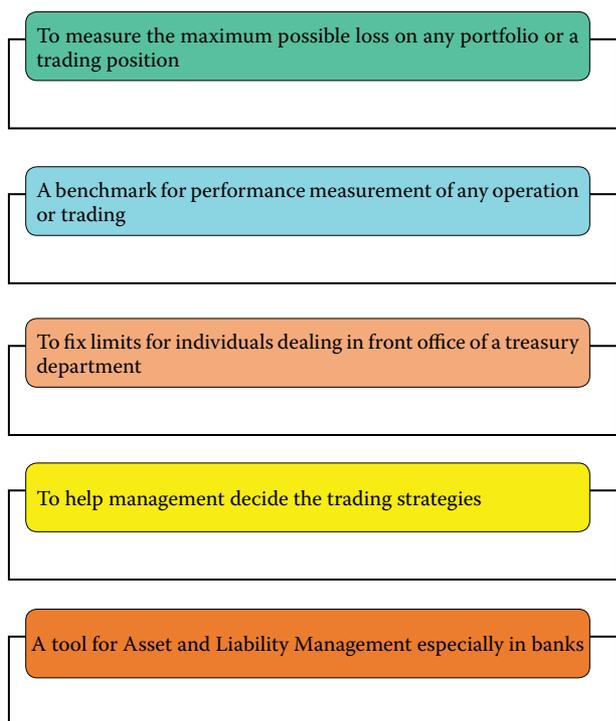
Value at Risk (VAR)

A measure of the risk of an investment which can be a portfolio, capital investment or foreign exchange, etc. In the normal market conditions in a particular period, it estimates how much an investment might lose in a day.

1. Features of VAR



2. Application of VAR



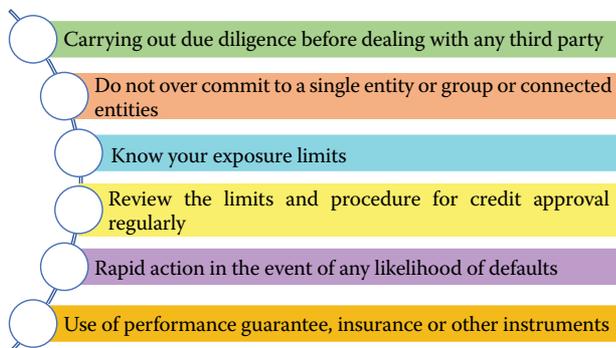
Appropriate Methods for Identification and Management of Financial Risk

1. Counter Party Risk

Some of the illustrations of counter party risk are as follows:

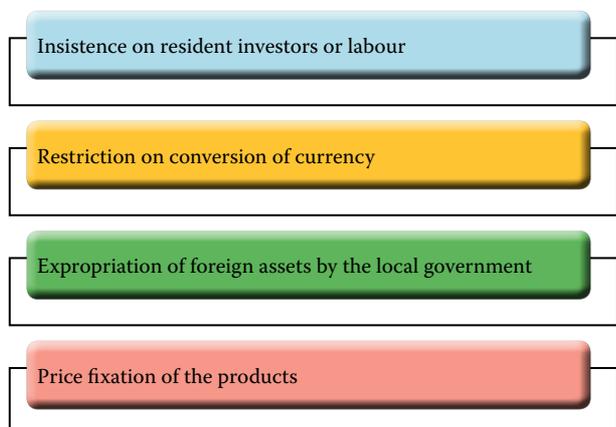


The various techniques to manage this type of risk are as follows:



2. Political Risk

This risk can be identified from the following actions by the Governments of the host country:



Since this risk mainly relates to investments in foreign country, company should assess country risk:

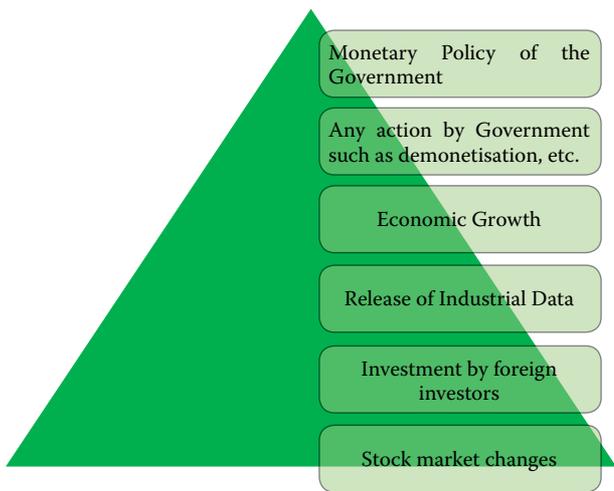
- By referring political ranking published by different business magazines
- By evaluating country's macro-economic conditions
- By analyzing the popularity of current government and assess their stability
- By taking advises from the embassies of the home country in the host countries

Further, following techniques can be used to mitigate this risk.

- Local sourcing of raw materials and labour
- Entering into joint ventures
- Local financing
- Prior negotiations

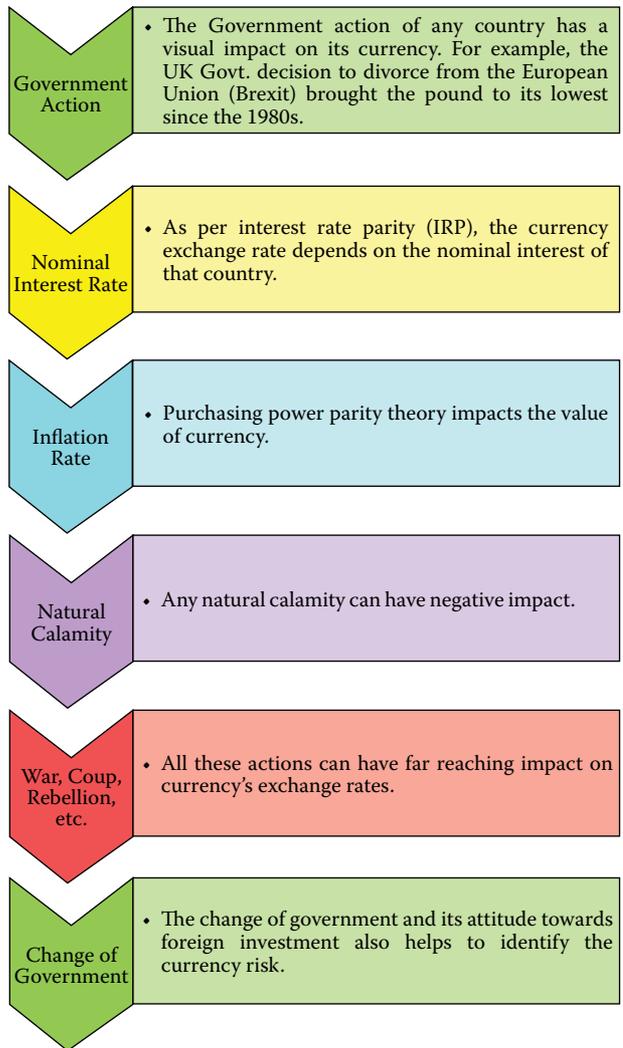
3. Interest Rate Risk

This risk can be identified from the following:



4. Currency Risk

Some of the parameters to identify this risk are as follows:



STRATEGIC FINANCIAL MANAGEMENT ||

STRATEGIC FINANCIAL MANAGEMENT: A CAPSULE FOR QUICK REVISION

The subject "Strategic Financial Management" basically involves in applying the knowledge and techniques of financial management to the planning, operating and monitoring of the finance function in particular as well as the organization in general. So, strategic financial management basically involves planning the utilization of company's resources in such a manner that it brings maximum value to the shareholders in the long run.

In this regard, an attempt has been made to convey the concepts of Strategic Financial Management to the students in a lucid and simple manner in the form of capsules. It will help the students in undergoing a quick revision of a particular chapter. Further, even though the capsule has been prepared keeping in view the new course, the students of old course may also be benefitted from it.

Although every effort has been made to portray the concepts to the students in the capsule form in the simplest possible manner, it cannot be taken as a substitute for the Study Material. Students are therefore advised to refer the ICAI Study Material including Practice Manual and other Publications such as Suggested Answers, Revisionary Test Papers etc.

CHAPTER 5 - SECURITY VALUATION

Introduction

Knowing what an asset is worth and what determines its value is a pre-requisite for making intelligent decisions while choosing investments for a portfolio or in deciding an appropriate price to pay or receive in a business takeover and in making investment, financing and dividend choices when running a business. While some assets are easier to value than others, for different assets, the details of valuation and the uncertainty associated with value estimates may vary. However, the core principles of valuation always remain the same.

Basic Return Concepts

A sound investment decision depends on the correct use and evaluation of the Rate of Return. Some of the different concepts of return are given as below:

Required Rate of Return

The minimum rate of return that the investor is expected to receive while making an investment in an asset over a specified period of time.

Discount Rate

The rate at which present value of future cash flows is determined.

Internal Rate of Return

The discount rate which equates the present value of future cash inflows to its cost i.e. cash outlay.

Equity Risk Premium

Equity risk premium is the excess return that investment in equity shares provides over a risk-free rate of return, such as return from tax free government bonds. This excess return compensates investors for taking on the relatively higher risk of investing in equity shares of a company.

Calculating the Equity Risk Premium

The Equity Risk Premium can be derived from Capital Asset Pricing Model (CAPM), which is as follows:

$$R_x = R_f + \beta_x (R_m - R_f)$$

Where:

R_x = Expected return on equity share of company X

R_f = Risk-Free Rate of Return

β_x = Beta of Company X i.e. Systematic Market Risk of the Company

R_m = Expected Return of Market or Market Portfolio or Return from Market Index

The equity risk premium is basically excess of a Security's Return over Risk-Free Rate Return and accordingly the CAPM can be remodeled as follows:

$$\text{Equity Risk Premium} = R_x - R_f = \beta_x (R_m - R_f)$$

The $(R_m - R_f)$ portion is called Market Risk Premium.

Discount Rate Selection in relation to Cash Flows

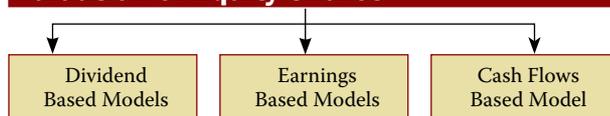
Nominal Cash Flow and Real Cash Flow

- Nominal cash flow is the amount of future revenues the company expects to receive and expenses it expects to pay out, without any adjustments for inflation.
- Real cash flow shows a company's cash flow with adjustments for inflation.

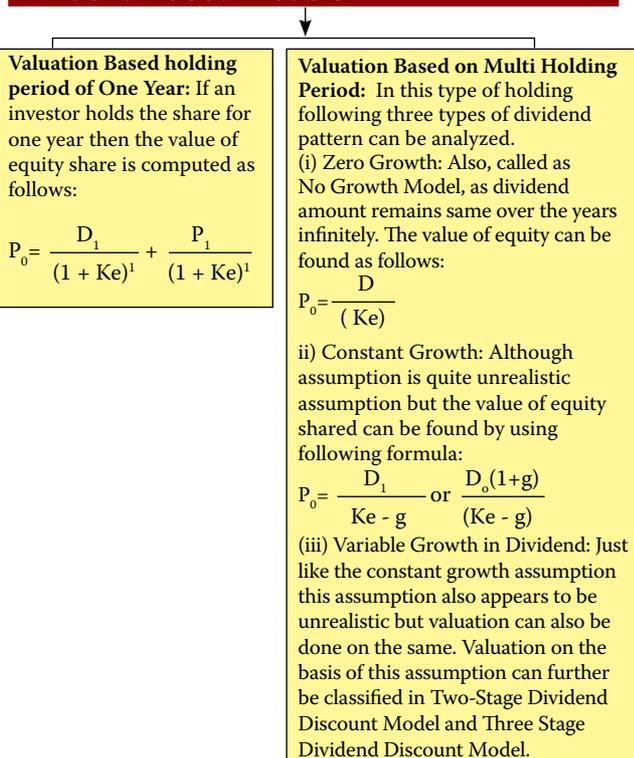
Discount rate for Equity Valuation

- For nominal cash flow, Nominal Rate of Discount is used.
- For real cash flow, real rate of discount is used.

Valuation of Equity Shares

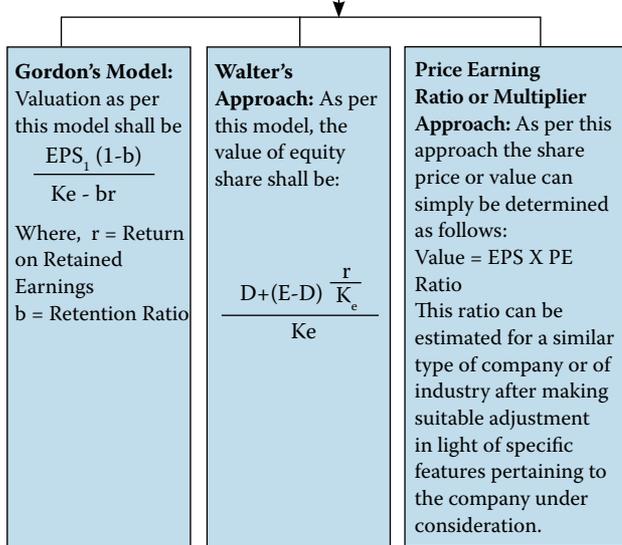


Dividend Based Models



STRATEGIC FINANCIAL MANAGEMENT

Earning Based Models



Calculation of Free Cash Flow to Equity (FCFE): Free Cash flow to equity is used for measuring the intrinsic value of the stock for equity shareholders. The cash that is available for equity shareholders after meeting all operating expenses, interest, net debt obligations and re-investment requirements such as working capital and capital expenditure. It is computed as: Free Cash Flow to Equity (FCFE) = Net Income - Capital Expenditures + Depreciation - Change in Non-cash Working Capital + New Debt Issued - Debt Repayments

or
 FCFE = Net Profit + depreciation - Δ NWC - CAPEX + New Debt - Debt Repayment.
 Δ NWC = changes in Net Working Capital.
 CAPEX = Addition in fixed assets to sustain the basis.
 FCFE can also be used to value share as per multistage growth model approach.

