



The Institute
of Chartered
Accountants of
India
(Set up by an act of
Parliament)

The Chartered Accountant **STUDENT**

Your monthly guide to CA news, information and events

SPECIAL ISSUE ON

STRATEGIC FINANCIAL MANAGEMENT





CA Students Talent Search 2018: ICAI President, CA. Naveen N. D. Gupta, Vice President, CA. Prafulla P. Chhajed, International Federation of Accountants (IFAC) President, Ms. Rachel Grimes, Board of Studies Chairman, CA. Dhinal A. Shah, Vice Chairman, CA. Vijay Kumar Gupta at the Grand Finale in New Delhi.



CA Students Talent Search 2018: ICAI President, CA. Naveen N. D. Gupta, Vice President, CA. Prafulla P. Chhajed, International Federation of Accountants (IFAC) President, Ms. Rachel Grimes, Board of Studies Chairman, CA. Dhinal A. Shah and Vice Chairman, CA. Vijay Kumar Gupta jointly presenting the Gift Cheque to Ms. Srinithi U., First Prize winner, National Elocution Contest.



CA Students Conference, Indore: Chief Guest Dr. Narendra Dhakad, Vice-Chancellor, DAVV University, ICAI immediate Past President, CA. Nilesh Vikamsey, Central Council Member, CA. Kemisha Soni and branch Managing Committee Members at the Inaugural session.



CA Students Conference, Jamnagar. ICAI Central Council Member, CA. Tarun Ghia being presented with a memento by the Branch Chairman, CA. Amit Mehta and branch WICASA Chairperson, CA. Shraddha Mehta.



CA Students Conference, Ahmednagar: ICAI Central Council Member, CA. Anil Bhandari inaugurates the Conference in the presence of branch Chairman, CA. Dnyanesh Kulkarni, branch WICASA Chairman, CA. (Dr) Paresh Bora and other dignitaries.

PRESIDENT'S COMMUNICATION



A commemorative Postal Stamp of ICAI was released by **Shri Manoj Sinha**, Minister of State (I/C) for Communications & Minister of State for Railways in presence of **Shri P.P Chaudhary**, Minister of State for Corporate Affairs & Minister of State for Law & Justice.

Other eminent dignitaries that graced the occasion included **IFAC (International Federation of Accountants) President, Ms. Rachel Grimes** who delivered the keynote address on **Impact of Technology on Accountancy Profession** and delegates from **SAFA (South Asian Federation of Accountants)**.

BOS: Your Knowledge Partner

With a view to facilitate effective knowledge delivery at affordable cost, in yet another important initiative, **Live Virtual Classes** have been launched by BOS for CA Intermediate and Final Students, commencing from **August 6 and August 16, 2018** respectively at select centres. Subject experts from across the country will take the sessions. Details are uploaded on the Link: <https://resource.cdn.icai.org/50507boslvc130618.pdf> and online registration form at <https://icai.org/boslvc/>. I hope you will avail this learning opportunity in best possible manner.

The Institute is mindful of your learning requirements *vis-à-vis* current business and regulatory environment. To enhance your knowledge on GST, the Board of Studies (BOS) of ICAI along with the Indirect Taxes Committee of ICAI had organised a 30 Hours **Virtual Training Course on GST** from July 14 till August 12, 2018. The course is successfully running with the participation of more than 3000 students.

The current issue includes a 20 page capsule on **Strategic Financial Management** that presents the relevant concepts succinctly, to enable you to revise the subject before exams.

Pattern of Assessment from May 2019 Examination

In line with the best global practices, I would like to inform that it has been decided that beginning from May 2019 examination, assessment in selected subjects in Intermediate/IIPCC and Final course under the old and new scheme of education and training would be partially based on objective type (multiple-choice type) questions, and weightage for objective type questions would be 30%. Introduction of objective type questions in the scheme of assessment would surely help to hone your application and analysis skills.

CA Student Conferences

The Board of Studies is organizing a series of Conferences for CA Students this month at Trichur, Surat, Jalgaon, Hubli and Nashik. Conferences like these are the perfect platform to expand your knowledge and passion for accountancy profession while connecting with like-minded people from across the country. Such conferences also enable you to meet and interact with eminent professionals who are passionate about the future of accountancy profession and are incredibly receptive to the needs and desires of students.

With best wishes,

CA. NAVEEN N. D. GUPTA
PRESIDENT, ICAI, NEW DELHI

Dear Students,

As the nation celebrates 71st anniversary of its independence on August 15, 2018, I greet you all on this momentous occasion. The day reminds us of the great freedom fighters who laid down their lives and the great statesmen who worked relentlessly to rebuild the Nation.

You as students of Chartered Accountancy profession are uniquely placed to usher in a new era of prosperity, growth and opportunities for all and develop an environment based on ethical values. I urge you all to uphold the values of our profession with utmost sincerity and dedication, making the profession and the Nation proud.

Welcome to the Distinguished Profession

I convey heartiest congratulations to successful students of May and June 2018 examinations. It surely evokes a great sense of accomplishment being proud members of the fraternity of Chartered Accountants. You must now **prepare for the giant leap from being a committed student to a competent, conscientious and committed professional**. As the placement process begins, you must critically analyse your preparedness and whet your communication and interpersonal skills to enhance your employability.

I also congratulate all of you who have qualified CA Foundation and CPT, to embark upon a significant academic journey. I am confident that you will continue to move ahead with your grit, perseverance and resilience.

Those of you, who could not make it this time, should not feel disheartened. You must overcome all negative emotions and have strong determination to resume your studies with much more vigor and zeal. You just need to introspect, **re-design** your strategy to leverage your strengths. Remember: ***If you set your mind on a purposeful and productive goal and work towards it consistently with single-minded dedication, you are bound to achieve it.***

CA Day Celebrations: A grandiose event

CA Day Function, an unprecedented event in the history of ICAI, was celebrated on **July 1, 2018** at Vigyan Bhawan. **Honorable President of India, Shri Ram Nath Kovind**, launched the **Platinum Jubilee Celebrations** of the Institute on this occasion. Encouraging our ongoing efforts, Hon'ble President of India addressed: *I am confident that ICAI and its members will keep up efforts to build a nation defined by tax transparency, tax predictability and tax compliance.*

VICE PRESIDENT'S COMMUNICATION ||



Dear Students,

At the outset, let me convey my heartiest congratulations to all those who have cleared successfully the May 2018 Final existing and New Course, May 2018 Foundation Course and June 2018 Common Proficiency Test (CPT) examinations. My special compliments to those

who have performed with merit and found a place in the prestigious rank list of the Institute.

The Chartered Accountancy course is such a course that can be easily completed with positive determination and self-confidence. As Swami Sukhbodhananda said, *"You cannot climb a mountain by just looking at it. So put your best foot forward and the best will come back to you"*. You have to realise the fact that no success is possible without working hard and there is no joy in achieving success without efforts. Try to cultivate a sense of confidence and willpower to succeed without any regrets about the past and worry about the future. Simultaneously, you must take effective steps to realise your limitations and shortcomings and try sincerely to

overcome them. So, remain positive and remember that hard work and perseverance are rewarded sooner or later.

As eager student of the Chartered Accountancy course, you should bring out and sharpen your skills to meet the challenges of a highly competitive professional world. I would like to tell you that the National Conventions and Conferences are the right platform for all of you to learn evolving knowledge. I wish you would come forward in large numbers to participate in the upcoming conferences at Trichur, Jalgaon, Nashik, Hubli and Surat.

Before winding up this message, I extend my heartiest greetings on the occasion of the 72nd Independence Day. Indeed, it is a historic day to refresh our memories of freedom struggle and pay our rich tributes to the martyrs who sacrificed their lives with extreme courage and noble spirits to make our motherland free from the colonial rule.

CA. PRAFULLA P. CHHAJED
VICE PRESIDENT, ICAI, NEW DELHI

TOPPERS OF CHARTERED ACCOUNTANTS FINAL EXAMINATIONS- MAY-2018

REVISED
SCHEME



PRITH PRITESH SHAH
SURAT
FIRST



ABHISHEK NAGARAJ
BENGALURU
SECOND



SAMIKSHA SUBHASH AGARWAL
ULHASNAGAR
THIRD

EXISTING
SCHEME



ATUL AGARWAL
JAIPUR
FIRST



AAGAM SANDIPBHAI DALAL
AHMEDABAD
SECOND



ANURAG BAGARIA
SURAT
THIRD



Dear Students,

I convey my warm greetings on the auspicious occasion of the 72nd Independence Day of our great nation. I feel pride to witness the enchanting colours of Independence Day on August 15th, dispersing cheerfulness and great joys all around. It is a moment of delight and grandeur for all of us. We will never ever forget the sacrifice of lives made by our valiant freedom fighters for the freedom of our nation. It is my belief that the past 71 years have been momentous. Despite serious challenges on varied fronts, we have been able to keep the flame of democracy shining bright. Our country has witnessed several ups and downs. We as a strong nation faced all those challenges and took the country forward. I can proudly say, The Institute of Chartered Accountants of India, being the partner in nation building, has meticulously played its role in the overall development of the country. ICAI has full faith in our strength and contributes our inimitable share to the overall growth of our profession and the country.

I feel pleasure to express my heartiest congratulations to all those who have cleared successfully, the May 2018 Final existing and New Course, May 2018 Foundation Course and June 2018 Common Proficiency Test (CPT) examinations. I would like to specially congratulate the top rank holders for their outstanding performance. This success will offer you a wide horizon to manoeuvre your professional graph to scale new heights of fame and success. The students who had failed to translate their efforts into success are advised to take their studies sincerely and regularly.

The students who intend to appear in the forthcoming examinations should prepare well by making full use of various educational inputs provided by the Board of Studies in different subjects. You can engineer your dream and turn it into reality; provided a proper preparation method is adopted from the very beginning.