Valuation of Rights

Immediately after the right issue, the price of share is called Ex Right Price or Theoretical Ex-Right Price (TERP) which is computed as follows:

$$\frac{nP_o + S}{n + 1}$$

n = No. of existing equity shares

P₀ = Price of Share Pre-Right Issue

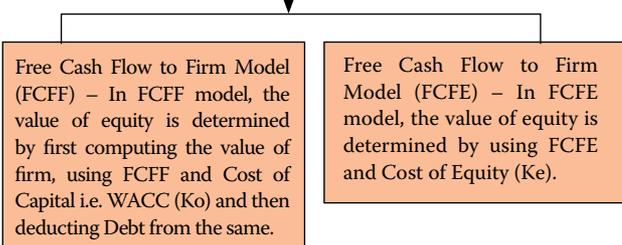
S = Subscription amount raised from Right Issue

However, theoretical value of right can be calculated as follows:

$$\frac{P_o - S}{n + n_1}$$

N₁ = No. of new shares offered

Cash Flow Models



Calculation of Free Cash Flow to Firm (FCFF)

(a) Based on its Net Income:

FCFF = Net Income + Interest expense * (1-tax) + Depreciation -/+ Capital Expenditure -/+ Change in Non-Cash Working Capital

(b) Based on Operating Income or Earnings Before Interest and Tax (EBIT):

FCFF = EBIT * (1 - tax rate) + Depreciation -/+ Capital Expenditure -/+ Change in Non-Cash Working Capital

(c) Based on Earnings before Interest, Tax, Depreciation and Amortisation (EBITDA):

FCFF = EBITDA * (1-Tax) + Depreciation * (Tax Rate) -/+ Capital Expenditure -/+ Change in Non-Cash Working Capital

(d) Based on Free Cash Flow to Equity (FCFE):

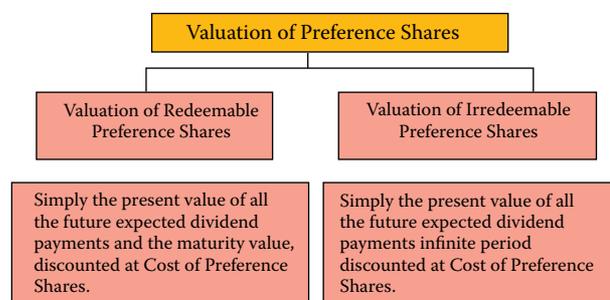
FCFF = FCFE + Interest * (1-t) + Principal Prepaid - New Debt Issued + Preferred Dividend

(e) Based on Cash Flows:

FCFF = Cash Flow from Operations (CFO) + Interest (1-t) -/+ Capital Expenditure

Valuation of Preference Shares

Preference shares, like debentures, are usually subject to fixed rate of dividend. In case of non-redeemable preference shares, their valuation is similar to perpetual bonds.



Formula for Valuation of Redeemable Preference Share

$$= \frac{\text{Dividend}_1}{(1+r)^1} + \frac{\text{Dividend}_2}{(1+r)^2} + \dots + \frac{(\text{Dividend}_n + \text{Maturity value})}{(1+r)^n}$$

Formula for Valuation of Irredeemable Preference Share

$$\text{Irredeemable Preference share value} = \frac{\text{Dividend}}{\text{Required return on Preference share}}$$

STRATEGIC FINANCIAL MANAGEMENT ||

Basics of a Bond

Par Value:
Value stated on the face of the bond of maturity.

Coupon Rate and Frequency of Payment: A bond carries a specific interest rate known as the coupon rate.

Maturity Period: Total time till maturity.

Redemption: Repayment of principal at par or premium.

Bond Valuation Model

The value of a bond is:

$$V = \sum_{t=1}^n \frac{I}{(1+k_d)^t} + \frac{F}{(1+k_d)^n}$$

$$V = I(PVIFA_{k_d, n}) + F(PVIF_{k_d, n})$$

Where,

V = value of the bond

I = annual interest payable on the bond

F = principal amount (par value) of the bond repayable at the time of maturity

N = maturity period of the bond.

Bond Values with Semi-Annual Interest

The basic bond valuation equation thus becomes:

$$V = \sum_{t=1}^{2n} \frac{[I/2]}{(1+k_d/2)^t} + \frac{F}{(1+k_d/2)^{2n}}$$

$$= I/2(PVIFA_{k_d/2, 2n}) + F(PVIF_{k_d/2, 2n})$$

Where,

V = Value of the bond

I/2 = Semi-annual interest payment

$k_d/2$ = Discount rate applicable to a half-year period

F = Par value of the bond repayable at maturity

2n = Maturity period expressed in terms of half-yearly periods.

Price Yield Relationship

A basic property of a bond is that its price varies inversely with yield. The reason is simple. As the required yield increases, the present value of the cash flow decreases; hence the price decreases and vice versa.

Bond Duration

Duration is nothing but the average time taken by an investor to collect his/her investment. If an investor receives a part of his/her investment over the time on specific intervals before maturity, the investment will offer him the duration which would be lesser than the maturity of the instrument. Higher the coupon rate, lesser would be the duration.

(a) Macaulay Duration

$$\text{Macaulay Duration} = \frac{\sum_{t=1}^n \frac{t \cdot C}{(1+i)^t} + \frac{n \cdot M}{(1+i)^n}}{P}$$

Where

n = Number of cash flows

t = Time to maturity

C = Cash flows

i = Required yield (YTM)

M = Maturity (par) value

P = Bond price

(b) Modified Duration

This is a modified version of Macaulay duration which takes into account the interest rate changes because the changes in interest rates affect duration as the yield gets affected each time the interest rate varies.

The formula for modified duration is as follows:

$$\text{Modified Duration} = \left[\frac{\text{Macaulay Duration}}{\left(1 + \frac{\text{YTM}}{n}\right)} \right]$$

Where

n = Number of compounding periods per year

YTM = Yield to Maturity

Term Structure Theories

Popularly known as Yield Curve, shows how yield to maturity is related to term to maturity for bonds that are similar in all respects, except maturity.

Unbiased Expectation Theory	•As per this theory the long-term interest rates can be used to forecast short-term interest rates in the future on the basis of rolling the sum invested for more than one period.
Liquidity Preference Theory	•As per this theory forward rates reflect investors' expectations of future spot rates plus a liquidity premium to compensate them for exposure to interest Rate Risk.
Preferred Habitat Theory	•As per this theory the Premiums are related to supply and demand for funds for various maturities – not the term to maturity and hence this theory can be used to explain almost any yield curve shape.

Convexity Adjustment

Although, the duration is a good approximation of the percentage of price change for a small change in interest rate but the change cannot be estimated so accurately due to convexity effect. This estimation can be improved by adjustment on account of 'convexity'. The formula for convexity is as follows:

$$C^* \times (\Delta y)^2 \times 100$$

$$\Delta y = \text{Change in Yield}$$

$$C^* = \frac{V_+ + V_- - 2V_0}{2V_0(\Delta^2)}$$

V_0 = Initial Price

V_+ = price of Bond if yield increases by Δy

V_- = price of Bond if yield decreases by Δy

Convertible Debentures

Convertible Debentures are those debentures which are converted in equity shares after certain period of time. The equity shares for each convertible debenture are called Conversion Ratio and price paid for the equity share is called 'Conversion Price'.

Further, conversion value of debenture is equal to Price per Equity Share x Converted No. of Shares per Debenture.

STRATEGIC FINANCIAL MANAGEMENT

Valuation of Warrants

A warrant is a right that entitles a holder to subscribe equity shares during a specific period at a stated price. These are generally issued to sweeten the debenture issue. Theoretical value of warrant can be found as follows:

$$(M_p - E) \times n$$

MP = Current Market Price of Share

E = Exercise Price of Warrant

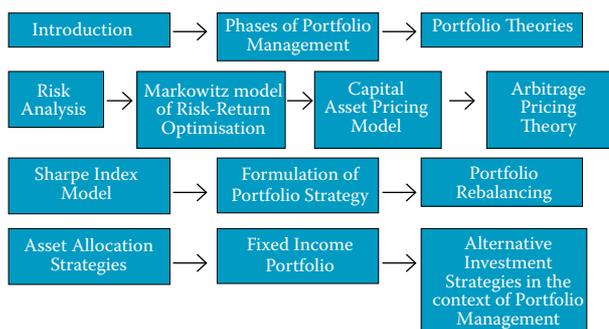
n = No. of equity shares convertible with one warrant

Zero Coupon Bond

As name indicates these bonds do not pay interest during the life of the bonds. Instead, zero coupon bonds are issued at discounted price to their face value, which is the amount a bond will be worth when it matures or comes due. When a zero coupon bond matures, the investor will receive one lump sum (face value) equal to the initial investment plus interest that has been accrued on the investment made.

CHAPTER 6 : PORTFOLIO MANAGEMENT

Chapter Overview



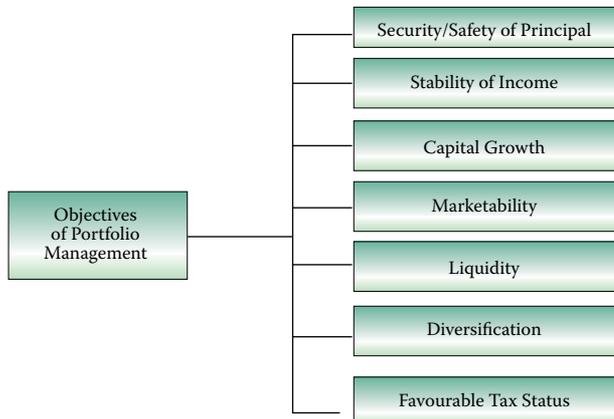
Introduction

Investment in the securities such as bonds, debentures and shares etc. is lucrative as well as exciting for the investors. Investment in a portfolio can reduce risk without diluting the returns. Every investment is characterized by return and risk. In general, risk refers to the possibility of the rate of return from a security or a portfolio of securities deviating from the corresponding expected/average rate and can be measured by the standard deviation/variance of the rate of return.

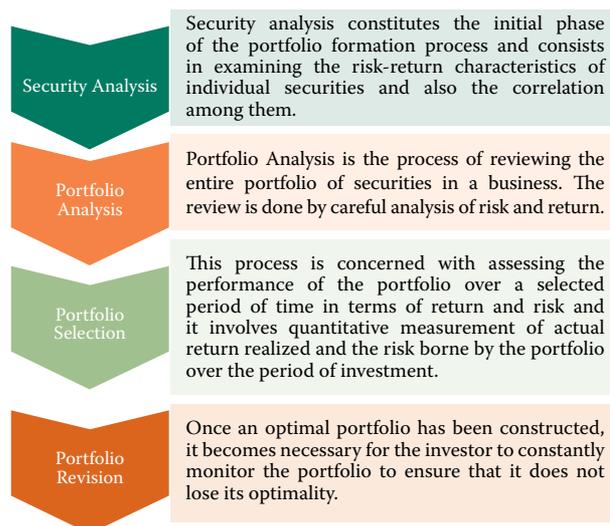
Activities in Portfolio Management

- Selection of securities.
- Construction of all Feasible Portfolios with the help of the selected securities.
- Deciding the weights/proportions of the different constituent securities in the portfolio so that it is an Optimal Portfolio for the concerned investor.

Objectives of Portfolio Management



Phases of Portfolio Management



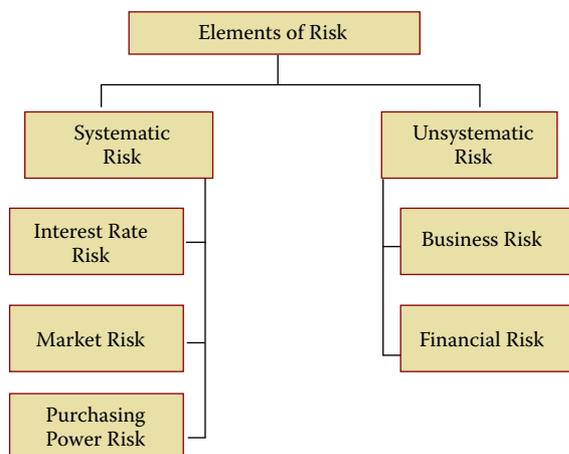
Portfolio Evaluation

Sharpe Ratio	Treynor Ratio	Jensen Alpha
- Measures the Risk Premium per unit of Total Risk for a security or a portfolio of securities.	- Measures the Risk Premium per unit of Systematic Risk (β) for a security or a portfolio of securities.	- This is the difference between a portfolio's actual return and those that could be expected in line with systematic risk of a security or portfolio using CAPM. Hence, purely a reward for bearing market risk.
Formula $\frac{R_i - R_f}{\sigma_i}$	Formula $\frac{R_i - R_f}{\beta_i}$	
Where R_i = Expected return on stock i R_f = Return on a risk less asset σ_i = Standard Deviation of the rates of return for the i Security or Portfolio	Where R_i = Expected return on stock i R_f = Return on a risk less asset β_i = Expected change in the rate of return on stock i associated with one unit change in the market return (Beta)	

Portfolio Theories

Traditional Approach	The traditional approach to portfolio management concerns itself with the investor, definition of portfolio objectives, investment strategy, diversification and selection of individual investment.
Modern Approach (Markowitz Model or Risk-Return Optimization)	The essence of his theory is that risk of an individual asset hardly matters to an investor. What really matters is the contribution it makes to the investor's overall risk.

Elements of Risk



Systematic Risk

The first group i.e. systematic risk comprises factors that are external to a company (macro in nature) and affect a large number of securities simultaneously. These are mostly uncontrollable in nature.

(i) **Interest Rate Risk:** This arises due to variability in the interest rates from time to time. A change in the interest rates establishes an inverse relationship in the price of security i.e. price of securities tends to move inversely with change in rate of interest.

(ii) **Purchasing Power Risk:** It is also known as inflation risk, as it also emanates from the very fact that inflation affects the purchasing power adversely. Purchasing power risk is more in inflationary conditions especially in respect of bonds and fixed income securities. It is not desirable to invest in such securities during inflationary periods.

(iii) **Market risk:** This is a type of systematic risk that affects prices of any particular share move up or down consistently for some time periods in line with other shares in the market.

Unsystematic Risk

The second group i.e. unsystematic risk includes those factors which are internal to companies (micro in nature) and affect only those particular companies. These are controllable to a great extent.

(i) **Business Risk:** Business risk emanates from sale and purchase of securities affected by business cycles, technological changes etc.

(ii) **Financial Risk:** It arises due to changes in the capital structure of the company. It is also known as leveraged risk and expressed in terms of debt-equity ratio.

Calculation of Expected Return

The expected return of the investment is the probability weighted average of all the possible returns. If the possible returns are denoted by X_i and the related probabilities are $p(X_i)$ the expected return may be represented as \bar{X} and can be calculated as:

$$\bar{X} = \sum_{i=1}^n x_i p(X_i)$$

It is the sum of the products of possible returns with their respective probabilities.

Measurement of Risk

Risk aspect should also be considered along with the expected return. The most popular measure of risk is the variance or standard deviation of the probability distribution of possible returns.

Variance of each security is generally denoted by σ^2 and is calculated by using the following formula:

$$\sum_{i=1}^n [(X_i - \bar{X})^2 p(X_i)]$$

Measurement of Systematic Risk

The systematic risk of a security is measured by a statistical measure which is called Beta (β). There are two statistical methods i.e. correlation method and the regression method, which can be used for the calculation of Beta.

Correlation Method: Using this method beta (β) can be calculated from the historical data of returns by the following formula:

$$\beta_i = \frac{r_{im} \sigma_i \sigma_m}{\sigma_m^2}$$

Where

r_{im} = Correlation coefficient between the returns of the stock i and the returns of the market index.

σ_i = Standard deviation of returns of stock i

σ_m = Standard deviation of returns of the market index.

σ_m^2 = Variance of the market returns

Regression Method: The regression model is based on the postulation that there exists a linear relationship between a dependent variable and an independent variable. The model helps to calculate the values of two constants, namely Alfa (α) and Beta (β). The formula of the regression equation is as follows:
 $Y = \alpha + \beta X$

where

Y = Dependent variable
 X = Independent variable
 α and β are constants.

$$\alpha = Y - \beta X$$

The formula used for the calculation of α and β are given below.

$$\beta = \frac{n \sum X_i \sum Y_i - \sum X_i \sum Y_i}{n \sum X_i^2 - (\sum X_i)^2}$$

where

n = Number of items.
 Y = Dependent variable scores.
 X = Independent variable scores.

Portfolio Analysis

Portfolio Return

The formula for the calculation of expected portfolio return may be expressed as shown below:

$$\bar{r}_p = \sum_{i=1}^n x_i \bar{r}_i$$

\bar{r}_p = Expected return of the portfolio.

x_i = Proportion of funds invested in security

\bar{r}_i = Expected return of security i.

n = Number of securities in the portfolio.

Portfolio Risk

Two important terms associated with the computation of Risk of Portfolio are as follows:

(i) **Covariance:** A statistical measure between two securities or two portfolios or a security and a portfolio indicates how the rates of return for the two concerned entities behave relative to each other.

The covariance between two securities A and B can be calculated using the following formula:

$$COV_{AB} = \frac{\sum [R_A - \bar{R}_A][R_B - \bar{R}_B]}{N}$$

At the beginning please add the summation sign in the numerator where

COV_{AB} = Covariance between x and y.

R_A = Return of security x.

R_B = Return of security y.

\bar{R}_A = Expected or mean return of security x.

\bar{R}_B = Expected or mean return of security y.

N = Number of observations.

(ii) **Coefficient of Correlation:** A statistical measure between two securities or two portfolios or a security and a portfolio indicate degree of relationship with each other.

The coefficient of correlation between two securities A and B can be calculated using the following formula:

$$r_{AB} = \frac{Cov_{AB}}{\sigma_A \sigma_B}$$

where

r_{AB} = Coefficient of correlation between x and y.

Cov_{AB} = Covariance between A and B.

σ_A = Standard deviation of A.

σ_B = Standard deviation of B.

From above formula the covariance can be expressed as the product of correlation between the securities and the standard deviation of each of the securities as shown below:

$$COV_{AB} = \sigma_A \sigma_B r_{AB}$$

The variance of a portfolio with only two securities in it can be calculated with the following formula.

$$\sigma_p^2 = x_1^2 \sigma_1^2 + x_2^2 \sigma_2^2 + 2x_1 x_2 (r_{12} \sigma_1 \sigma_2)$$

where

σ_p^2 = Portfolio variance.

x_1 = Proportion of funds invested in the first security.

x_2 = Proportion of funds invested in the second security ($x_1 + x_2 = 1$).

σ_1^2 = Variance of first security.

σ_2^2 = Variance of second security.

σ_1 = Standard deviation of first security.

σ_2 = Standard deviation of second security.

r_{12} = Correlation coefficient between the returns of the first and second securities.

Calculation of Return and Risk of Portfolio with more than two securities

The expected return of a portfolio is the weighted average of the returns of individual securities in the portfolio, the weights being the proportion of investment in each security. The formula for calculation of expected portfolio return is the same for a portfolio with two securities and for portfolios with more than two securities. The formula is:

$$\bar{r}_p = \sum_{i=1}^n x_i \bar{r}_i$$

Where

\bar{r}_p = Expected return of portfolio.

x_i = Proportion of funds invested in each security.

\bar{r}_i = Expected return of each security.

n = Number of securities in the portfolio.

Markowitz's Model of Risk Return Optimisation

The essence of the theory is that risk of an individual asset hardly matters to an investor. The investor is more concerned to the contribution it makes to his total risk. Markowitz has formalized the risk return relationship and developed the concept of efficient frontier. For selection of a portfolio, comparison between combinations of portfolios is essential. The investor has to select a portfolio from amongst all those represented by the efficient frontier. This will depend upon his risk-return preference. As different investors have different preferences with respect to expected return and risk, the optimal portfolio of securities will vary considerably among investors.

As a rule, a portfolio is not efficient if there is another portfolio with:

- ❖ A higher expected value of return and a lower standard deviation (risk).
- ❖ A higher expected value of return and the same standard deviation (risk).
- ❖ The same expected value but a lower standard deviation (risk).

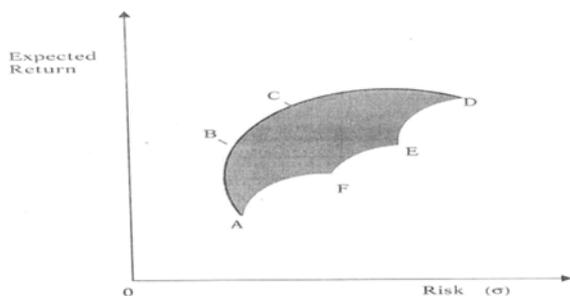


Fig. Markowitz Efficient Frontier

Capital Asset Pricing Model (CAPM)

CAPM model describes the linear relationship risk-return trade-off for securities/portfolios. The CAPM method also is solely concerned with non-diversifiable risk.

The non-diversifiable risks are assessed in terms of beta coefficient, β , through fitting regression equation between return of a security/portfolio and the return on a market portfolio.

$$R_j = R_f + \beta (R_m - R_f)$$

Where,

R_f = Risk free rate

R_m = Market Rate

β = Beta of Portfolio

Arbitrage Pricing Theory Model (APT)

Unlike the CAPM which is a single factor model, the APT is a multi-factor model having a whole set of Beta Values – one for each factor. Arbitrage Pricing Theory states that the expected return on an investment is dependent upon how that investment reacts to a set of individual macro-economic factors (degree of reaction measured by the Betas) and the risk premium associated with each of those macro – economic factors.

According to CAPM, $E(R_i) = R_f + \lambda\beta_i$

Where, λ is the average risk premium [$E(R_m) - R_f$]

In APT, $E(R_i) = R_f + \lambda_1\beta_{i1} + \lambda_2\beta_{i2} + \lambda_3\beta_{i3} + \lambda_4\beta_{i4}$

Where, $\lambda_1, \lambda_2, \lambda_3, \lambda_4$ are average risk premium for each of the four factors in the model and $\beta_{i1}, \beta_{i2}, \beta_{i3}, \beta_{i4}$ are measures of sensitivity of the particular security i to each of the four factors.

Sharpe Index Model

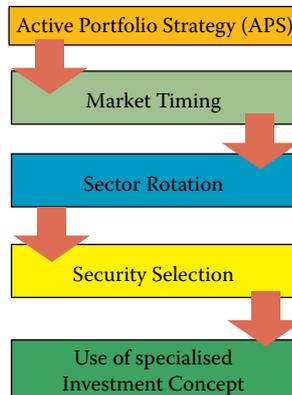
William Sharpe has developed a simplified variant of Markowitz model that reduces substantially its data and computational requirements.

Types of Sharpe Index Model

Single Index Model - This model assumes that co-movement between stocks is due to change or movement in the market index.

Sharpe's Optimal Portfolio - This model is based on desirability of an investor for excess return of risk free rate of return to beta.

Formulation of Portfolio Strategy



Passive Portfolio Strategy

Passive strategy, on the other hand, rests on the tenet that the capital market is fairly efficient with respect to the available information. Hence they search for superior return. Basically, passive strategy involves adhering to two guidelines. They are:

Guidelines - passive portfolio strategy

Create a well diversified portfolio at a predetermined level of risk.

Guidelines - passive portfolio strategy

Hold the portfolio relatively unchanged over time unless it became adequately diversified or inconsistent with the investor risk return preference.

Portfolio Rebalancing

It means the value of portfolio as well as its composition. The relative proportion of bond and stocks may change as stock and bonds fluctuate in response to such changes. Therefore, Portfolio rebalancing is necessary.

Buy and Hold Policy - Sometime this policy is also called 'do nothing policy' as under this strategy no balancing is required and therefore investor maintains an exposure to stocks and therefore linearly related to the value of stock in general.

Constant Mix Policy - This strategy involves periodic rebalancing to required (desired) proportion by purchasing and selling stocks as and when their prices goes down and up respectively.

Constant Proportion Insurance Policy - Under this strategy investor sets a floor below which he does not wish his asset to fall called floor, which is invested in some non-fluctuating assets such as Treasury Bills, Bonds etc.

Asset Allocation Strategies

Many portfolios containing equities also contain other asset categories, so the management factors are not limited to equities. There are four asset allocation strategies:

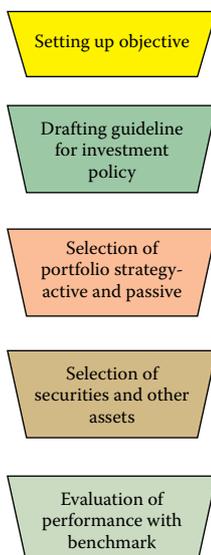
Integrated Asset Allocation	Under this strategy, capital market conditions and investor objectives and constraints are examined and the allocation that best serves the investor's needs while incorporating the capital market forecast is determined.
Strategic Asset Allocation	Under this strategy, optimal portfolio mixes based on returns, risk, and covariances is generated using historical information and adjusted periodically to restore target allocation within the context of the investor's objectives and constraints.
Tactical Asset Allocation	Under this strategy, investor's risk tolerance is assumed constant and the asset allocation is changed based on expectations about capital market conditions.
Insured Asset Allocation	Under this strategy, risk exposure for changing portfolio values (wealth) is adjusted; more value means more ability to take risk.

Fixed Income Portfolio

Fixed Income Portfolio is same as equity portfolio with difference that it consists of fixed income securities such as bonds, debentures, money market instruments etc. Since it mainly consists of bonds, it is also called Bond Portfolio.

Fixed Income Portfolio Process

Just like other portfolios, following five steps are involved in fixed income portfolio.



Alternative Investment Strategies in context of Portfolio Management

Plainly speaking, Alternative Investments (AIs) are Investments other than traditional investments (stock, bond and cash). Some of the alternative investment strategies are briefly discussed as follows:

Real Estates

As opposed to financial claims in the form of paper or a dematerialized mode, real estate is a tangible form of assets which can be seen or touched. Real Assets consists of land, buildings, offices, warehouses, shops etc.

Valuation of Real Estates

Generally, following four approaches are used in valuation of Real estates:

Sales Comparison Approach – It is like Price Earning Multiplier as in case of equity shares. Benchmark value of similar type of property can be used to value Real Estate.

Income Approach – This approach like value of Perpetual Debenture or unredeemable Preference Shares. In this approach the perpetual cash flow of potential net income (after deducting expense) is discounted at market required rate of return.

Cost Approach – In this approach, the cost is estimated to replace the building in its present form plus estimated value of land. However, adjustment of other factors such as good location, neighbourhood is also made in it.

Discounted After Tax Cash Flow Approach – In comparison to NPV technique, PV of expected inflows at required rate of return is reduced by amount of investment.

Private Equity

Following 3 types of private equity investment has been discussed here:

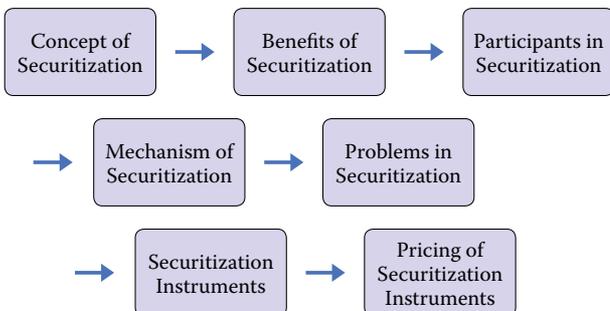
Mezzanine Finance - It is a blend or hybrid of long term debt and equity share.

In start up companies with growth potential, wealthy investors like to invest their capital with a long-term growth perspective. This capital is known as **venture capital**.

Distressed securities - It is a kind of purchasing the securities of companies that are in or near bankruptcy. Profit can be earned from distressed securities by taking long position in debt and short position in equity. This is how investors can earn arbitrage profit.

CHAPTER 6 – SECURITIZATION

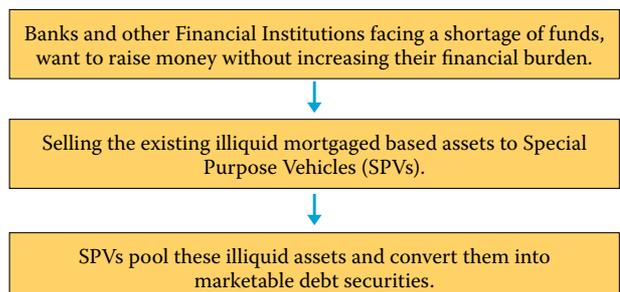
Chapter Overview



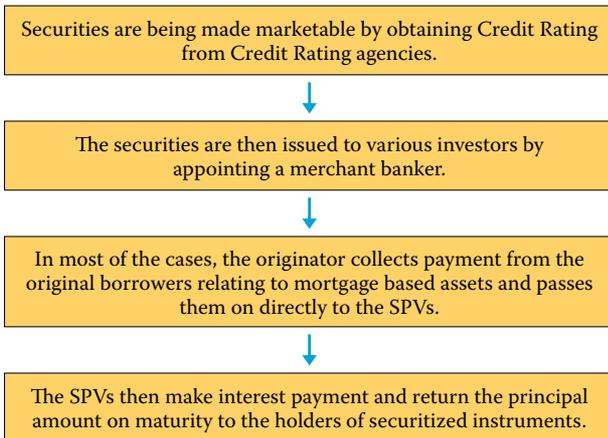
Concept of Securitization

It is the process of repackaging or rebundling of illiquid assets into marketable securities. These assets can be automobile loans, credit card receivables, residential mortgages or any other form of future receivables.