I have immense pleasure in sharing with you that the Board of Studies has decided to augment its education delivery mechanism in a big way and conduct Live Virtual Classes for the benefit of the students spread across the country. The classes will be available in selected regions and branches of the Institute. There will be special sessions by experts and renowned faculty. Classes for the Intermediate course will commence from August 6th and for the Final from 16th of August 2018. The classes will run for about eight months. For details, students may visit: <https://bit.ly/2LmOmfy>.

I would like to tell you that all of you should also take your articleship training very seriously and develop a practical approach to tackle the examinations. The education and training programme of the Institute helps the students in the development of areas of knowledge, creative thinking, integrity, ethical conduct, leadership, motivation, and a commitment to lifelong learning as a part of overall personality development.

In this direction, the student conferences play a vital role. The Board of Studies is organising a series of Conferences for CA Students this month at Trichur, Surat, Jalgaon, Hubli and Nashik. Since such programmes are intended for the student community with the purpose of ensuring the all round development of them, you all should attend and derive maximum benefit.

Best Wishes

A handwritten signature in black ink, appearing to read 'Dhinal A. Shah', written in a cursive style.

CA. DHINAL A. SHAH
CHAIRMAN, BOARD OF STUDIES, ICAI

EDITORIAL BOARD

President and Editor-in-Chief

CA. Naveen N. D. Gupta, New Delhi

Vice President

CA. Prafulla Premsukh Chhajed, Mumbai

Chairman and Editor

CA. Dhinal A. Shah, Ahmedabad

Vice-Chairman

CA. Vijay Kumar Gupta, Faridabad

Members

CA. Atul Kumar Gupta, New Delhi

CA. Babu Abraham Kallivayalil, Kochi

CA. (Dr.) Debashis Mitra, Kolkata

CA. Dhiraj Kumar Khandelwal, Mumbai

CA. Kemisha Soni, Indore

CA. K. Sripriya, Chennai

CA. Madhukar Narayan Hiregange, Bangalore

CA. Manu Agrawal, Kanpur

CA. Mangesh Pandurang Kinare, Mumbai

CA. M. Devaraja Reddy, Hyderabad

CA. M. P. Vijay Kumar, Chennai

CA. Mukesh Singh Kushwah, Ghaziabad

CA. Prakash Sharma, Jaipur

CA. Rajesh Sharma, New Delhi

CA. Ranjeet Kumar Agarwal, Kolkata

CA. Sanjiv Kumar Chaudhary, New Delhi

CA. Sushil Kumar Goyal, Kolkata

Dr. P.C. Jain, New Delhi

Shri Vijay Jhalani, New Delhi

Co-Opted Members

CA. Ashwani Kumar Jindal

CA. Brijen Sampat

CA. Pankaj Gupta

CA. Retna Kumaran A

CA. R.N. Singh

CA. Vilas Paranjape

CA. Viral Kiran Mehta

Director- Board of Studies

CA. Vandana D. Nagpal

Editorial Support

K. Sudhakaran, Assistant Director

Dr. Ruchi Gupta, Assistant Secretary

Office

Board of Studies

The Institute of Chartered

Accountants of India, ICAI Bhawan, A-29,
Sector-62, Noida-201 309.

Phone : 0120-3045938

HEAD OFFICE

The Institute of Chartered Accountants
of India, ICAI Bhawan, Indraprastha
Marg, New Delhi-110 104.

Cover Image Courtesy: www.shutterstock.com
Inside image: www.shutterstock.com

INSIDE

03 President's Communication

04 Vice-President's Communication

05 Chairman's Communication

07 Strategic Financial Management

29 Announcements

32 Students' Conference Announcement

36 Crossword

SWACHH BHARAT - A STEP TOWARDS CLEANLINESS

ANNUAL SUBSCRIPTION RATES

CA Students	Members and Others	Overseas
₹200	₹500	US \$ 100

Total Circulation: 3,66,069

Check your Address: All students should check their mailing address printed on back cover. In case, there is any change or the PIN Code (Postal Index Code) is either missing or is incorrect, kindly inform immediately the concerned Regional Office, giving full particulars of your address alongwith correct PIN Code. This would enable us to ensure regular and prompt delivery of the Journal.

Correspondence with regard to subscription, advertising and writing articles

Email: writesj@icai.in

Non-receipt of Students' Journal

Email: nosj@icai.in

EDITOR: CA. Dhinal A. Shah

Printed and published by CA. Vandana D. Nagpal, on behalf of The Institute of Chartered Accountants of India, New Delhi.

PUBLISHED at the Institute's Office at Indraprastha Marg, New Delhi and printed at Spenta Multimedia Pvt. Ltd., Plot 15,16 & 21/1, Village Chikhholi, Morivali, MIDC, Ambarnath (West), Dist. Thane

The views and opinions expressed or implied in THE CHARTERED ACCOUNTANT STUDENT are those of the authors and do not necessarily reflect those of ICAI. Unsolicited articles and transparencies are sent at the owner's risk and the publisher accepts no liability for loss or damage. Material in this publication may not be reproduced, whether in part or in whole, without the consent of ICAI.

DISCLAIMER: The ICAI is not in any way responsible for the result of any action taken on the basis of the advertisement published in the Journal.

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

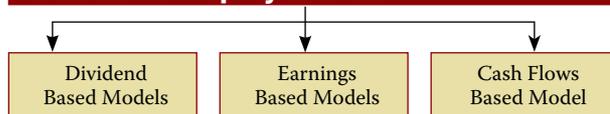
Nominal Cash Flow and Real Cash Flow

- 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.

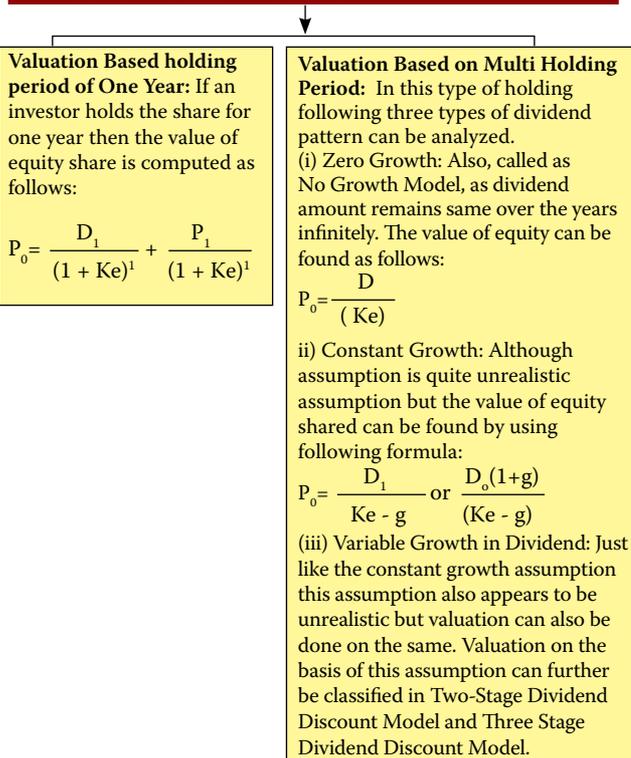
Discount rate for Equity Valuation

- 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



Valuation Based holding period of One Year: If an investor holds the share for one year then the value of equity share is computed as follows:

$$P_0 = \frac{D_1}{(1 + Ke)^1} + \frac{P_1}{(1 + Ke)^1}$$

Valuation Based on Multi Holding Period: In this type of holding following three types of dividend pattern can be analyzed.

(i) Zero Growth: Also, called as No Growth Model, as dividend amount remains same over the years infinitely. The value of equity can be found as follows:

$$P_0 = \frac{D}{Ke}$$

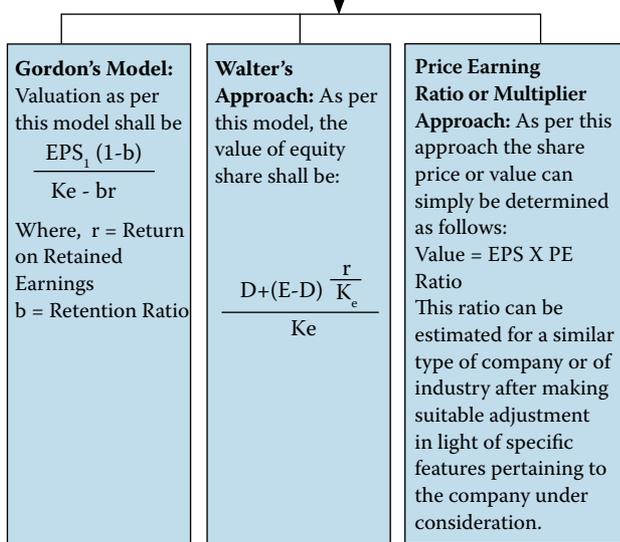
ii) Constant Growth: Although assumption is quite unrealistic assumption but the value of equity shared can be found by using following formula:

$$P_0 = \frac{D_1}{Ke - g} \text{ or } \frac{D_0(1+g)}{Ke - g}$$

(iii) Variable Growth in Dividend: Just like the constant growth assumption this assumption also appears to be unrealistic but valuation can also be done on the same. Valuation on the basis of this assumption can further be classified in Two-Stage Dividend Discount Model and Three Stage Dividend Discount Model.

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 - ΔNWC - CAPEX + New Debt - Debt Repayment.
ΔNWC = 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:

$$\frac{nP_0 + S}{n + 1}$$

n = No. of existing equity shares

P₀ = Price of Share Pre-Right Issue

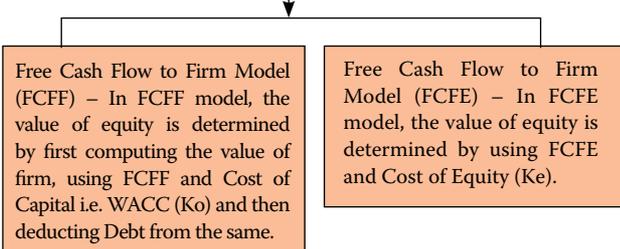
S = Subscription amount raised from Right Issue

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

$$\frac{P_0 - S}{n + n_1}$$

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

Valuation of Redeemable Preference Shares

Simply the present value of all the future expected dividend payments and the maturity value, discounted at Cost of Preference Shares.