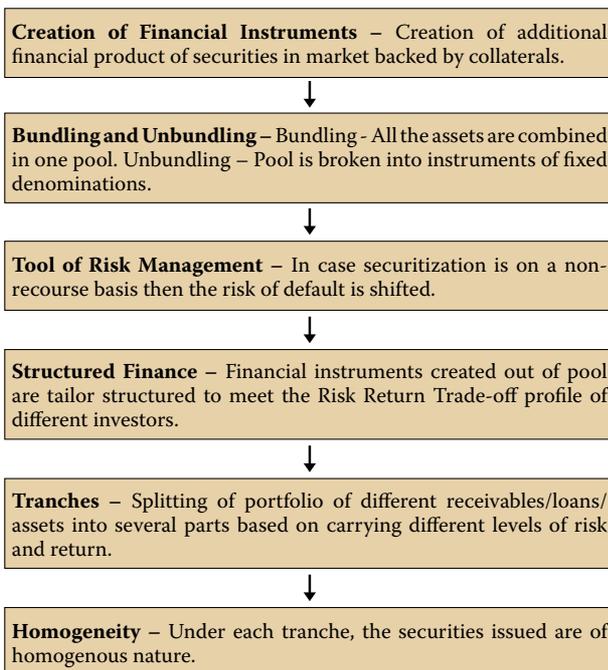
Flow Chart – Process of Securitization



STRATEGIC FINANCIAL MANAGEMENT ||

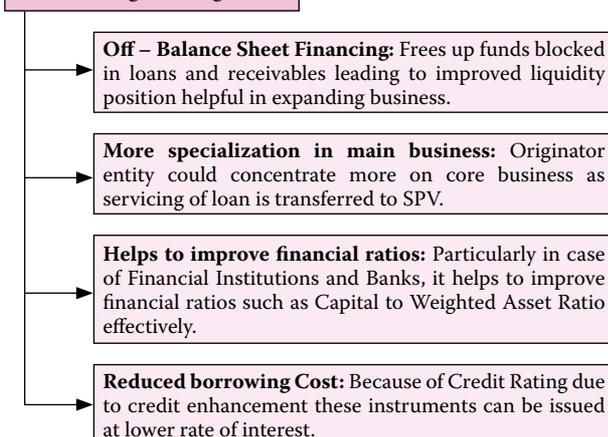


Features of Securitization

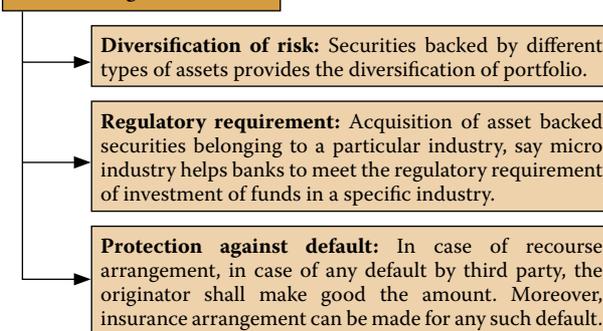


Benefits of Securitization

From the angle of originator

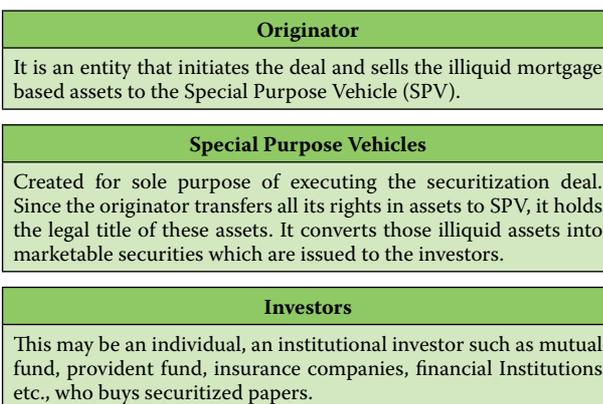


From the angle of investor

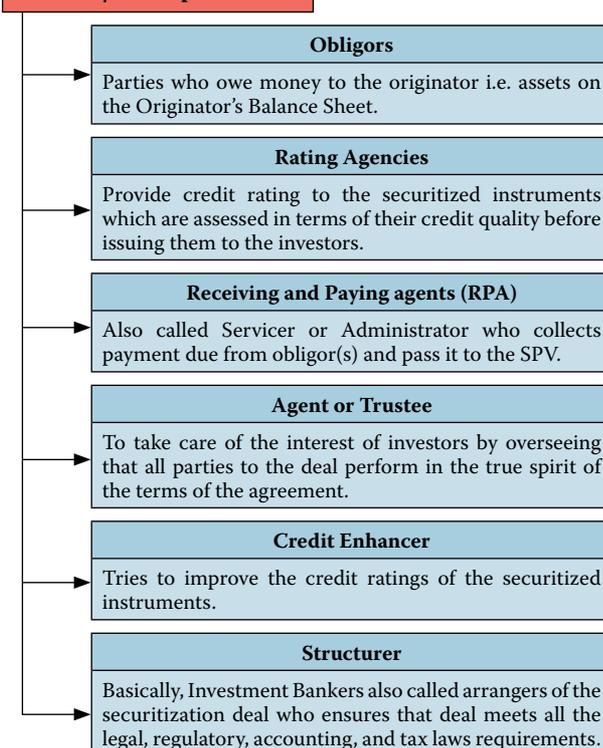


Participants in Securitization

Primary Participants



Secondary Participants



Mechanism of Securitization

Creation of Pool of Assets

Creation of pool of assets by segregation of assets backed by similar type of mortgages in terms of interest rate, risk, maturity and concentration units.

Transfer to SPV

Pooled assets are transferred to Special Purpose Vehicle (SPV) especially created for this purpose.

Sale of Securitized Papers

Designing of certificates out of the pool of assets to be issued to investors based on the nature of interest, risk, tenure, etc.

Administration of assets

Originator works as a conduit which collects the principal and the interest from underlying assets and transfers it to the SPV.

Recourse to Originator

Depending on the terms of agreement in case of default, instruments go back to originator from SPV.

Repayment of funds

SPV will repay the funds in the form of interest and principal that arises from the assets pooled.

Credit Rating to Instruments

Before the sale of securitized instruments, credit rating can be done to assess the risk of the issuer.

Problems in Securitization

Stamp Duty

- Under the Transfer of Property Act, 1882, a mortgage debt stamp duty that goes up to 12% in some states of India has impeded the growth of securitization in India.

Taxation

- In the absence of any specific provision in the Income Tax Act, there is a difference of opinion among experts.

Accounting

- Though Securitization is an off-balance sheet instrument but problem arises especially when assets are transferred without recourse.

Lack of standardization

- Every originator follows its own format for documentation and this leads to lack of standardization.

Inadequate Debt Market

- The lack of existence of a well-developed debt market in India.

Ineffective foreclosure laws

- Foreclosure laws are not supportive to the lending institutions and this makes securitized instruments especially mortgaged-backed securities less attractive as the lenders face difficulty in the transfer of property in the event of default by the borrower.

Securitized Instruments

The securitized instruments can be divided into following three categories:

Pass Through Certificates (PTCs) - Regular payment of interest and return of principal amount that originators (banks, financial institutions, etc.) receive on the original loan repayments—are passed to them.

Pay through Security (PTS) - Interest is not passed onto the holders of securitized instruments. Instead, new securities are issued to them.

Stripped Securities - Created by dividing the cash flows associated with underlying securities into two new securities i.e. Interest Only (IO) Securities and Principle Only (PO) Securities.

Pricing of Securitized Instruments

From Originator's Angle

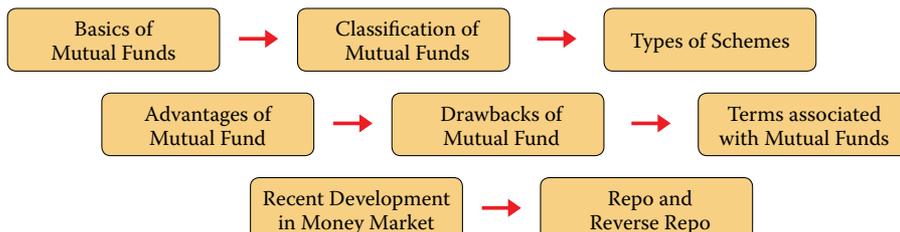
- Can be priced at a rate at which the originator has incurred an outflow by giving loans to the original borrowers and if that outflow can be amortized over a period of time by investing the amount raised through securitization.

From Investor's Angle

- Can be determined by discounting expected future cash flows using yield to maturity of a comparable security with respect to credit quality and average life of the securities.

CHAPTER 7 – MUTUAL FUNDS

Chapter Overview



STRATEGIC FINANCIAL MANAGEMENT

Concept of Mutual Fund

A trust that pools together the resources of the investors by making investments in the capital market thereby, making the investor to be a part owner of the assets of the mutual fund.

The concept of Mutual Fund as a process in the form of a flow chart is as follows:

Starts with a sponsor which establishes the mutual fund. For example, Axis Bank forms a mutual fund by the name of Axis Mutual Fund.



The sponsor then appoints a trustee which acts as an independent person and sees that the entire mutual fund process is followed transparently.



Then the sponsor appoints an Asset Management Company (AMC) which manages the mutual fund. For example: Axis Asset Management Company Ltd.



AMC collects money from various investors, pool it and invests it in various profitable investment opportunities such as debt, equity, a balance of debt and equity etc.



The returns generated from the various mutual fund schemes in the form of dividend/capital appreciation are then distributed among the investors by the Asset Management Companies.

Classification of Mutual Funds

1. Functional Classification

Open ended funds

- In an Open-Ended scheme, the investor can make entry and exit at any time. Hence, the capital of the fund is unlimited, and the redemption period is indefinite.

Close-Ended funds

- On the contrary, in a Close-Ended scheme, the investor can buy into the scheme during Initial Public Offering or from the stock market after the units have been listed. The scheme has a limited life at the end of which the corpus is liquidated. The investor can make his exit from the scheme by selling in the stock market before the expiry of the scheme or during repurchase period at his option.

2. Portfolio Classification

2.1 Equity Funds

Equity Funds are of the following types viz.

Growth Funds: Seek to provide long term capital appreciation to the investors and are best suited to long term investors.

Aggressive Funds: Look for super normal returns for which investment is made in start-ups, IPOs and speculative shares. They are best suited to investors who are willing to take risks.

Income Funds: Seek to maximise present income of investors by investing in safe stocks, paying high cash dividends and in high yield money market instruments. They are suited to investors seeking current income.

2.2 Debt Fund

Debt Funds are of two types viz.

Bond Funds

- Mainly invest in fixed income securities e.g. Government Bonds, Corporate Debentures, Convertible Debentures and Money Market instruments. Investors seeking tax free income or steady income may opt for such funds.

Gilt Funds

- Mainly invest in Government securities hence earns a secure income for investor in funds.

2.3 Special Funds

Index Funds

- Are passive funds that invest in those securities that are there in the underlying index such as NSE and BSE.

International Funds

- A mutual fund located in India to raise money in India for investing globally.

Offshore Funds

- A mutual fund located in India to raise money globally for investing in India.

Sector Funds

- Invest their entire fund in a particular industry e.g. utility fund for utility industry like power, gas, public works.

Money Market Funds

- Predominantly debt-oriented schemes to achieve main objectives of preservation of capital, easy liquidity and moderate income. Invest majorly in safer short-term instruments like Commercial Papers, Certificate of Deposits, Treasury Bills, G-Secs, etc.

Fund of Funds

- As the name suggests are schemes which invest in other mutual fund schemes.

Capital Protection Oriented Funds

- Since these schemes aim to protect the capital of the investors, a substantial portion of the investment is made in debt.

Gold Funds

- Generally in the form of an Exchange Traded Fund (ETF) which offers investors an opportunity to participate in the bullion market without having to take physical delivery of gold.

Quant Funds

- Works on a data-driven approach for stock selection and investment decisions based on a pre-determined rules or parameters using statistics or mathematics-based models.

3. Ownership Classification

Funds are classified into Public Sector Mutual Funds, Private Sector Mutual Funds and Foreign Mutual Funds. Public Sector Mutual Funds are sponsored by a company of the public sector. Private Sector Mutual Fund is sponsored by a company of the private sector. Foreign Mutual Funds are sponsored by companies for raising funds in India, operate from India and invest in India.

Direct Plan in Mutual Funds

- The investors can directly approach a Mutual Fund House without going to the distributor.
- Another aspect of the Direct Plan is that Asset Management Companies or Mutual Fund Houses do not charge distributor expenses, trail fees, and transaction charges.
- NAV of the direct plan is generally higher in comparison to a regular plan.

Types of Schemes of Mutual Funds

1. Balanced funds - Make strategic allocation to both debt as well as equities. It mainly works on the premise that while the debt portfolio of the scheme provides stability, the equity provides growth.

2. An Equity Diversified fund - A fund that contains a wide array of stocks. The fund manager ensures high level of diversification in its holdings, thereby reducing the amount of risk in the fund.

3. Equity Linked Saving Scheme (ELSS) - ELSS has the potential to give better returns than any traditional tax savings instrument.

4. Sector funds - Highly focused on a particular industry. Since sector funds ride on market cycles, they have the potential to offer good returns if the timing is perfect.

5. A thematic fund - Focusses on trends that are likely to result in the 'out-performance' by certain sectors or companies. The theme could vary from multi-sector, international exposure, commodity exposure, etc. Unlike a sector fund, these funds have a broader outlook.

6. A Hedge Fund - A lightly regulated investment fund and being a sort of a private investment vehicle being offered to selected clients.

7. Arbitrage funds - Seeks to capitalise on the price differentials between Spot and Future Markets.

8. Cash Fund - An open ended liquid scheme that aims to generate returns with lower volatility and higher liquidity through a portfolio of debt and money market instrument.

9. Exchange Traded Funds (ETFs) - Are hybrid products that combine the features of listed stocks and index funds. These funds are listed on the stock exchanges and their prices are linked to the underlying index. ETFs can be bought and sold like any other stock on an exchange.

10. Fixed Maturity Plans (FMPs) - Close Ended Funds usually invest funds in Certificates of Deposits (CDs), Commercial Papers (CPs), Money Market Instruments and Non-Convertible Debentures over fixed investment period. Sometimes, they also invest in Bank Fixed Deposits.

Types of Equity Diversified Funds

Flexicap Fund

In flexicap funds, atleast 65% of the funds must be invested in equity. However, there is complete flexibility as to how much investments has to be made in large, mid or small cap.

Multicap Fund

In multicap funds, investment to be made in large cap, mid-cap and small cap is 25% each.

Contra Fund

A contra fund invests in those companies that are presently out of favour and has value but has the potential to grow in future. Investors who invest in contra funds have an aggressive risk appetite.

Index Fund

An index fund invests and track the performance of a benchmark market index like the BSE Sensex or S&P. CNX Nifty aims to receive return as earned by the market index.

Dividend Yield fund

A dividend yield fund invests in shares of companies having high dividend yields. Dividend yield is defined as dividend per share divided by the share's market price.

Types of Exchange Traded Funds

Index ETFs

- That holds securities and attempt to replicate the performance of a stock market index.

Commodity ETFs

- That invests in commodities, such as precious metals and futures.

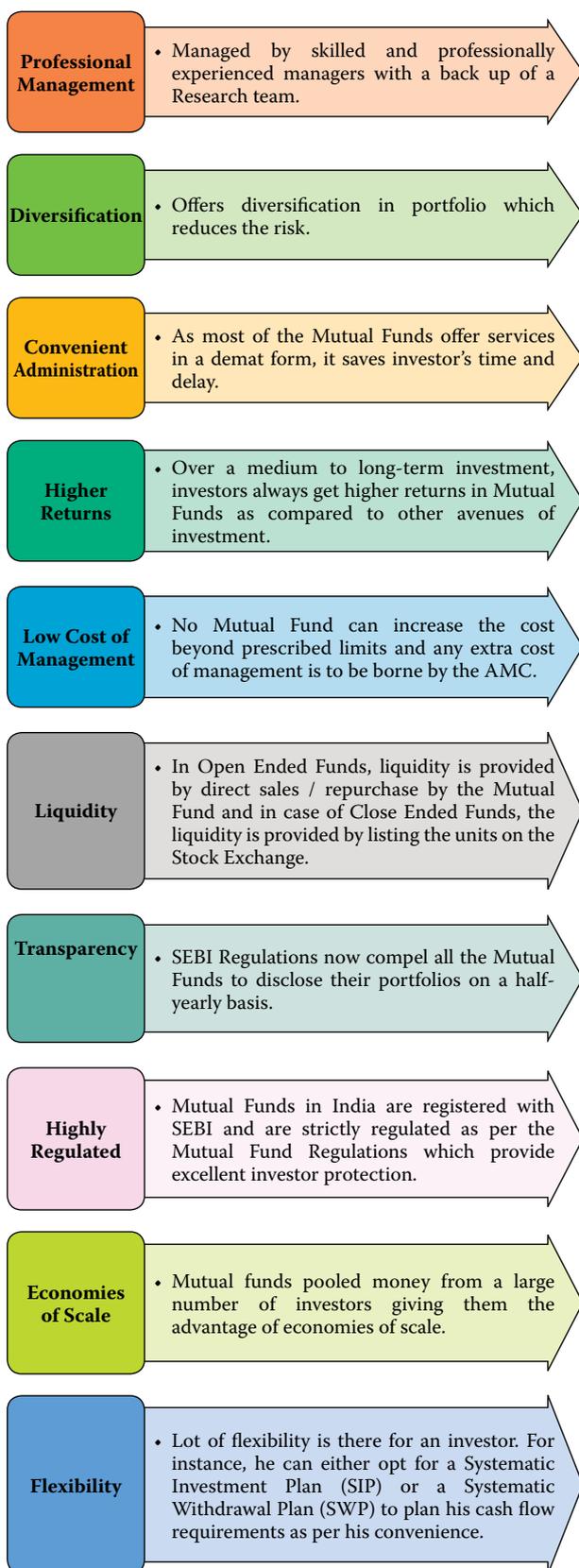
Bond ETFs

- That invests in bonds are known as bond ETFs.