Valuation of Irredeemable Preference Shares

Simply the present value of all the future expected dividend payments infinite period discounted at Cost of Preference Shares.

Formula for Valuation of Redeemable Preference Share

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

Formula for Valuation of Irredeemable Preference Share

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

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:

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

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

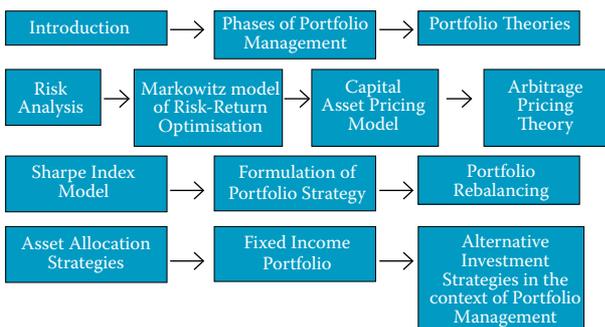
n = No. of equity shares convertible with one warrant

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



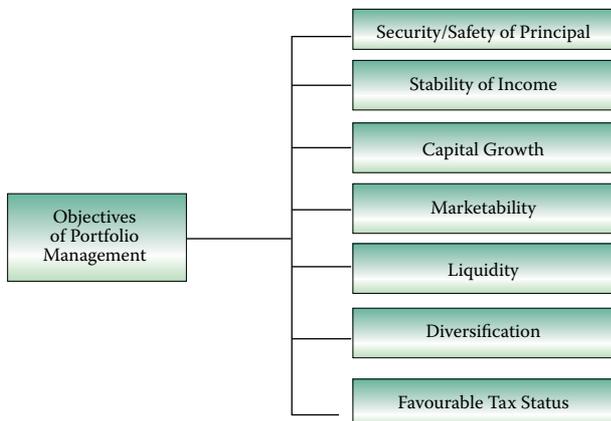
Introduction

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.

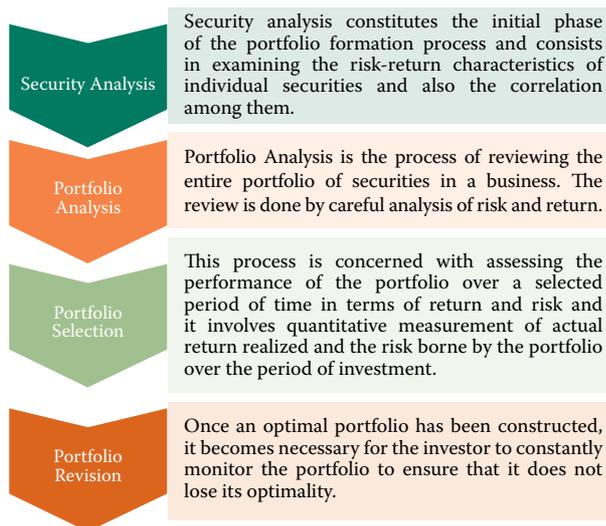
Activities in Portfolio Management

- 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



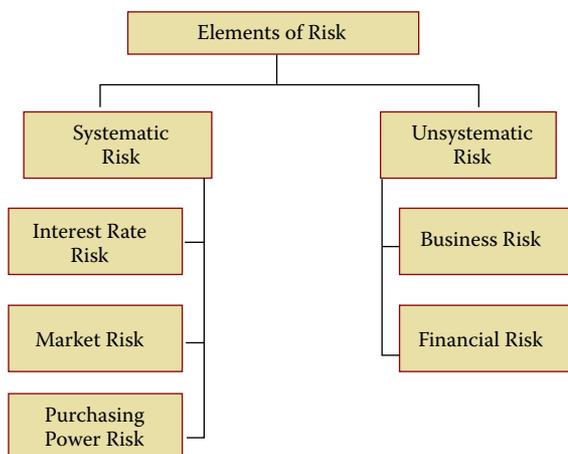
Portfolio Evaluation

<p>Sharpe Ratio - Measures the Risk Premium per unit of Total Risk for a security or a portfolio of securities.</p> <p>Formula $\frac{R_i - R_f}{\sigma_i}$</p> <p>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</p>	<p>Treynor Ratio - Measures the Risk Premium per unit of Systematic Risk (β) for a security or a portfolio of securities.</p> <p>Formula $\frac{R_i - R_f}{\beta_i}$</p> <p>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)</p>	<p>Jensen Alpha - 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.</p>
---	---	--

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.

$$\beta = \frac{n \sum X \sum Y - (\sum X)(\sum Y)}{n \sum X^2 - (\sum X)^2}$$

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).

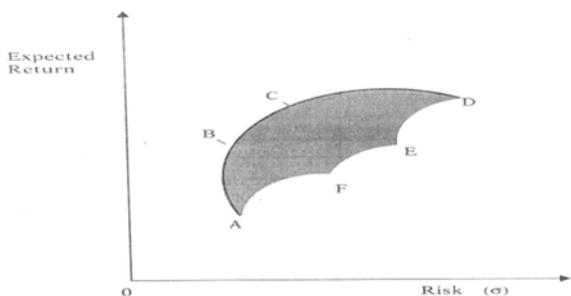


Fig. Markowitz Efficient Frontier

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

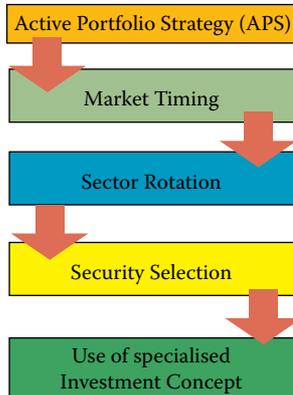
William Sharpe has developed a simplified variant of Markowitz model that reduces substantially its data and computational requirements.

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.

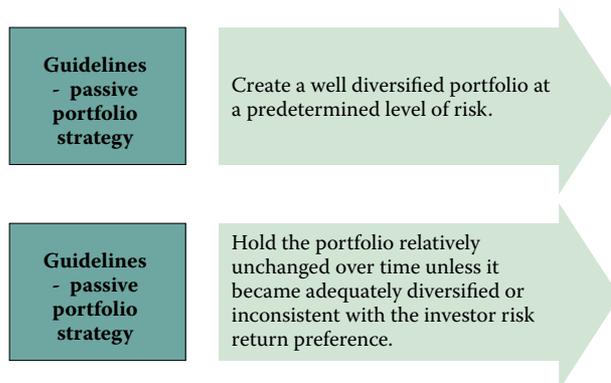
Sharpe's Optimal Portfolio - This model is based on desirability of an investor for excess return of risk free rate of return to beta.

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:



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:

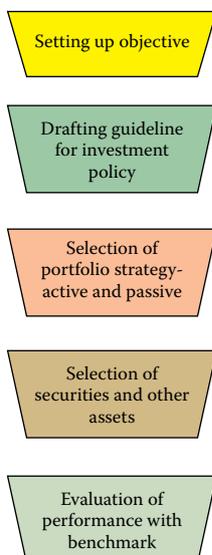
Integrated Asset Allocation	Under this strategy, capital market conditions and investor objectives and constraints are examined and the allocation that best serves the investor's needs while incorporating the capital market forecast is determined.
Strategic Asset Allocation	Under this strategy, optimal 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:

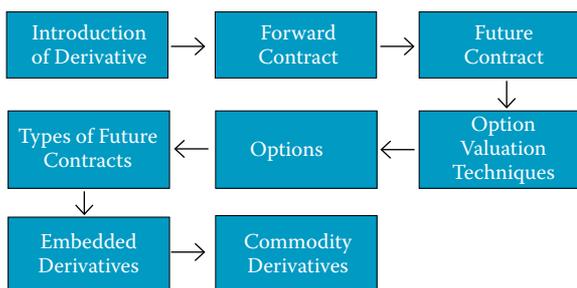
Mezzanine Finance - It is a blend or hybrid of long term debt and equity share.

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.

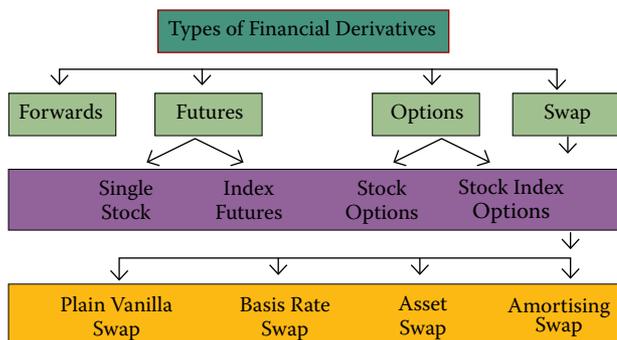
CHAPTER 9 : DERIVATIVES

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.

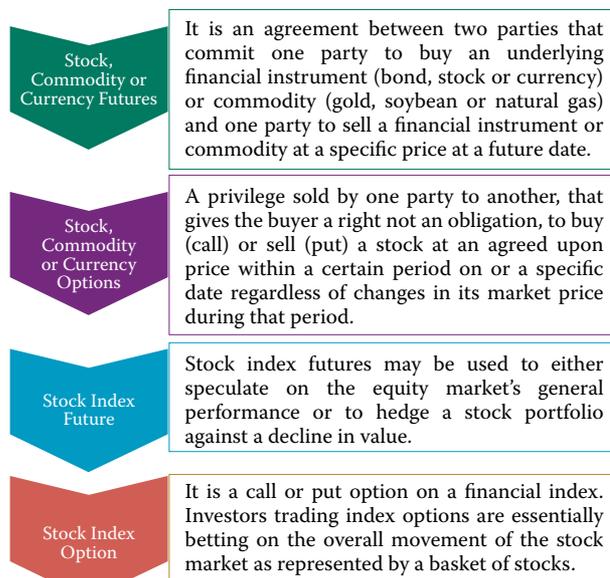
The various kinds of stock options include Put and Call options, which may be purchased in anticipation of changes in stock prices, as a means of speculation or hedging.

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.

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

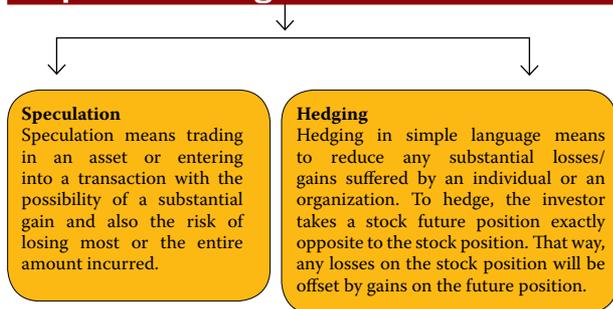
In a normal market, the spot price is less than the futures price (which includes the full cost-of-carry) and accordingly the basis would be negative. Such a market, in which the basis is decided solely by the cost-of-carry is known as a Contango market.

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.

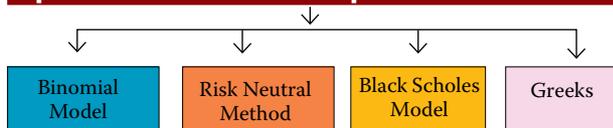
Basis will approach zero towards the expiry of the contract, i.e., the spot and futures prices converge as the date of expiry of the contract approaches. The process of the basis approaching zero is called Convergence.

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

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)

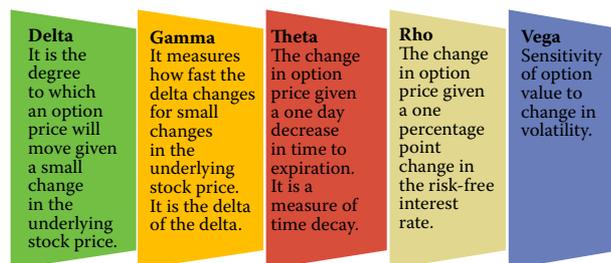
The formula for calculating the theoretical option price (OP) is as follows:

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

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

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.



Delta
It is the degree to which an option price will move given a small change in the underlying stock price.

Gamma
It measures how fast the delta changes for small changes in the underlying stock price. It is the delta of the delta.

Theta
The change in option price given a one day decrease in time to expiration. It is a measure of time decay.

Rho
The change in option price given a one percentage point change in the risk-free interest rate.

Vega
Sensitivity of option value to change in volatility.

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.

Durability and storability	The commodity derivatives market is an integral part of this storage scenario because it provides a hedge against price risk for the carrier of stocks.
Homogeneous	The commodity derivatives contract corresponds with the commodity traded in the cash market. This allows for actual delivery in the commodity derivatives market.
Fluctuating Price	The third attribute, a fluctuating price, is of great importance since firms will feel little incentive to insure themselves against price risk if price changes are small.
Breaking in an existing pattern of forward trading	The last crucial attribute, breakdowns in an existing pattern of forward trading, indicates that cash market risk will have to be present for a commodity derivatives market to come into existence.

Embedded derivative

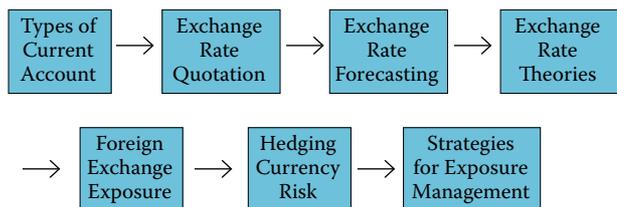
Embedded derivative is a derivative instrument that is embedded in another contract - the host contract. The host contract might be a debt or equity instrument, a lease, an insurance contract or a sale or purchase contract.

Derivatives require being marked-to-market through the income statement, other than qualifying hedging instruments.

This requirement on embedded derivatives are designed to ensure that mark-to-market through the income statement cannot be avoided by including - embedding - a derivative in another contract or financial instrument that is not marked-to-market through the income statement.

CHAPTER 10: FOREIGN EXCHANGE EXPOSURE AND RISK MANAGEMENT

Chapter Overview



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)

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.

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

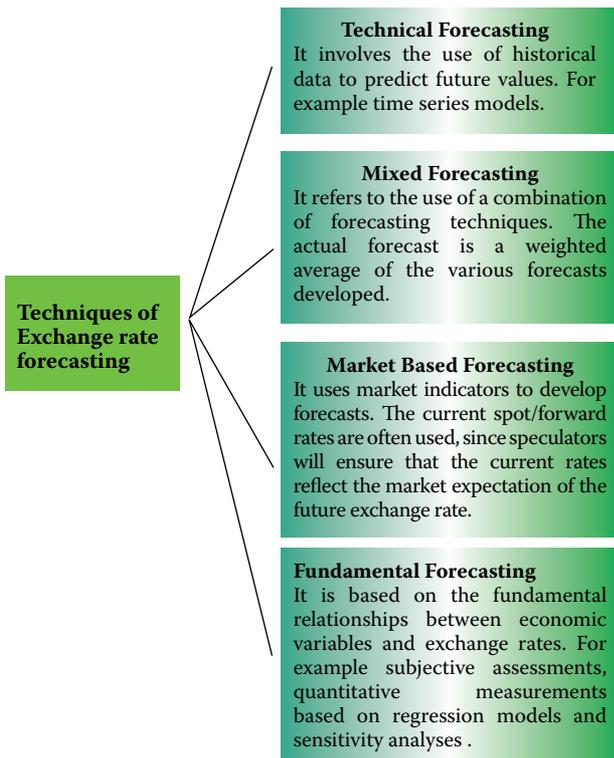
Offer is the rate at which he is willing to sell another currency.

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

STRATEGIC FINANCIAL MANAGEMENT ||

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.



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)

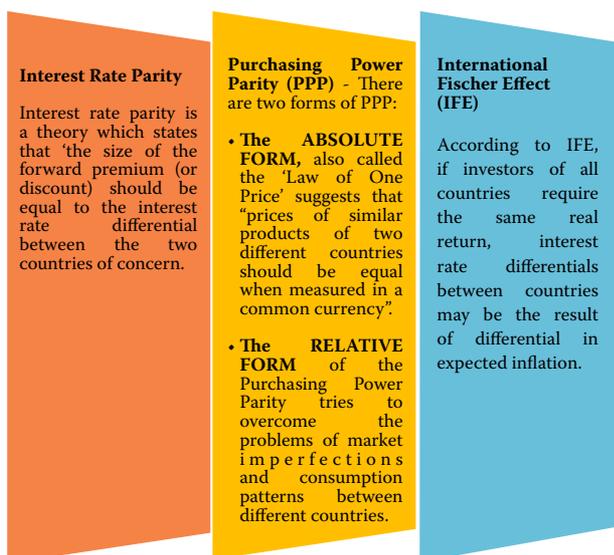
According to this theory, ‘nominal risk-free interest rates contain a real rate of return and anticipated inflation’. This means if investors of all countries require the same real return, interest rate differentials between countries may be the result of differential in expected inflation.

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.



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.

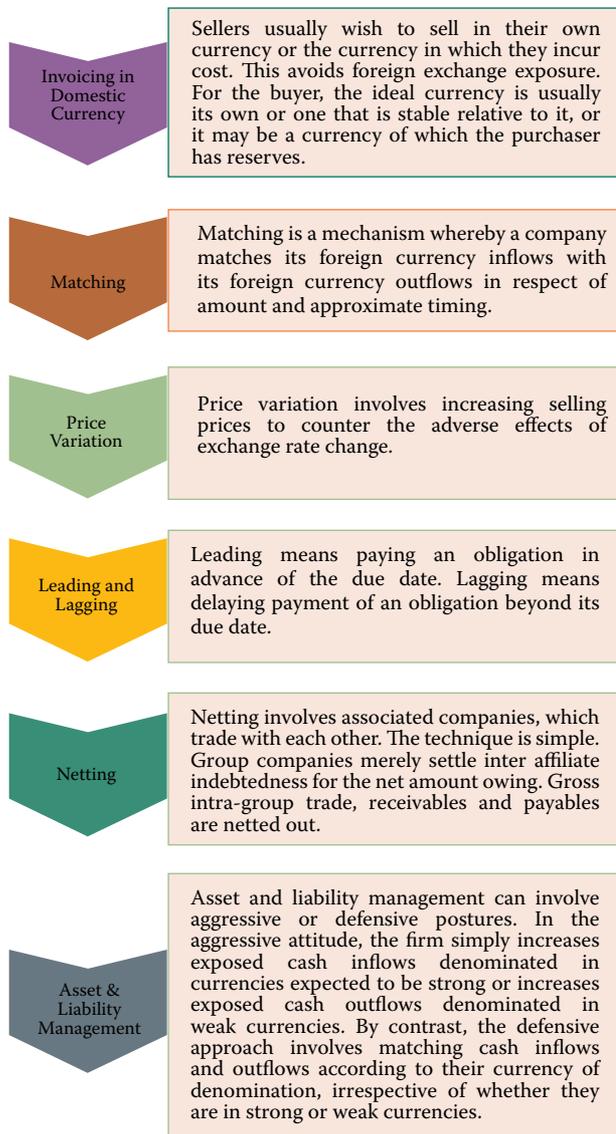
Economic Exposure

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.