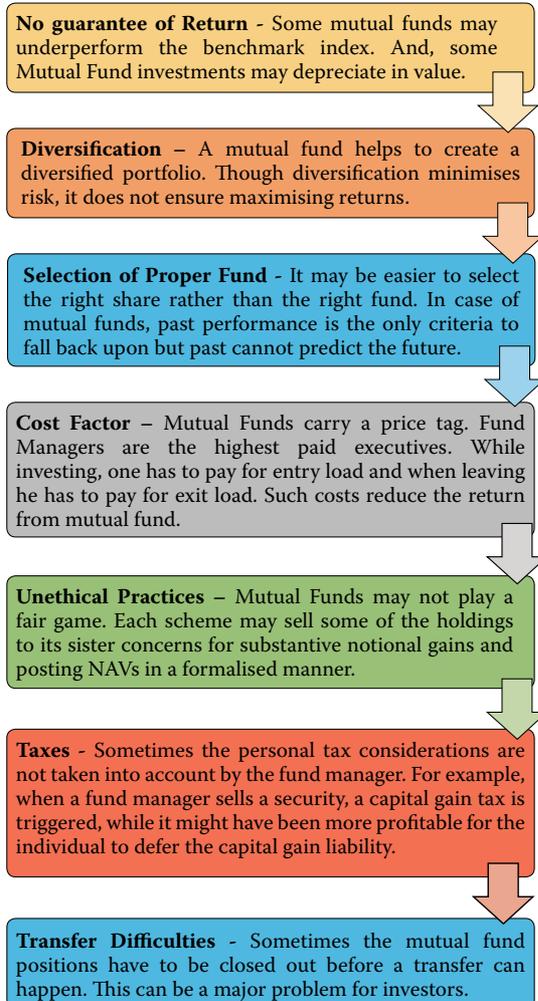
Currency ETFs

- That provides investor access to the Foreign exchange spot change, local institutional interest rates and a collateral yield.

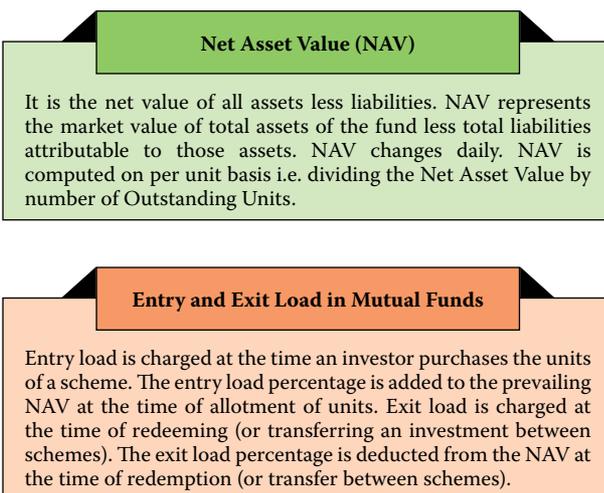
Advantages of Mutual Funds



Drawbacks of Mutual Funds



Terms associated with Mutual Funds



Trail Commission

It is the amount that a mutual fund investor pays to his advisor each year. The purpose of charging this commission from the investor is to provide incentive to the advisor to review their customer's holdings and to give advice from time to time.

Expense Ratio

It is the percentage of the assets that were spent to run a mutual fund. It includes things like management and advisory fees, travel costs and consultancy fees. The expense ratio does not include brokerage costs for trading the portfolio. It is also referred to as the Management Expense Ratio (MER)

Side Pocketing

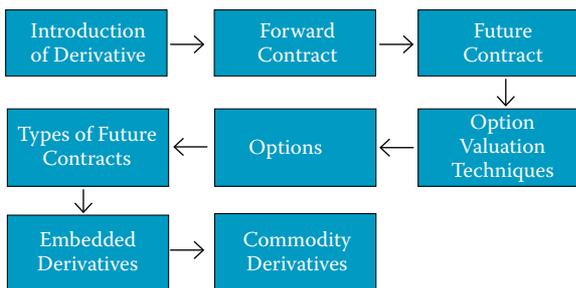
In simple words, a Side Pocketing in Mutual Funds leads to separation of risky assets from other investments and cash holdings. The purpose is to make sure that money invested in a mutual fund, which is linked to stressed assets, gets locked, until the fund recovers the money from the company or could avoid distress selling of illiquid securities.

Tracking Error

Tracking error can be defined as the divergence or deviation of a fund's return from the benchmarks return it is following. The tracking error can be calculated on the basis of corresponding benchmark return vis a vis quarterly or monthly average NAVs.

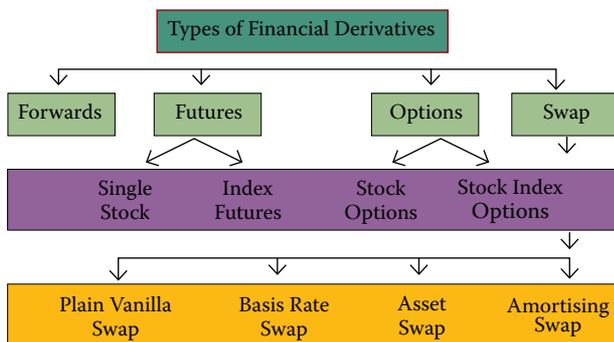
CHAPTER 9 : DERIVATIVES

Chapter Overview



What is a Derivative ?

It is a product whose value is to be derived from the value of one or more basic variables called bases (underlying assets, index or reference). The underlying assets can be equity, forex and commodity.



Forward Contract

A forward contract is an agreement between a buyer and a seller obligating the seller to deliver a specified asset of specified quality and quantity to the buyer on a specified date at a specified place and the buyer, in turn, is obligated to pay to the seller a pre-negotiated price in exchange of the delivery.

In a forward contract, the contracting parties negotiate on, not only the price at which the commodity is to be delivered on a future date but also on what quality and quantity to be delivered and at what place. No part of the contract is standardized and the two parties sit across and work out each and every detail of the contract before signing it.

Futures Contract

A Future Contract is like Forward Contract with following distinguishing features:

- ❖ In contrast to tailor-made Forward Contract, Future Contracts are standardized in nature.
- ❖ While Forward Contracts are OTC contracts, Future Contracts are traded on organized exchanges.
- ❖ Generally, settlement in Forward Contract takes place through actual delivery and almost 99% Future Contracts are settled through Cash Settlement.

- ❖ Future contracts are subject to Marking to Market i.e. adjustment of profit or loss on the position taken on daily basis. Forward contracts are not subject to such settlement on a daily basis.
- ❖ While there is a Margin requirement in Future Contract, no such margin is required in Forward Contract.
- ❖ Forward Contracts are subject to counter party risk. Since the parties in Future Contract are connected through Exchange Mechanism there is no counter party risk.

Options Contract

An Option may be understood as a privilege, sold by one party to another, that gives the buyer the right, but not the obligation, to buy (call) or sell (put) any underlying say stock, foreign exchange, commodity, index, interest rate etc. at an agreed-upon price within a certain period or on a specific date regardless of changes in underlying's market price during that period on the maturity date.

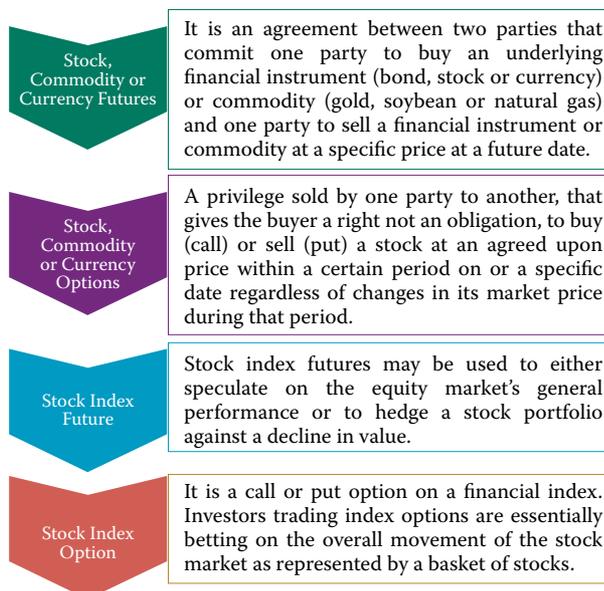
The various kinds of stock options include Put and Call options, which may be purchased in anticipation of changes in stock prices, as a means of speculation or hedging.

A Call Option gives its holder a right or choice (not an obligation) to buy an underlying from another party at a pre-determined price (Strike Price) irrespective of the market price in exchange of some consideration (Premium) after expiry or before expiry of a period (maturity date).

A Put Option gives its holder a right or choice (not an obligation) to sell an underlying to another party at a pre-determined price (Strike Price) irrespective of the market price in exchange of some consideration (Premium) after expiry or before expiry of a period (maturity date).

Futures and Options Contracts

The various types of Futures and Options contracts are discussed in the following paragraphs:



Pricing/Valuation of Forward/Future Contracts

The difference between the prevailing spot price of an asset and the futures price is known as the basis, i.e.

$$\text{Basis} = \text{Spot price} - \text{Futures price}$$

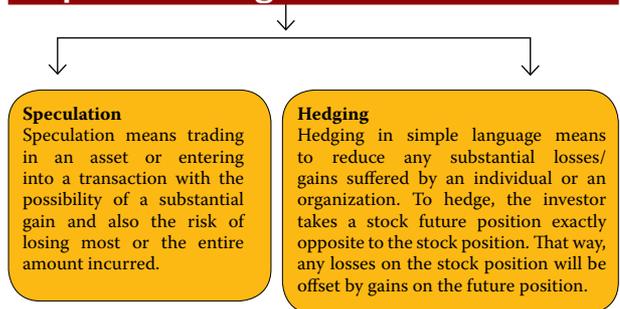
In a normal market, the spot price is less than the futures price (which includes the full cost-of-carry) and accordingly the basis would be negative. Such a market, in which the basis is decided solely by the cost-of-carry is known as a Contango market.

Basis can become positive, i.e., the spot price can exceed the futures price only if there are factors other than the cost-of-carry to influence the futures price. In case this happens, then basis becomes positive and the market under such circumstances is termed as a Backwardation Market or Inverted Market.

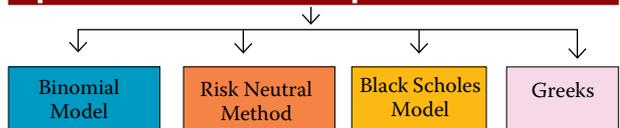
Basis will approach zero towards the expiry of the contract, i.e., the spot and futures prices converge as the date of expiry of the contract approaches. The process of the basis approaching zero is called Convergence.

$$\text{Future price} = \text{Spot price} + \text{Carrying cost} - \text{Returns (dividends, etc.)}$$

Purpose of Trading in Futures



Option Valuation Techniques



Binomial Model

This model is based on the concept of 'Replicating Portfolio' and the assumption that end of a given period there are two possible outcomes for a common stock, one is higher and other is lower. This Replicating Portfolio involves using a combination of borrowing at risk free rate and buying the underlying stock in such manner there will be same cash flow in either of price change after a period. To create this Replicating Portfolio, Delta Hedge Ratio (Δ) is computed. The value of option is computed on the assumption that a part stock buying in Delta Hedge Ratio shall be financed by borrowing at Risk-Free Rate and receipt of Option Premium which shall be equal to position of portfolio after the period specified.

Risk Neutral Method

Using the Binomial Model this is an alternative approach to value an option which is based on the assumption that investors are risk-neutral. As per this approach first the probability of price

rise and fall is calculated and then option value is computed by computing the Present Value of expected future value.

Black Scholes Model

The Black-Scholes model is used to calculate a theoretical price of an Option. While Binomial Model is based on the assumption that there are possible values at the end of a period, this model is based on assumption that if this period is further shortened we shall get more frequent changes in the share price and there shall be wider range of price changes eventually on continuous basis.

This model is based on following assumptions:

1. European Options are considered,
2. No transaction costs,
3. Short term interest rates are known and are constant,
4. Stocks do not pay dividend,
5. Stock price movement is similar to a random walk,
6. Stock returns are normally distributed over a period of time, and
7. The variance of the return is constant over the life of an Option.

This model is based on the concept of Replicating Portfolio as per which the amount an option writer would require as compensation for writing a call and completely hedging the risk of buying stock. Accordingly, as per this model the value of option is function of five variables:

1. Current Stock Price (S)
2. Future Exercise or Strike Price (X)
3. Continuously compounded risk-free rate of interest (r)
4. Time to Expiry i.e. time remaining until expiration, expressed as a percentage of a year (t)
5. Price volatility of the related stock i.e. Standard Deviation of the Short-Term return over one year (v)

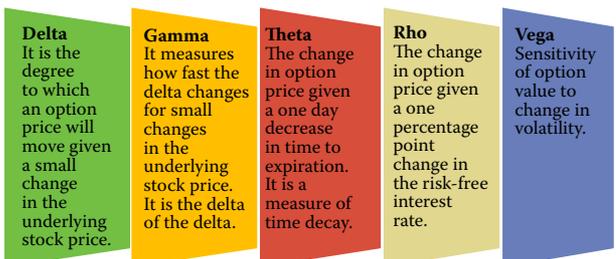
The formula for calculating the theoretical option price (OP) is as follows:

$$= SN(d_1) - Xe^{-rt} N(d_2)$$

$$\text{Where } d_1 = \frac{\ln\left(\frac{S}{N}\right) + \left(r + \frac{v^2}{2}\right)t}{v\sqrt{t}} \quad \text{and} \quad d_2 = d_1 - v\sqrt{t}$$

Greeks and its Types

The Greeks are a collection of statistical values (expressed as percentages) that give the investor a better overall view of how a stock has been performing. In other words it measures the sensitivity of option value or price consequent upon change in the factor on which its value depends.



STRATEGIC FINANCIAL MANAGEMENT ||

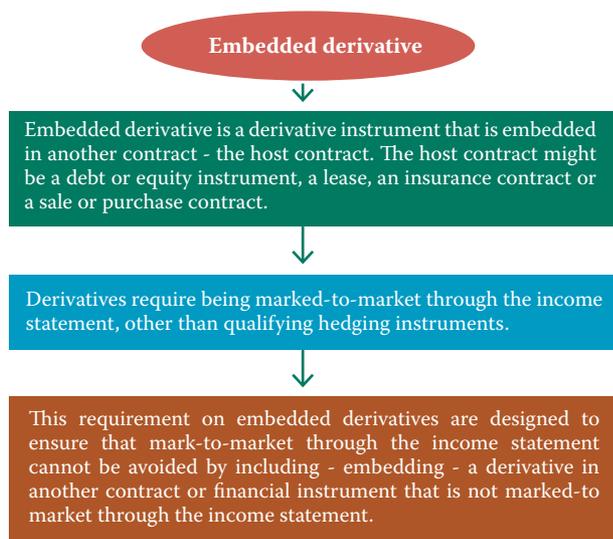
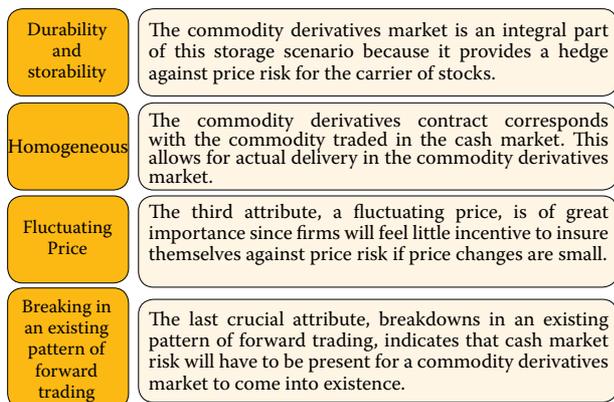
Commodity Derivatives

Trading in commodity derivatives first started to protect farmers from the risk of the value of their crop going below the cost price of their produce. Derivative contracts were offered on various agricultural products like cotton, rice, coffee, wheat, pepper etc.