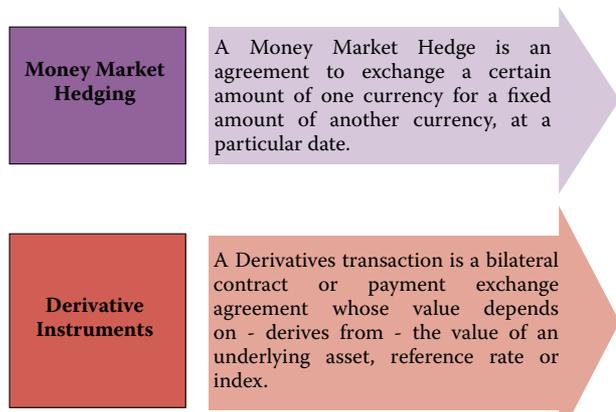
Hedging Currency Risk

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



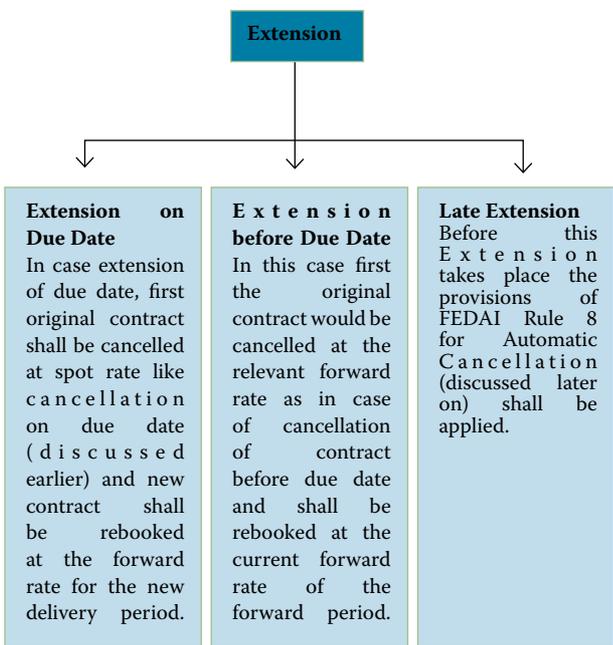
External Techniques



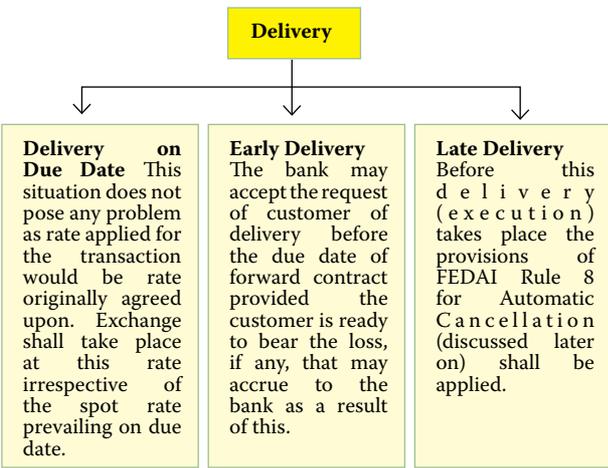
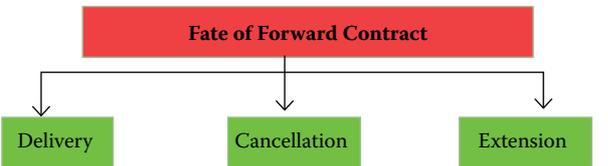
STRATEGIC FINANCIAL MANAGEMENT

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

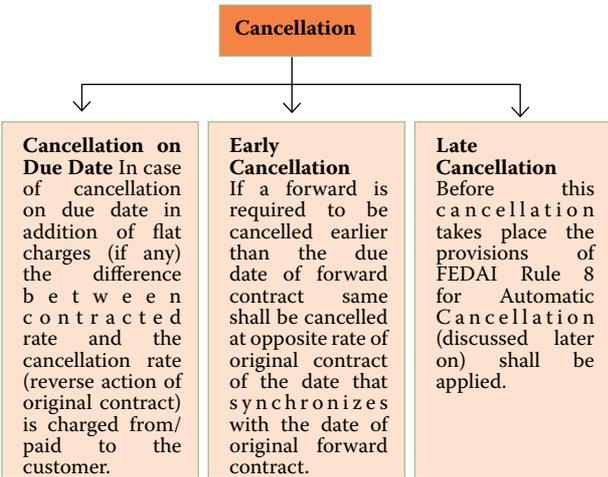


Automatic Cancellation in case of Forward Contract

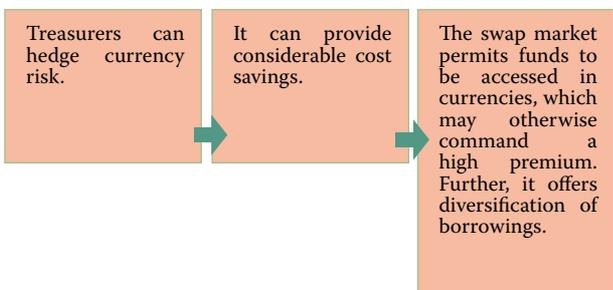
As per FEDAI Rule 8, a forward contract which remains overdue without any instructions from the customers on or before due date shall stand automatically cancelled on 15th day from the date of maturity. Though, customer is liable to pay the exchange difference arising therefrom but not entitled for the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

Swaps

STAGES OF CURRENCY SWAPS



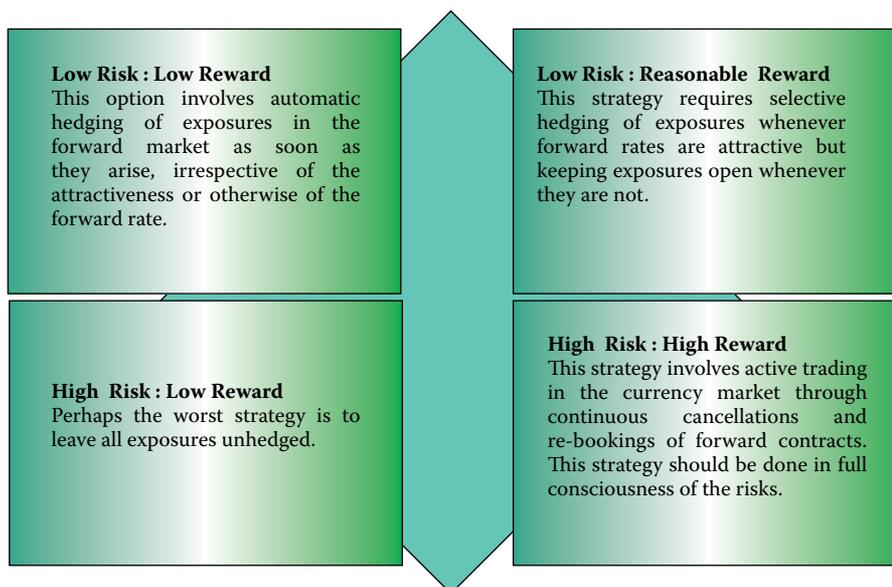
Benefits of Currency Swaps



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.



Attend Student Conferences across the Country

The Board of Studies has planned the following Conferences for CA Students as on date For August, 2018-2019

S. No.	Branch	Nomenclature of the Programme	Approved Dates
1	Trichur	CA Students Conference	3-4 August, 2018
2	Jalgaon	CA Students Conference	12-13 August, 2018
3	Nashik	CA Students Conference	11-12 August, 2018
4	Hubli	CA Students Conference	18-19 August, 2018
5	Surat	CA Students Conference	31 Aug-1 Sep, 2018

Students Eligible to attend the Students Conference: Students who have registered as IPCC/Intermediate Students/ Students who are pursuing their Articleship training/ Students who have completed their Practical Training but could not qualify their final examinations may attend the conference till next one year from the date of completion of Practical Training. (CPT Students and Students who have completed one year beyond their Articleship training will not be eligible to register for these Conferences)

It may however be noted that during April, 2018 - March, 2019, the students can be Paper Presenters for max. 2 Students Conferences. Best paper presenters (overall category) of National Conference can be permitted to present technical papers in International CA Students Conference where the limit of two programmes per year will not be applicable.