The first organized exchange, the Chicago Board of Trade (CBOT) -- with standardized contracts on various commodities -- was established in 1848. In 1874, the Chicago Produce Exchange - which is now known as Chicago Mercantile Exchange (CME) was formed. CBOT and CME are two of the largest commodity derivatives exchanges in the world.

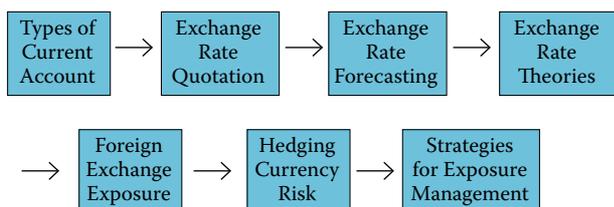
Conditions (Attributes) to Introduce Commodity Derivatives

The following attributes are considered crucial for qualifying for the derivatives trade.



CHAPTER 10: FOREIGN EXCHANGE EXPOSURE AND RISK MANAGEMENT

Chapter Overview



Types of Account maintained by Banks

Nostro Account is the bank's foreign currency account maintained by the bank in a foreign country and in the home currency of that country or "our account with you".

Vostro Account is the local currency account maintained by a foreign bank/branch or "your account with us".

Loro Accounts is an account wherein a bank remits funds in foreign currency to another bank for credit to an account of a third bank.

Exchange Rate Quotation

American Term Quotes in *American* terms are the rates quoted in amounts of U.S. dollar per unit of foreign currency.

European term While rates quoted in amounts of foreign currency per U.S. dollar are known as quotes in European terms.

Direct Quote A direct quote is the home currency price of one unit foreign currency. For example, the quote \$1 = ₹48.00 is a direct-quote for an Indian.

Indirect quote is the foreign currency price of one unit of the home currency. The quote Re.1 = \$0.0208 is an indirect quote for an Indian. (\$1/₹ 48.00 = \$0.0208 approximately)

Bid is the price at which the dealer is willing to buy another currency.

Offer is the rate at which he is willing to sell another currency.

Spread The difference between the bid and the offer is called the spread.

Exchange Rate Forecasting

Corporates need to do the exchange rate forecasting for taking decisions regarding hedging, short-term financing, short-term investment, capital budgeting, earnings assessments and long-term financing.

Techniques of Exchange rate forecasting

- Technical Forecasting**
 It involves the use of historical data to predict future values. For example time series models.
- Mixed Forecasting**
 It refers to the use of a combination of forecasting techniques. The actual forecast is a weighted average of the various forecasts developed.
- Market Based Forecasting**
 It uses market indicators to develop forecasts. The current spot/forward rates are often used, since speculators will ensure that the current rates reflect the market expectation of the future exchange rate.
- Fundamental Forecasting**
 It is based on the fundamental relationships between economic variables and exchange rates. For example subjective assessments, quantitative measurements based on regression models and sensitivity analyses.

Interest Rate Parity (IRP)

This theory which states that “the size of the forward premium (or discount) should be equal to the interest rate differential between the two countries of concern”. When interest rate parity exists, covered interest arbitrage (means foreign exchange risk is covered) is not feasible, because any interest rate advantage in the foreign country will be offset by the discount on the forward rate.

As per Interest Rate Parity the forward rate can be found as follows:

$$F = \frac{S(1+r_D)}{(1+r_F)}$$

Where,

F = Expected forward rate

S = Spot Rate

r_D = Interest Rate of Domestic Country

r_F = Interest Rate of Foreign Country

Purchasing Power Parity (PPP)

This theory focuses on the ‘inflation-exchange rate’ relationship.

There are two forms of PPP theory:

- Absolute Form**- Also called the ‘Law of One Price’ suggests that “prices of similar products of two different countries should be equal when measured in a common currency”. If a discrepancy in prices as measured by a common currency exists, the demand should shift so that these prices should converge.
- Relative Form** – An alternative version that accounts for the possibility of market imperfections such as transportation costs, tariffs, and quotas. It suggests that ‘because of these market imperfections, prices of similar products of different countries will not necessarily be the same when measured in a common currency.’

As per Purchasing Power Parity the forward rate can be found as follows:

$$F = \frac{S(1+i_D)}{(1+i_F)}$$

Where,

F = Expected forward rate

S = Spot Rate

i_D = Anticipated Inflation Rate of Domestic Country

i_F = Anticipated Inflation Rate of Foreign Country

International Fisher Effect (IFE)

According to this theory, ‘nominal risk-free interest rates contain a real rate of return and anticipated inflation’. This means if investors of all countries require the same real return, interest rate differentials between countries may be the result of differential in expected inflation.

Accordingly, the Nominal Risk- Free Rate of Interest can be computed as follows:

$$(1 + \text{Nominal Rate}) = (1 + \text{Real Rate}) (1 + \text{Anticipated Inflation Rate})$$

Exchange Rate Theories

There are three theories of exchange rate determination- Interest rate parity, Purchasing power parity and International Fisher effect.

Interest Rate Parity

Interest rate parity is a theory which states that ‘the size of the forward premium (or discount) should be equal to the interest rate differential between the two countries of concern.

Purchasing Power Parity (PPP) - There are two forms of PPP:

- The ABSOLUTE FORM**, also called the ‘Law of One Price’ suggests that “prices of similar products of two different countries should be equal when measured in a common currency”.
- The RELATIVE FORM** of the Purchasing Power Parity tries to overcome the problems of market imperfections and consumption patterns between different countries.

International Fisher Effect (IFE)

According to IFE, if investors of all countries require the same real return, interest rate differentials between countries may be the result of differential in expected inflation.

STRATEGIC FINANCIAL MANAGEMENT

Comparison of PPP, IRP and IFE Theories

Theory	Key	Variables	Summary
Interest Rate Parity (IRP)	Forward rate premium (or discount)	Interest rate differential	The forward rate of one currency will contain a premium (or discount) that is determined by the differential in interest rates between the two countries.
Purchasing Power Parity (PPP)	Percentage change in spot exchange rate	Inflation rate differential	The spot rate of one currency with respect to another will change in reaction to the differential in inflation rates between two countries.
International Fisher Effect (IFE)	Percentage change in spot exchange rate	Interest rate differential	The spot rate of one currency with respect to another will change in accordance with the differential in interest rates between the two countries.

Foreign Exchange Exposure

The foreign exchange exposure may be classified under three broad categories:

Transaction Exposure

It measures the effect of an exchange rate change on outstanding obligations that existed before exchange rates changed but were settled after the exchange rate changes. Thus, it deals with cash flows that result from existing contractual obligations.

Translation Exposure

Translation exposure occurs because of the need to "translate" foreign currency financial statements of foreign subsidiaries into a single reporting currency to prepare worldwide consolidated financial statements.

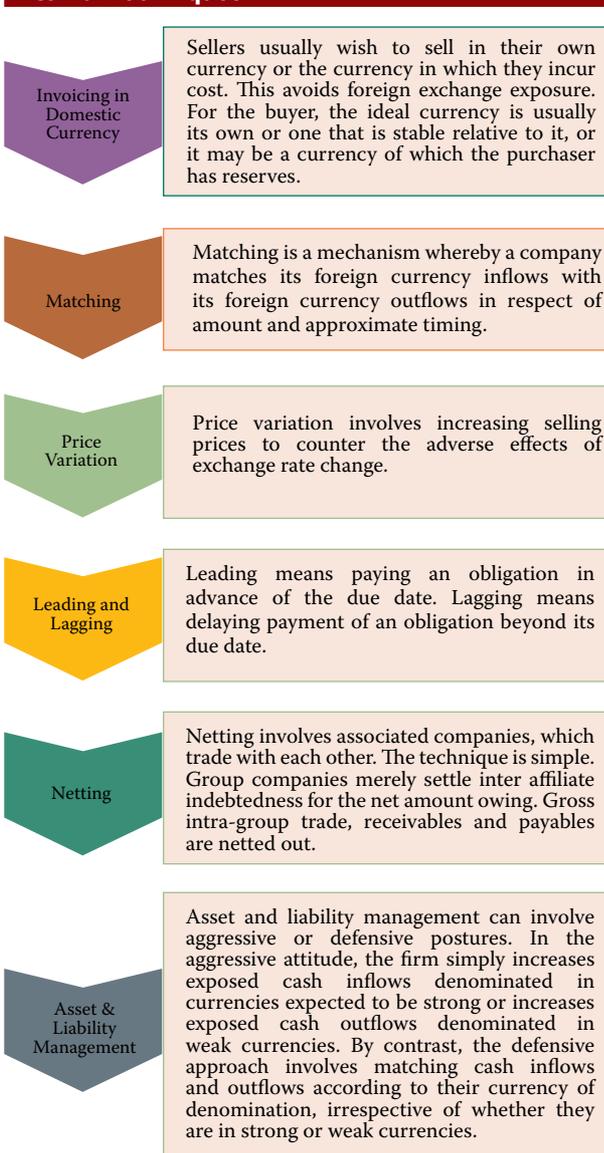
Economic Exposure

It refers to the extent to which the economic value of a company can decline due to changes in exchange rate. It is the overall impact of exchange rate changes on the value of the firm.

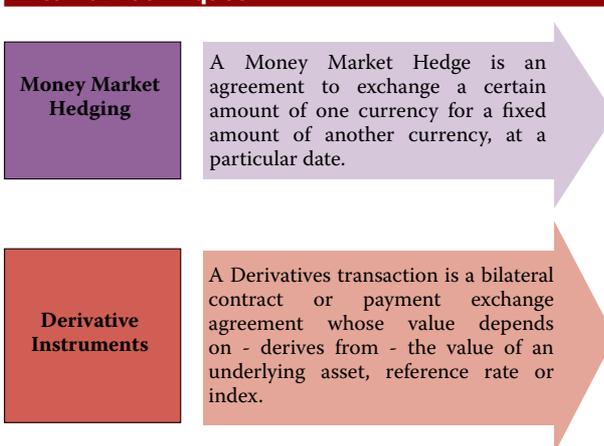
Hedging Currency Risk

There are a range of hedging instruments that can be used to reduce risk. Broadly these techniques can be divided into **Internal Techniques** and **External Techniques**:

Internal Techniques



External Techniques



Derivatives in the Context of Foreign Exchange

Forward Contract: The simplest form of derivatives is the forward contract. It obliges one party to buy, and the other to sell, a specified quantity of foreign exchange at a specific price, on a specified date in the future.

Futures: It is like Forward Contract with difference on account of Quotation, Contract Size, Period and Cash Settlement etc.

Options: A currency option is a contract that gives the buyer the right, but not the obligation, to buy or sell a certain currency at a specified exchange rate on or before a specified date.

Swaps: A currency swap involves the exchange of interest and sometimes of principal in one currency for equivalent amount in another currency.

Forward Contract

Fate of Forward Contract

Delivery

Cancellation

Extension

Delivery

Delivery on Due Date This situation does not pose any problem as rate applied for the transaction would be rate originally agreed upon. Exchange shall take place at this rate irrespective of the spot rate prevailing on due date.

Early Delivery The bank may accept the request of customer of delivery before the due date of forward contract provided the customer is ready to bear the loss, if any, that may accrue to the bank as a result of this.

Late Delivery Before this delivery (execution) takes place the provisions of FEDAI Rule 8 for Automatic Cancellation (discussed later on) shall be applied.

Cancellation

Cancellation on Due Date In case of cancellation on due date in addition of flat charges (if any) the difference between contracted rate and the cancellation rate (reverse action of original contract) is charged from/paid to the customer.

Early Cancellation If a forward is required to be cancelled earlier than the due date of forward contract same shall be cancelled at opposite rate of original contract of the date that synchronizes with the date of original forward contract.

Late Cancellation Before this cancellation takes place the provisions of FEDAI Rule 8 for Automatic Cancellation (discussed later on) shall be applied.

Extension

Extension on Due Date

In case extension of due date, first original contract shall be cancelled at spot rate like cancellation on due date (discussed earlier) and new contract shall be rebooked at the forward rate for the new delivery period.

Extension before Due Date

In this case first the original contract would be cancelled at the relevant forward rate as in case of cancellation of contract before due date and shall be rebooked at the current forward rate of the forward period.

Late Extension

Before this Extension takes place the provisions of FEDAI Rule 8 for Automatic Cancellation (discussed later on) shall be applied.

Automatic Cancellation in case of Forward Contract

As per FEDAI Rule 8, a forward contract which remains overdue without any instructions from the customers on or before due date shall stand automatically cancelled on 15th day from the date of maturity. Though, customer is liable to pay the exchange difference arising therefrom but not entitled for the profit resulting from this cancellation.

Swaps

STAGES OF CURRENCY SWAPS

A spot exchange of principal

Continuing exchange of interest payments during the term of the swap

Re-exchange of principal on maturity.

Benefits of Currency Swaps

Treasurers can hedge currency risk.

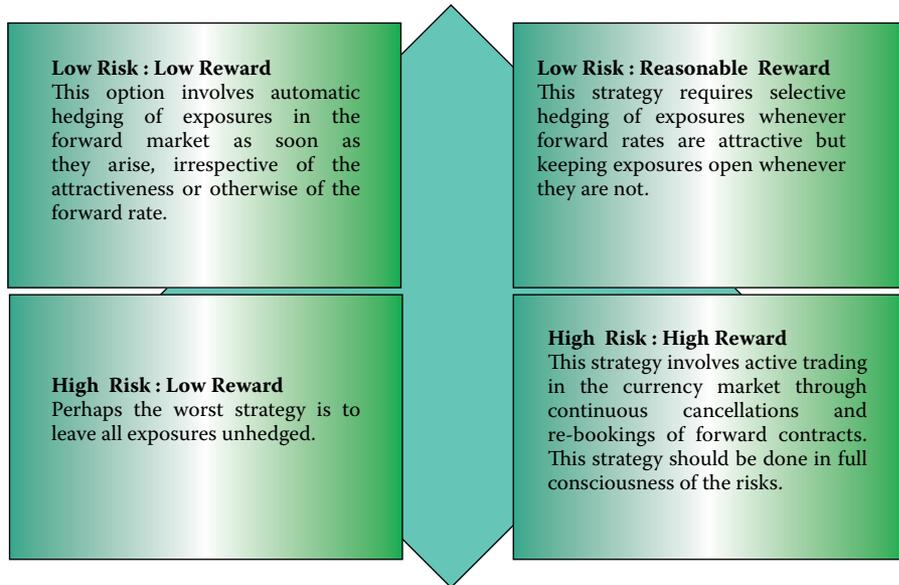
It can provide considerable cost savings.

The swap market permits funds to be accessed in currencies, which may otherwise command a high premium. Further, it offers diversification of borrowings.

STRATEGIC FINANCIAL MANAGEMENT ||

Strategies for Exposure Management

A company's attitude towards risk, financial strength, nature of business, vulnerability to adverse movements, etc. shapes its exposure management strategies. There can be no single strategy which is appropriate to all businesses. Four separate strategy options are feasible for exposure management.