CHAPTER 12 – INTEREST RATE RISK MANAGEMENT

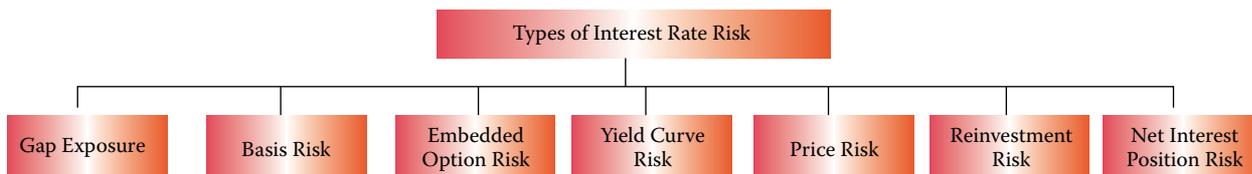
How interest rate is determined

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

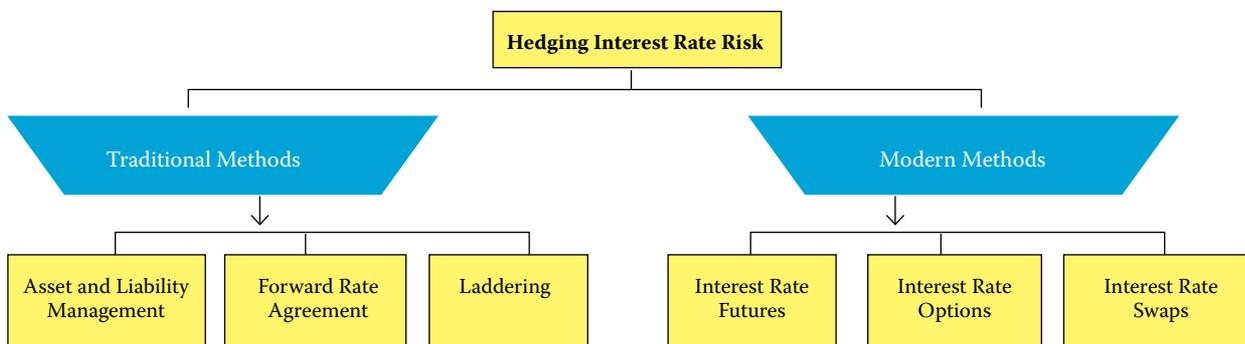
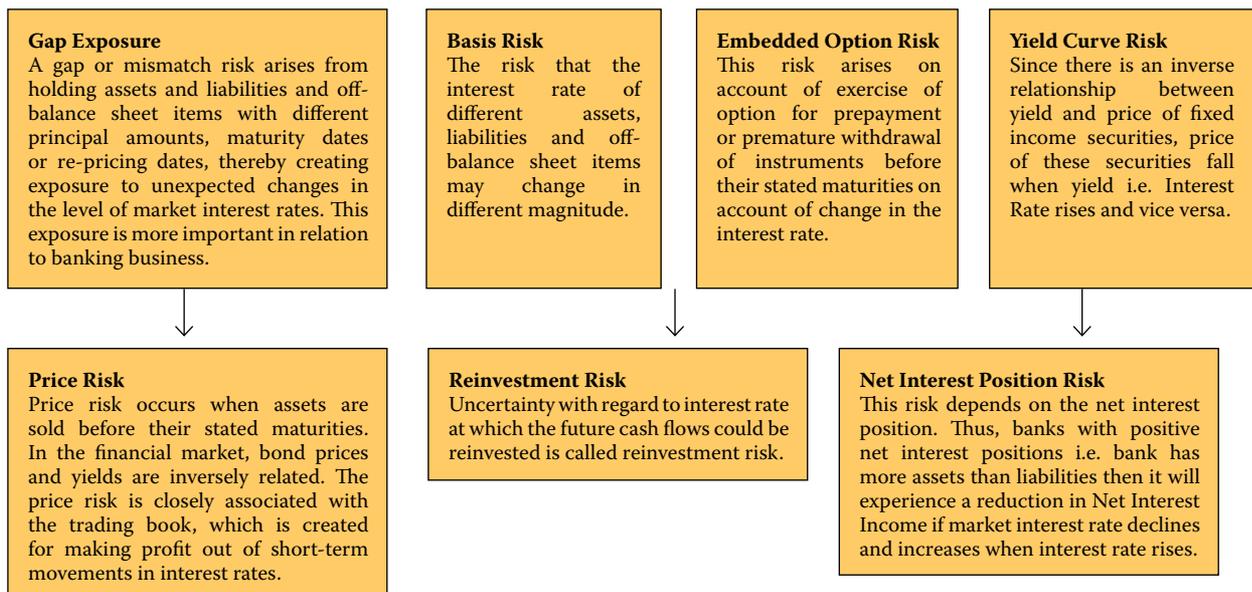
- (a) Supply and Demand: Demand/supply of money- When economic growth is high, demand for money increases, pushing the interest rates up and vice versa.
- (b) Inflation - The higher the inflation rate, the more interest rates are likely to rise.
- (c) Government- Government is the biggest borrower. The 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



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.

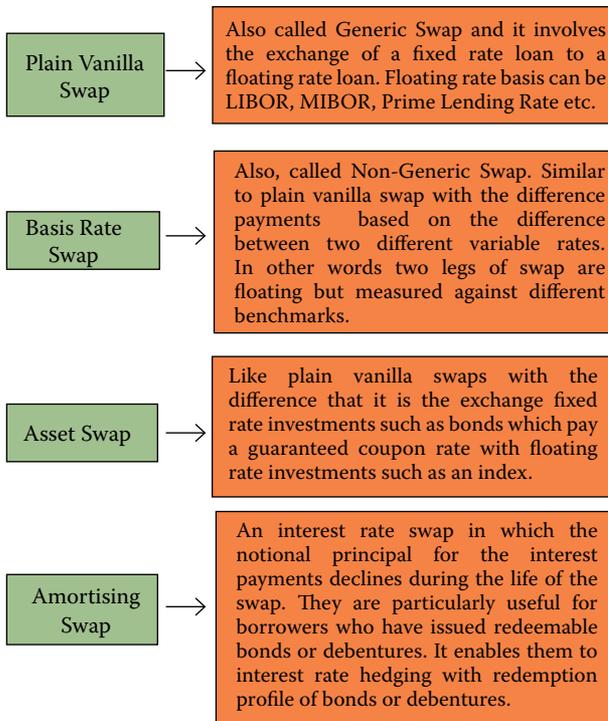
❖ Interest Rate Collars

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

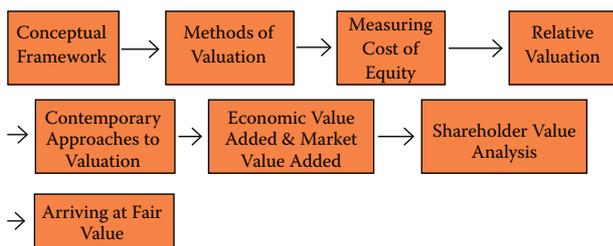
An interest rate swaption is simply an option on an interest rate swap. It gives the holder the right but not the obligation to enter into an interest rate swap at a specific date in the future, at a particular fixed rate and for a specified term.

→ **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 13: CORPORATE VALUATION

Chapter Overview

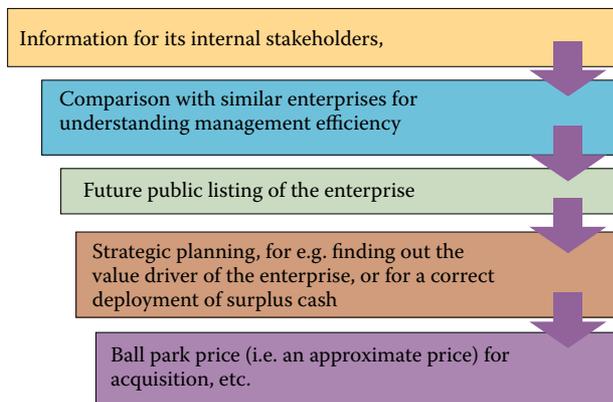


Conceptual Framework of Corporate Valuation

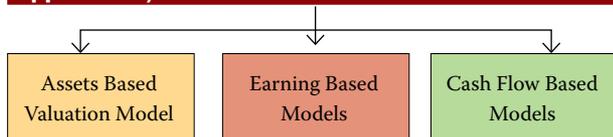
Corporate valuation tells us about the worth of a company. There are various ratios, tools and methods which are employed by financial analysts to calculate a corporations' worth. And, it helps in knowing whether the stock is undervalued or overvalued. Knowing this is very important because it is useful in making mergers and acquisition decision. It also helps in gauging out whether the company is in financial stress or the market is unstable.

Need of a proper assessment of an Enterprise's Value

The need of a proper assessment of an enterprise's value can be typically for:



Approaches/Methods of Valuation



Asset Based Approach

This approach is based on the estimation of Net Worth of a Business which is equivalent to Fixed Assets (including intangible assets) plus Net Working Capital. Book Value of Net Worth is equal to Share Capital plus Reserves and can also be depicted as follows:

Book Value = Total Assets minus Long Term Debt

However, the book value approach will not essentially represent the true price of the assets because:

- Tangible assets may be undervalued or even overvalued
- Intangible assets may no longer be of actual saleable worth in the market
- Long term debt may have a terminal payout that needs to be catered to.

So, in reality, the book value is always adjusted to such factors to assess the 'net realizable value' of the assets and hence is called as the 'Adjusted Book Value' approach.

Earning Based Approach

This approach looks to overcome the drawbacks of using the asset-backed valuation approach by referring to the earning potential and using a multiplier - 'Capitalization Rate'. Earnings can best be depicted by EBITDA (Earnings before interest, taxes, depreciation and amortization), and capitalization rate will be computed either using the CAPM or as multiples approach.

Cash Flow Based Approach

As opposed to the asset based and income based approaches, the cash flow approach takes into account the quantum of free cash that is available in future periods, and discounting the same appropriately to match to the flow's risk.

There are essentially five steps in performing DCF based valuation:

- Arriving at the 'Free Cash Flow'
- 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 key requirements for Valuation is Cost of Equity. Although Cost of Equity can be computed on the basis of Dividend but some of the other approaches taking into consideration the risk involved are as follows:

Capital Assets Pricing Model (CAPM)

The CAPM is represented by the below formula:

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

Where R = expected rate of return or Cost of Equity

R_f = risk free rate of return

β = Beta value of the stock

R_m = market rate of return

Arbitrage Pricing Theory Model (APT)

While CAPM takes into consideration premium for single risk, the APT is a multi-factor model having a whole set of Beta Values – one for each factor. Further, it 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 the macro – economic factors and represented by following formula:

$$R = R_f + \beta_1(RP_1) + \beta_2(RP_2) + \dots + \beta_n(RP_n)$$

Where R = expected rate of return or Cost of Equity.

R_f = risk free rate of return.

β_j = Measures of sensitivity of the security to each of the various factors.

RP_n = Average risk premium for each of the various factors.

R_m = market rate of return.

Estimating Beta and Valuation of Unlisted Companies

While the Betas of listed companies are easily available the biggest challenge is faced in calculation of 'beta' for the private and unlisted firms and hence problems are faced in valuation of these firms. Through the use of Industry Beta or Beta of similar type listed companies (called Proxy Beta), the Beta of privately held enterprise can be arrived at and then Cost of Equity. So, the various steps involved in estimating beta and valuation of unlisted companies are as follows:

Step I: Take the Proxy Beta and convert it into Unlevered Beta to remove the impact of debt by using the formula:

$$\text{Unlevered beta} = \text{beta} / 1 + (1 - \text{tax rate}) \times (\text{debt} / \text{equity})$$

Step II: Determine the correct earnings by making adjustment for gaps in accounting policies and accounting estimates.

Step IV: Calculate the Weighted Average Cost of Capital taking into consideration the Debts of the company.

Step III: Find out the Cost of equity using the CAPM.

Step VI: The future cash flows of will be discounted using the WACC. In case there are two stages of Growth expected in the expected Cash Flows then Terminal Value (TV) of the firm shall also be calculated.

Step V: Since this is a private company, the owners will demand a return towards 'goodwill'. However, in some cases, the acquisition price may include sweeteners for the erstwhile, which will then exclude the need to perform this step.

Step VII: The sum of the PV of the above values will be the value of the firm.

Relative Valuation

Above mentioned three approaches that we saw to arriving at the value of an enterprise viz. the asset based, the earnings based, and the cash flow based are for arriving at the 'Intrinsic Value' of the firm or an enterprise.