CHAPTER 12 – INTEREST RATE RISK MANAGEMENT

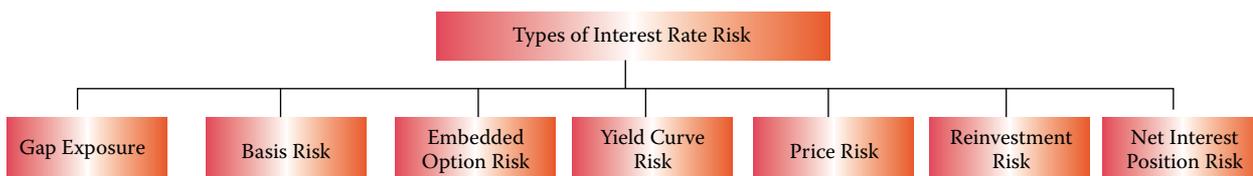
How interest rate is determined

The factors affecting interest rates are largely macro-economic in nature:

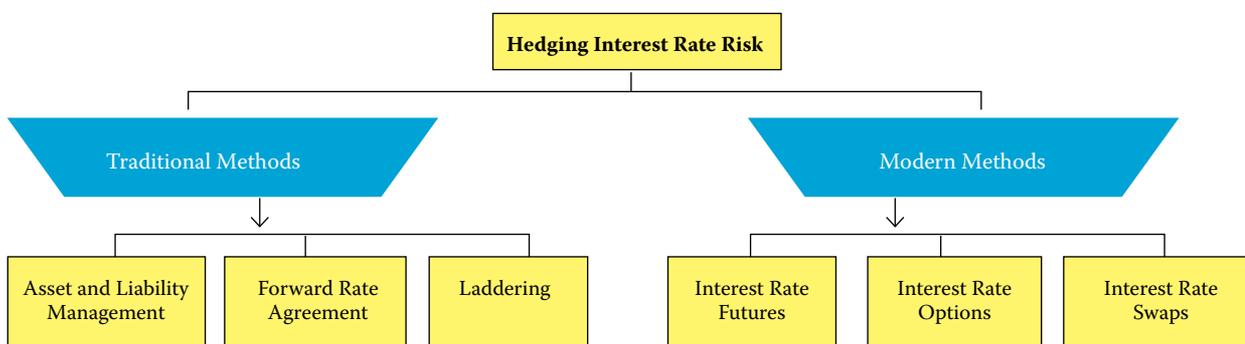
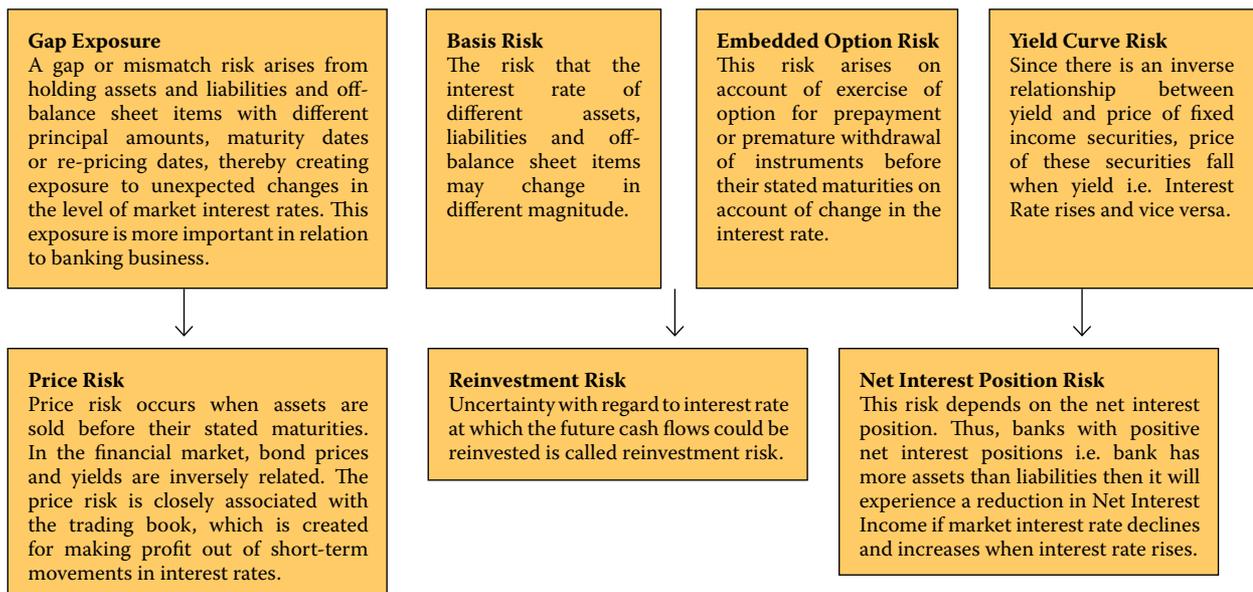
- Supply and Demand:** Demand/supply of money- When economic growth is high, demand for money increases, pushing the interest rates up and vice versa.
- Inflation** - The higher the inflation rate, the more interest rates are likely to rise.
- Government**- Government is the biggest borrower. The level of borrowing also determines the interest rates. Central bank i.e. RBI by either printing more notes or through its Open Market Operations (OMO) changes the key rates (CRR, SLR and bank rates) depending on the state of the economy or to combat inflation.

Interest Rate Risk

Interest risk is the change in prices of bonds that could occur because of change in interest rates. It also considers change in impact on interest income due to changes in the rate of interest. In other words, price as well as reinvestment risks require focus.



Detailed Explanation



STRATEGIC FINANCIAL MANAGEMENT ||

Traditional Methods

Asset and Liability Management (ALM)

Asset-Liability Management (ALM) is one of the important tools of risk management in commercial banks of India. It is the management of structure of balance sheet (liabilities and assets) in such a way that the net earnings from interest are maximized within the overall risk preference (present and future) of the institutions. It involves the proper use of discretionary element i.e. increase or decrease interest sensitive funds.

Forward Rate Agreements (FRAs)

A Forward Rate Agreement (FRA) is an agreement between two parties through which a borrower/ lender protects itself from the unfavourable changes to the interest rate in future. On settlement date the actual money (amount of loan) is not exchanged rather settlement is made on the basis of notional principal. Unlike futures FRAs are not traded on an exchange thus are called OTC product.

Laddering

This strategy is mainly used to avoid Re-investment risk. It involves the purchasing/ scheduling of multiple securities in a portfolio of different maturity periods. Accordingly, in case if due to rise in interest rate if the value of long term securities decreases then same shall be compensated by re-investing the sum out of redeemed short term investment at higher interest rate.

Modern Methods

Interest Rate Futures

An interest rate future is a contract between the buyer and seller agreeing to the future delivery of any interest-bearing asset. The interest rate future allows the buyer and seller to lock in the price of the interest-bearing asset for a future date. Interest rate futures are used to hedge against the risk that interest rates will move in an adverse direction, causing a cost to the company.

In IRF following are two important terms:

(a) **Conversion factor:** All the deliverable bonds have different maturities and coupon rates. To make them comparable to each other, Conversion factor for each deliverable bond and for each expiry at the time is used.

$(\text{Conversion Factor}) \times (\text{Futures price}) = \text{Actual delivery price for a given deliverable bond.}$

(b) **Cheapest to Deliver (CTD):** The CTD is the bond that minimizes difference between the quoted Spot Price of bond and the Futures Settlement Price (adjusted by the conversion factor).

Interest Rate Options

Also known as Interest Rate Guarantee (IRG) as option is a right not an obligation and acts as insurance by allowing businesses to protect themselves against adverse interest rate movements while allowing them to benefit from favourable movements. Some of the important types of Interest Rate Options are as follows:

❖ Cap Option

The buyer of an interest rate cap pays the seller a premium in return for the right to receive the difference in the interest cost on some notional principal amount any time a specified index of market interest rates rises above a stipulated "cap rate."

❖ Floor Option

It is an OTC instrument that protects the buyer of the floor from losses arising from a decrease in interest rates. The seller of the floor compensates the buyer with a pay off when the interest rate falls below the strike rate of the floor.

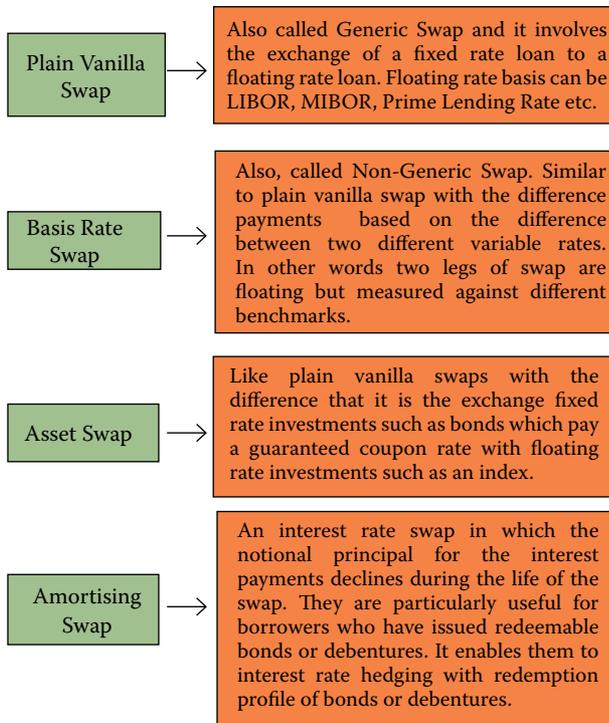
❖ Interest Rate Collars

It is a combination of a Cap and Floor. The purchaser of a Collar buys a Cap and simultaneously sells a Floor. A Collar has the effect of locking its purchases into a floating rate of interest that is bounded on both high side and the low side.

Interest Rate Swap

In an interest rate swap, the parties to the agreement, termed the swap counterparties, agree to exchange payments indexed to two different interest rates. Total payments are determined by the specified notional principal amount of the swap, which is never actually exchanged.

Types of Swap



Swaptions

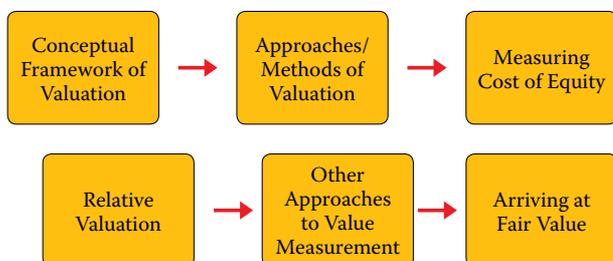
An interest rate swaption is simply an option on an interest rate swap. It gives the holder the right but not the obligation to enter into an interest rate swap at a specific date in the future, at a particular fixed rate and for a specified term.

→ **A fixed rate payer swaption** gives the owner of the swaption the right but not the obligation to enter into a swap where they pay the fixed leg and receive the floating leg.

→ **A fixed rate receiver swaption** gives the owner of the swaption the right but not the obligation to enter into a swap in which they will receive the fixed leg, and pay the floating leg.

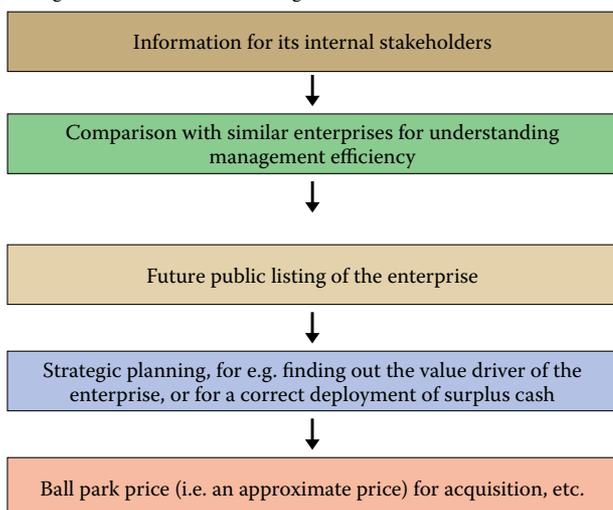
CHAPTER 12 – CORPORATE VALUATION

Chapter Overview



Concept of Corporate Valuation

Means determining the value of a business organisation. Though Corporate Valuation can be carried out for various purposes but here we shall mainly use the same for the Merger and Acquisition decisions. The need for proper corporate valuation of a company emerges because of the following:



Approaches and Methods of Valuation

1. Asset Based Approach

The value of shares of the target company is computed in terms of net assets acquired. This approach further can be classified into following three methods:

Net Asset Value

- Also called 'Book Value' Method and the value of the shares of the company is computed as follows:
- $\text{Net Fixed Asset} = \text{Fixed Assets} + \text{Net Current Assets} - \text{Long Term Debt}$

Net Realisable Value

- Also called Liquidation Value or Adjusted Book Value. It can be defined as realisable value of all assets after deduction of liquidation expenses and paying off liabilities. However, in some cases liquidation expenses can be ignored if business of target company is acquired as a going concern.

Replaceable Value

- Involves valuation as per determination of the cost of group of assets and liabilities of equivalent company in the open market.

2. Income Based Approach

Overcomes the drawbacks of using the asset-backed valuation approach by referring to the earning potential. Especially suitable when acquiring company intends to continue the business of Target Company to foresee future without selling or liquidating assets of the same. Following two methods are used under this approach:

I: PE Ratio or Earning Yield Multiplier

Generally used for valuing listed companies whose PE Ratios are available. This approach has one benefit that it takes into account the expected growth rate of the company as well as market expectations.

The price or value of equity share can be calculated using the following equation:

$$\text{Price per Share} = \text{EPS} \times \text{PE Ratio}$$

This approach involves following steps:

- Choosing PE Ratio of equivalent quoted company.
- Making adjustment downward for additional risk due to non-listing of shares.
- Determination of future maintainable EPS.
- Multiply same EPS with adjusted PE Ratio.

II: Capitalisation of Earnings

The value of business is calculated by capitalisation of company's expected annual maintainable profit using appropriate required rate of return or yield or discounting rate.

Annual expected maintainable profit can be calculated by using weighted average of previous years' profits after adjusting synergy benefits or economies of scale in the same profit.

The capitalisation rate depends on many factors. The capitalisation rate can be approximated as follows:
Required Earning Yield = EPS/Share Price

Valuation of a company can be computed as follows:
Capitalised Earning Value = Expected Annual Maintainable Profit/Capitalisation Rate or Required Earning Yield

3. Cash Flow Based Approach

As opposed to the asset based and income based approaches, the cash flow based approach takes into account the quantum of free cash that is available in future periods, and discounting the same appropriately to arrive at the present value.

If the present value i.e. the Discounted Cash Flow (DCF) so arrived at, is more than the current cost of investment, the valuation of the enterprise is attractive to both the internal as well as external stakeholders.

Steps involved in DCF based valuation:

- Arriving at the 'Free Cash Flows (FCF)
- Forecasting of future cash flows (also called projected future cash flows)
- Determining the discount rate based on the cost of capital
- Finding out the Terminal Value (TV) of the enterprise
- Finding out the present values of both the free cash flows and the TV, and interpretation of the results.

Measuring Cost of Equity

One of the important constituents of Valuation of Equity Share is Cost of Capital. Following methods are generally used to calculate the Cost of Equity:

1. Capital Assets Pricing Model (CAPM)

The CAPM model calculates the Cost of Equity based on the degree of risk assumed and is represented by the below formula:

$$R = r_f + \beta (r_m - r_f)$$

Where R = expected rate of return

β = beta r_f = risk free rate of return

r_m = market rate of return β = Beta value of the stock

2. Arbitrage Pricing Model

The Arbitrage Pricing Model considers multiple risk factors such as Interest Rate Fluctuations, Sectoral Growth Rate, etc. Hence Cost of Equity as per this method is calculated in the following manner:

- Calculate the risk premium for both these risk factors (e.g. beta for the risk factor 1 – interest rate, and beta of the risk factor 2 – sector growth rate; and,
- Adding the risk-free rate of return.

Thus, the formula for APT is represented as –

$$R_i + \beta_1(RP_1) + \beta_2(RP_2) + \dots + \beta_n(RP_n)$$

Here, R_i = Risk free rate of return

β_j = beta of the respective risk factor

RP = Risk Premium

3. Estimating beta and valuation of unlisted companies

Estimating beta and then valuing an unlisted company is a challenging task. This is even more difficult when an existing listed company decides to invest in a new business and wants to value it. In such cases, it is not feasible to use Weighted Average Cost of Capital (WACC) to evaluate the business, rather than WACC should be assessed for the appropriate risk level. For this purpose, the company uses asset beta or ungeared beta which is adjusted according to its own gearing level.

So, the equity beta of a new business or an unlisted company is computed by adjusting the asset beta as follows:

Identify the Pure Play firms or companies (engaged entirely in same business and are also called proxy companies) and their Equity Betas to surrogate the Equity Beta of new Project or business.

Once Beta of proxy companies have been identified we de-gear it and compute the Asset Beta as the different companies may have different gearing levels.

In case if there is only one proxy company then Asset Beta of the same company shall be continued for further analysis. In case there are more than one proxy companies then we shall take average of Asset Betas of these companies. Otherwise, we can also opt for the Asset Beta of the company that appears to be most appropriate.

Now we must re-gear the Asset Beta as per capital structure of the appraising company to reflect the financial risk using the required formula.

Insert computed β_e in CAPM and can compute required rate of return for project under consideration.

Required Formula for computing Beta of company as per its own Capital Structure

$$\beta_e = \beta_a \left[\frac{E + D(1-t)}{E} \right]$$

Where β_e = Geared or Equity Beta

β_a = Ungeared or Asset Beta

E = Equity

D = Debt

t = Tax Rate

Relative Valuation

Also referred to as 'Valuation by multiples', uses financial ratios to derive at the desired metric (referred to as the 'multiple') and then compares the same to that of comparable firms.

The various steps in relative valuation are as follows:

Find out the 'drivers' that will be the best representative for deriving at the multiple. One can have either enterprise value based multiples or equity value based multiples.

Determine the results based on the chosen driver(s) through financial ratios.

Find out the comparable firms, and perform the comparative analysis. Comparable firms would mean the ones having similar asset and risk dispositions.

Iterate / extrapolate the results obtained to arrive at the correct estimate of the value of the firm.

Other approaches to Value Measurement

1. Contemporary approaches to Valuation

An internet company having a huge online presence may adopt a new method of valuation – Price per page visited.



An online play store can value a business using 'Price per Subscriber'.



A retail giant looking to acquire a company which is giving it a tough competition may adopt another contemporary approach to value a company by using 'Goodwill based Approach'. It may first take an asset based valuation, and then value the goodwill separately by linking a multiple to its annual sales.



Price Earnings Ratio (PER) approach may also be used. However, PER is a relative figure, and comparison across industries in the same sector can give a more median PER that may be acceptable for valuation purposes.



LBOs (Leveraged Buy Outs) - Private equities acquire companies using a high leverage mostly at a debt-equity ratio of 70:30 thereby increasing their value over a period of time and then sell it at a much higher price.

2. Chop-Shop Method

This approach attempts to identify multi-industry companies that are undervalued and would have more value if separated from each other. This approach involves following three steps:

Step 1

- Identify the firm's various business segments and calculate the average capitalisation ratios for firms in those industries.

Step 2

- Calculate a "theoretical" market value based upon each of the average capitalisation ratios.

Step 3

- Average the "theoretical" market values to determine the "chop-shop" value of the firm.

3. Economic Value Added (EVA)

The core concept behind EVA is that a company generates 'value' only if there is a creation of wealth in terms of returns in excess of its cost of capital invested. EVA insists on separation of firm's operation from its financing. So if a company's EVA is negative, it means the company is not generating value from the funds invested into the business. Conversely, a positive EVA shows a company is producing value from the funds invested in it.

The formula to calculate EVA is as below –

$$\text{Net Operating Profit after tax (NOPAT)} - (\text{Invested Capital} \times \text{WACC})$$

OR

$$\text{NOPAT} - \text{Capital Charge}$$

4. Market Value Added (MVA)

MVA simply means the Current Market Value of a firm minus the Invested Capital. It is an attempt to resolve some of the issues involved in EVA e.g. ignoring Value Drivers, Book Value, etc. Further, MVA itself does not give any basis of share valuation rather provides an alternative way to gauge performance efficiencies of an enterprise, albeit from a market capitalisation point of view. The logic being that the market will discount the efforts taken by the management fairly.

5. Shareholder Value Analysis (SVA)

The focus is on creation of economic value for shareholders as measured by share price performance and flow of funds.

The steps involved in the computation of SVA are as follows:

(a) Arrive at the Future Cash Flows (FCFs).

(b) Discount these FCFs using the WACC.

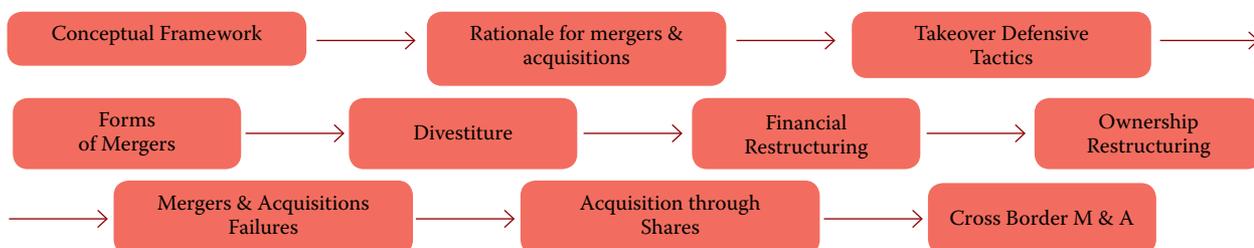
(c) Add the present value of terminal value to the present values computed in step (b).

(d) Add the current market value of non-core assets and marketable investment with the value computed in step (c).

(e) Reduce the value of debt from the result in step (d) to arrive at value of equity.

CHAPTER 14: MERGERS, ACQUISITIONS AND CORPORATE RESTRUCTURING

Chapter Overview



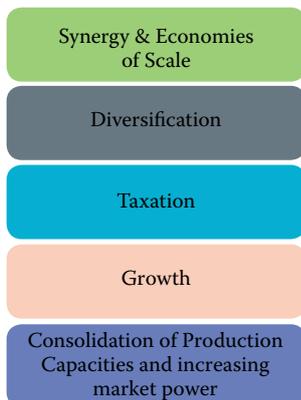
Conceptual Framework

The terms 'mergers', 'acquisitions' and 'takeovers' are often used interchangeably in common parlance. However, there are differences. While merger means unification of two entities into one, acquisition involves one entity buying out another and absorbing the same. In India, in legal sense merger is known as 'Amalgamation'.

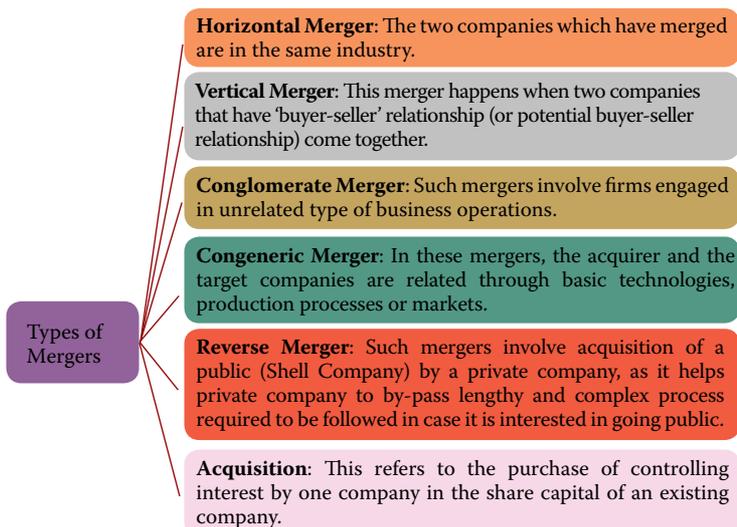
Restructuring usually involves major organizational changes such as shift in corporate strategies. Restructuring can be internally in the form of new investments in plant and machinery, Research and Development of products and processes, hiving off of non-core businesses, divestment, sell-offs, de-merger etc. Restructuring can also take place externally through mergers and acquisition (M&A) and by forming joint-ventures and having strategic alliances with other firms.

Rationale for Mergers and Acquisitions

The most common reasons for Mergers and Acquisition (M&A) are:



Forms (Types of Mergers)



STRATEGIC FINANCIAL MANAGEMENT ||

Takeover Defensive Tactics

Divestiture	In a divestiture, the target company divests or spins off some of its businesses in the form of an independent, subsidiary company. Thus, reducing the attractiveness of the existing business to the acquirer.
Crown jewels	It means company's most valuable assets. The target company may sell its crown jewels to make it unattractive for the acquirer to takeover the company.
Poison pill	The tactics used by the acquiring company to make it unattractive to a potential bidder is called poison pills.
Poison Put	In this case the target company issue bonds that encourage holder to cash in at higher prices. The resultant cash drainage would make the target unattractive.
Greenmail	Greenmail refers to an incentive offered by management of the target company to the potential bidder for not pursuing the takeover.
White knight	In this, a target company offers to be acquired by a friendly company to escape from a hostile takeover.
White squire	This strategy is essentially the same as white knight and involves sell out of shares to a company that is not interested in the takeover.
Pac-man	This strategy aims at the target company making a counter bid for the acquirer company.

Different Forms of Divestment or Demerger or Divestitures

Sell off / Partial Sell off	A sell off is the sale of an asset, factory, division, product line or subsidiary by one entity to another for a purchase consideration payable either in cash or in the form of securities. Partial Sell off, is a form of divestiture, wherein the firm sells its business unit or a subsidiary to another because it deemed to be unfit with the company's core business strategy.
Spin-off	In this case, a part of the business is separated and created as a separate firm.
Split-up	This involves breaking up of the entire firm into a series of spin off.
Equity Carve outs	This is like spin off, however, some shares of the new company are sold in the market by making a public offer, so this brings cash.

Financial Restructuring

Financial restructuring refers to a kind of internal changes made by the management in Assets and Liabilities of a company with the consent of its various stakeholders. This is a suitable mode of restructuring for corporate entities who have suffered from sizeable losses over a period of time.

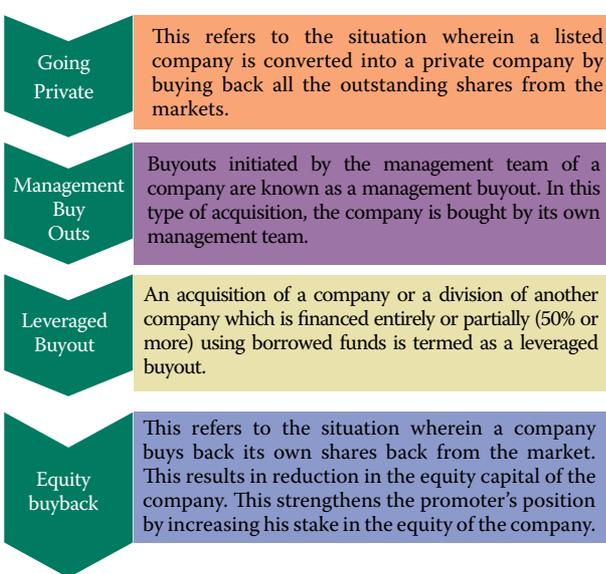
It may be said that financial restructuring (also known as internal re-construction) is aimed at reducing the debt/payment burden of the corporate firm. This results into:

(i) Reduction/Waiver in the claims from various stakeholders;

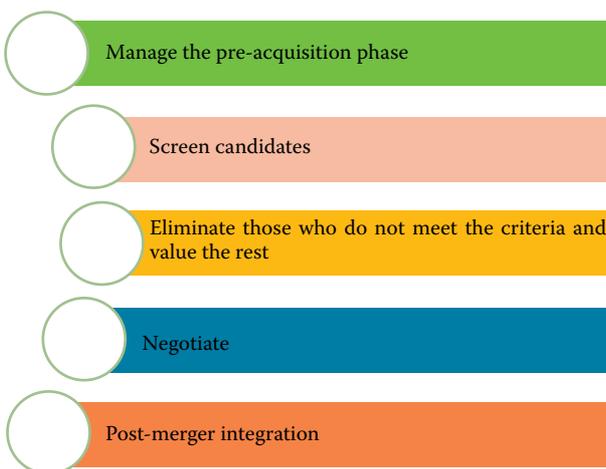
(ii) Real worth of various properties/assets by revaluing them timely;

(iii) Utilizing profit accruing on account of appreciation of assets to write off accumulated losses and fictitious assets (such as preliminary expenses and cost of issue of shares and debentures) and creating provision for bad and doubtful debts.

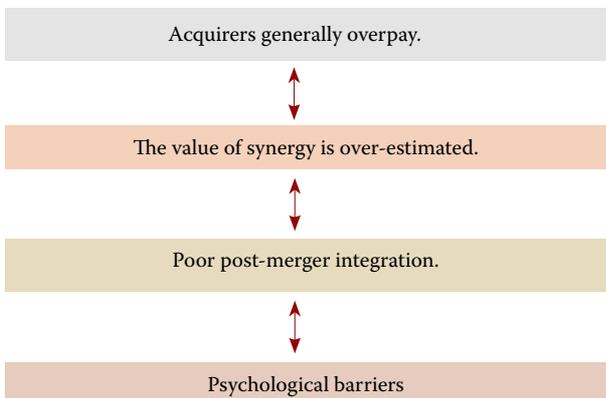
Ownership Restructuring



Steps in a Successful Merger and Acquisitions



Reasons for Merger Failures



STRATEGIC FINANCIAL MANAGEMENT

Strategies to Make a Merger Successful

Decide what tasks need to be accomplished in the post-merger period.

Choose managers from both the companies (and from outside).

Establish performance yardstick and evaluate the managers on that yardstick.

Motivate them.

Acquisition through Shares

The acquirer can pay the target company in cash or exchange shares in consideration. The analysis of acquisition for shares is slightly different. The steps involved in the analysis are:

Estimate the value of acquirer's equity.

Estimate the value of target company's equity.

Calculate the maximum number of shares that can be exchanged with the target company's shares.

Conduct the analysis for pessimistic and optimistic scenarios.

Cross-Border Merger and Acquisitions

Cross-Border Merger and Acquisitions are deals between foreign companies and domestic companies which usually take place in the country where the target company has to be acquired. Major factors that motivate multinational companies to engage in cross-border merger and acquisitions in Asia include the following:

Globalisation of production and distribution of products and services.

Integration of global economies.

Expansion of trade and investment relationships on international level.

Many countries are reforming their economic and legal systems, and providing generous investment and tax incentives to attract foreign investment.

Privatisation of state-owned enterprises and consolidation of the banking industry.