Relative Valuation is the method to arrive at a 'relative' value using a 'comparative' analysis to its peers or similar enterprises. Also known as 'Valuation by Multiples' since it uses financial ratios to derive at the desired metric (referred to as the 'Multiple') and then compares the same to that of comparable firms i.e. ones having similar asset and risk dispositions and assumed to continue to do so over the comparison period.

In the process, there may be extrapolations set to the desired range to achieve the target set. Hence overall following steps are involved –

1. Find out the 'drivers' that will be the best representative for deriving at the multiple
2. Determine the results based on the chosen driver(s) through financial ratios
3. Find out the comparable firms, and perform the comparative analysis, and,
4. Iterate the value of the firm obtained to smoothen out the deviations.

Other approaches to Value Measurement



Brief description of the above mentioned approaches to Value Measurement

Contemporary Approaches to Valuation: It is worth noting here that some of the traditional methods used in valuation have been borne out of the peculiarities of certain industries. For example an internet or app company would have virtually zero fixed assets – but a robust online presence and a huge brand recall value. This would give rise to a new method of valuation – price per page visited. Or an online play store can be valued now using 'price per subscriber'. Accordingly for this type of companies contemporary approach to valuation are used.

Economic Value Added: 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. 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.

Market Value Added: The 'MVA' (Market Value Added) would simply be the current market value of the firm minus invested capital. The MVA is also an alternative way to gauge performance efficiencies of an enterprise, albeit from a market capitalization point of view, the logic being that the market will discount the efforts taken by the management fairly.

Shareholder Value Analysis (SVA)

SVA take into its foray certain 'drivers' that can expand the horizon of value creation. The key drivers considered are of 'earnings potential in terms of sales, investment opportunities, and cost of incremental capital. The following are the steps involved in SVA computation:

- Arrive at the Future Cash Flows (FCFs) by using a judicious mix of the 'value drivers'
- Discount these FCFs using the WACC
- Add the terminal value to the present values computed in step (b)
- Add the market value of non-core assets
- Reduce the value of debt from the result in step (d) to arrive at value of equity.

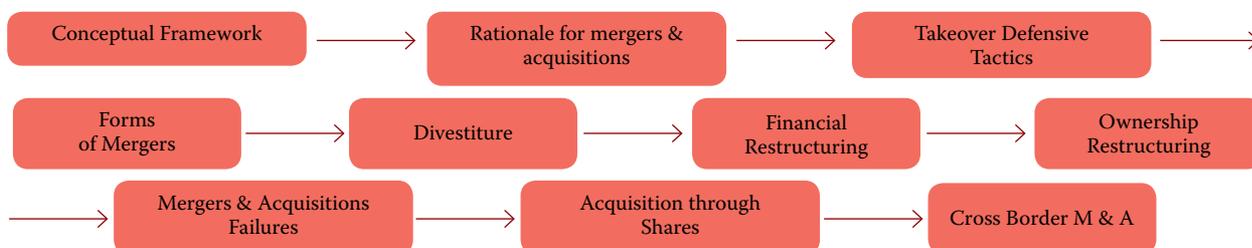
Arriving at Fair Value

Different stakeholders have distinct perspective to the concept of 'Fair Value'. While an accountant's perspective envisages a transaction to be measured at the arm's length, for a financial analyst it would be akin to the present value of an entity in cash terms, and for a speculative investor, the term would represent the arbitrage opportunities that open up among similar entities having dissimilar value numbers put to it.

Hence arriving at Fair Value of a firm or share to some extent is subject and depends upon the perspective of the user of Valuation Report.

CHAPTER 14: MERGERS, ACQUISITIONS AND CORPORATE RESTRUCTURING

Chapter Overview



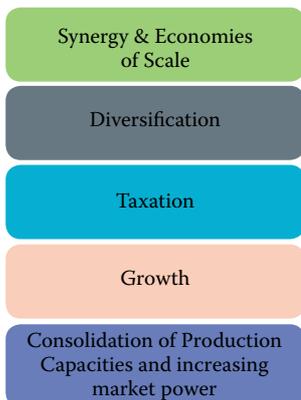
Conceptual Framework

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'.

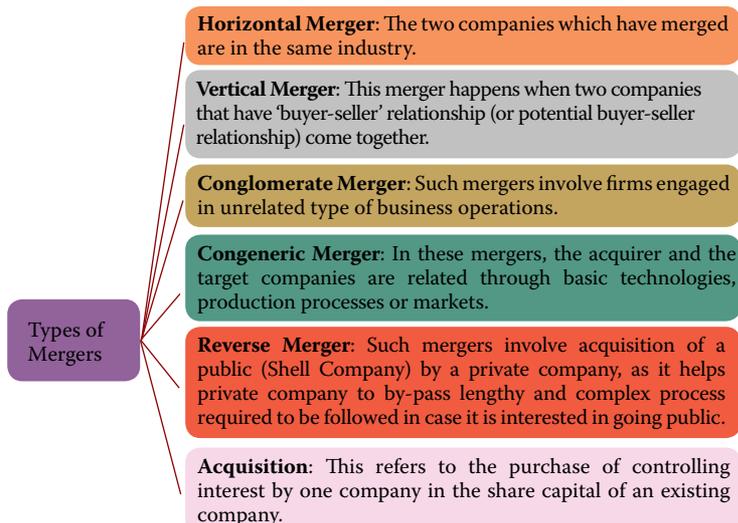
Restructuring usually involves major organizational changes such as shift in corporate strategies. Restructuring can be internally in the form of new investments in plant and machinery, Research and Development of products and processes, hiving off of non-core businesses, divestment, sell-offs, de-merger 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)



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.

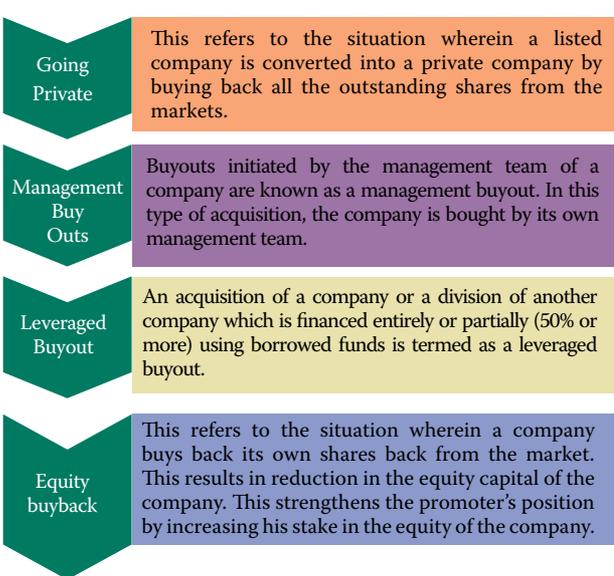
Financial Restructuring

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.

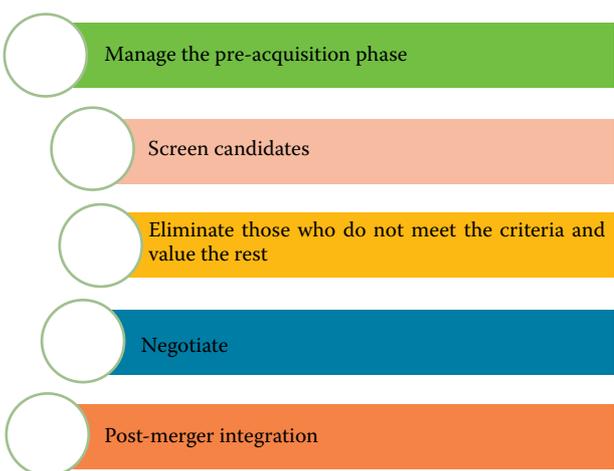
It may be said that financial restructuring (also known as internal re-construction) is aimed at reducing the debt/payment burden of the corporate firm. This results into:

- (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.

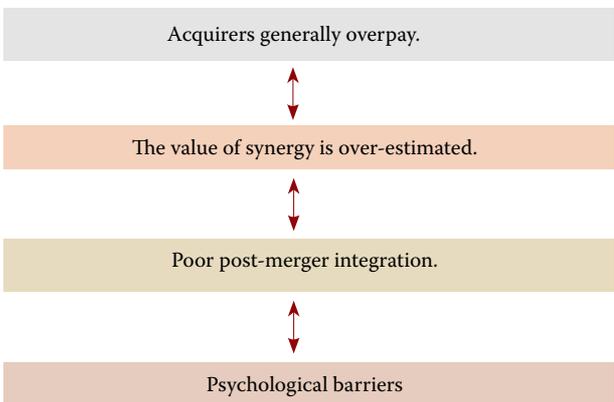
Ownership Restructuring



Steps in a Successful Merger and Acquisitions

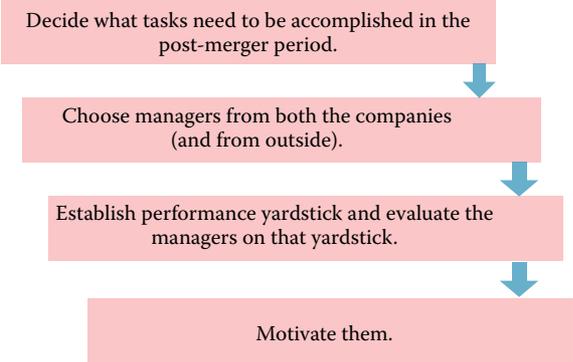


Reasons for Merger Failures



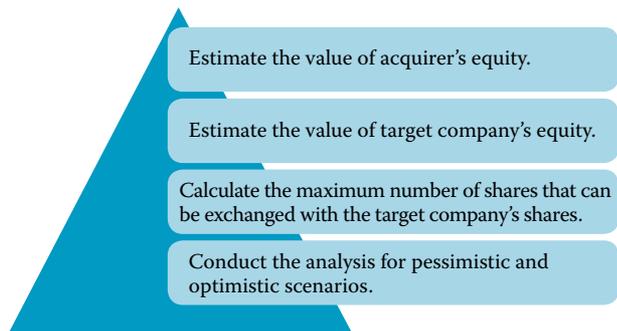
STRATEGIC FINANCIAL MANAGEMENT ||

Strategies to Make a Merger Successful



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:



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:



CROSSWORD SOLUTION JULY 2018

1C	2O	3N		4O	5T	6C		7B		8P	9E	R	10T
11H	I	T		12P	R	O	D	U	13C	E	R		R
14A	L	T		15E	I	N		16G	O	N	E		A
T				17C	A	S	H		V		18C	X	I
	19U	S	P		20L	T		21D	E	T	T	O	L
22U	P					23R	24O	E					E
S		25P	26R	27E	S	U	M	P	T	I	28V	29E	
30H	I	R	E	S		31C	R	O	S	S	A	L	32L
E		33I	P	O		T		S			34C	I	I
R		35C	O	P		36I	37N	I	T	I	A	T	E
38S	H	E			39C	O	S	T		40A	T	E	
			41N	O		42N	E	S	T		E		



IMPORTANT ANNOUNCEMENT

25th July, 2018

No.13-CA (EXAM)/CPT/December/2018: In pursuance of Regulation 22 of the Chartered Accountants Regulations, 1988, the Council of the Institute of Chartered Accountants of India is pleased to announce that the **Common Proficiency Test** will be held on Sunday, **16th December, 2018** in two sessions as below,

at the following centres provided that sufficient number of candidates offer themselves to appear from each centre.

[This Common Proficiency Test will be conducted as per provisions of Regulation 25 D (3) of the Chartered Accountants Regulations, 1988.]

First Session (i.e. Morning Session)	10.30 AM to 12.30 PM (IST) Section - A Fundamentals of Accounting Section - B Mercantile Laws
Second Session (i.e. Afternoon Session)	2.00 PM to 4.00 PM (IST) Section - C General Economics Section - D Quantitative Aptitude

PLACES OF EXAMINATION CENTRES IN INDIA:

1	Agra	2	Ahmedabad	3	Ahmednagar
4	Ajmer	5	Akola	6	Alappuzha
7	Aligarh	8	Allahabad	9	Alwar
10	Ambala	11	Ambikapur (Chhattisgarh)	12	Amravati
13	Amritsar	14	Anand	15	Anantapur
16	Asansol	17	AURANGABAD	18	Badlapur
19	Balotra	20	BANSWARA	21	Bareilly
22	Bathinda	23	BEAWAR	24	Belgaum
25	Bellary	26	BENGALURU	27	Berhampore
28	Bhagalpur	29	BHARATPUR	30	Bharuch
31	Bhavnagar	32	Bhilwara	33	Bhiwandi
34	Bhiwani	35	Bhopal	36	Bhubaneswar
37	Bhuj	38	Bikaner	39	Bilaspur
40	Bundi	41	Burhanpur	42	Chandigarh
43	Chandrapur	44	Chennai	45	Chhindwara
46	Chittorgarh	47	Churu	48	Coimbatore
49	Cuttack	50	Dehradun	51	Delhi / New Delhi
52	Dhanbad	53	Dhule	54	Durg
55	Durgapur	56	Eluru	57	Ernakulam
58	Erode	59	Faridabad	60	Fatehabad
61	Firozabad	62	Gandhidham	63	Gandhinagar
64	Ghaziabad	65	Gondia	66	Gorakhpur
67	Guntur	68	Gurgaon	69	Guwahati
70	Gwalior	71	Haldwani	72	Haridwar
73	Hisar	74	Hubli	75	Hyderabad
76	Ichalkaranji	77	Indore	78	Jabalpur
79	Jaipur	80	Jalandhar	81	Jalgaon
82	Jalna	83	Jammu	84	Jamnagar
85	Jamshedpur	86	Jhansi	87	Jhunjhunu
88	Jodhpur	89	Junagadh	90	Kaithal

EXAMINATION ||

91	Kakinada	92	Kalaburgi (Gulbarga)	93	Kannur
94	Kanpur	95	Karimnagar	96	Karnal
97	Kishangarh	98	Kolhapur	99	Kolkata
100	Kollam	101	Kota	102	Kottayam
103	Kozhikode	104	Kumbakonam	105	Kurnool
106	Latur	107	Lucknow	108	Ludhiana
109	Madurai	110	Malappuram	111	Mandsaur
112	Mangalore	113	Mapusa (Goa)	114	Margao (Goa)
115	Mathura	116	Meerut	117	Moradabad
118	Mumbai	119	Muzaffarnagar	120	Muzaffarpur
121	Mysore	122	Nagpur	123	Nanded
124	Nashik	125	Navi Mumbai	126	Navsari
127	Neemuch	128	Nellore	129	Nizamabad
130	Noida	131	Ongole	132	Palakkad
133	Palghar	134	Pali Marwar	135	Panipat
136	Panvel	137	Parbhani	138	Patiala
139	Patna	140	Pimpri-Chinchwad	141	Pondicherry
142	Port Blair	143	PUNE	144	Raigarh (Chhattisgarh)
145	Raipur	146	Rajamahendravaram	147	Rajkot
148	Ranchi	149	Ratlam	150	Ratnagiri
151	Rewa	152	Rewari	153	Rohtak
154	Rourkela	155	Saharanpur	156	Salem
157	Sambalpur	158	Sangli	159	Sangrur
160	Satara	161	Satna	162	Shimla
163	Shimoga	164	Sikar	165	Siliguri
166	Sirohi	167	Sirsa	168	Sivakasi
169	Solapur	170	Sonepat	171	Sri Ganganagar
172	Srinagar	173	Surat	174	Surendranagar
175	Thane	176	Thiruvananthapuram	177	Thrissur
178	Tinsukia	179	Tiruchirapalli	180	Tirunelveli
181	Tirupati	182	Tirupur	183	Tuticorin
184	Udaipur	185	Udupi	186	Ujjain
187	Vadodara	188	Vapi	189	Varanasi
190	Vasai	191	Vellore	192	Vijayawada
193	Visakhapatnam	194	Warangal	195	Yamuna Nagar
196	Yavatmal				

PLACES OF EXAMINATION CENTRES OVERSEAS:

(1) Abu Dhabi (2) Doha (3) Dubai (4) Kathmandu
(5) Muscat

The Council reserves the right to withdraw any centre at any stage without assigning any reason.

An application for admission to Common Proficiency Test (CPT) is required to apply on-line at <http://icaiaexam.icaia.org> from 4th October, 2018 to 25th October, 2018 (without late fees) and upto 1st November, 2018 (with Late Fees of 600/- for Indian & Kathmandu Centres and \$10 for Foreign Centres). The exam fee is required to be submitted on-line by using either VISA or MASTER Credit / Debit Card / Rupay Card / Net Banking.

The fees payable for the Common Proficiency Test is ₹ 1000/- for centres in India, ₹ 1700/- for centres in Kathmandu

(Nepal) and \$ 300/- for centres in Abu Dhabi, Doha, Dubai & Muscat

The aforesaid Common Proficiency Test (CPT) is open only to students registered with the Institute of Chartered Accountants of India for the Common Proficiency Course and fulfill the requisite eligibility conditions.

QUESTION PAPER BOOKLET LANGUAGE:

Common Proficiency Test is an objective type multiple choice questions based examination. Candidates will be allowed to opt for English / Hindi medium Question Paper Booklet for answering the questions. Detailed information will be found given in the Information brochure hosted on the aforementioned website.

(B. MURALIDHARAN)
JOINT SECRETARY (EXAMINATIONS)

Residential Programme on Professional Skills Development at Centre of Excellence, Hyderabad and Jaipur

The Board of Studies is pleased to announce the next two batches of ICAI's 'Four Weeks Residential Programme' on Professional Skills Development as below:

Venue	Participant	Fees	Date	Online Registration
Centre of Excellence (CoE), Hyderabad	Women	₹ 48,000/-	25 th November, 2018 to 22 nd December, 2018	https://resource.cdn.icaai.org/50872bos40499main.pdf
Centre of Excellence (CoE), Jaipur	Men	₹ 48,000/-	26 th November, 2018 to 23 rd December, 2018	https://resource.cdn.icaai.org/50874bos40500main.pdf

This programme aims to help the Chartered Accountancy students and newly qualified Chartered Accountants in imbibing the professional skills required for effective functioning in business organisations and the profession. The Programme environment focuses on development of communication skills, personal qualities, interpersonal and teamwork skills, problem solving skills, leadership skills etc.

Salient Features of the Programme:

- ♣ Emphasis on Soft Skills, Communication Skills and Personality Development.
- ♣ Exemption from payment of Fees to Top 10 Rank holders.
- ♣ Part of Practical Training.
- ♣ No need for Separate Management and Communication Skills (MCS) forming part of Advanced Integrated Course on Information Technology and Soft Skills (AICITSS).
- ♣ Special Session on Group Discussion & Interview.
- ♣ Preparation of Project and Presentation Skills.
- ♣ Building Team Spirit.

Students who have passed Chartered Accountancy IPCC/ PCC/ PE- II examination and pursuing last year of Practical training or completed Practical training are invited to join the course for this batch. Recently qualified Chartered Accountants are also welcome to join the course.

Student's opinion

CoE is a place to learn from best of speakers who fill the session with loads of earnings and bundle of creativity. It is a great place to learn from students and professional with diverse background. A must-do course for all CA Students.

- **CA. Kevin Dharmesh Gandhi**
from Western Region
(Participant of 37th batch)

It was an amazing experience and the faculties were exceptionally good. It bridges the gap between a CA students and a professional. It influences us to be creative and think out of the box.

- **Ms. Parnika Poddar**
from Eastern Region
(Participant of 40th batch)

For online registration, you can proceed with 'Board of Studies Announcements' https://www.icaai.org/new_category.html?c_id=345 under the 'Students' tab on the Home Page of the ICAI's website www.icaai.org. For any query, you can write us at ashokdua@icaai.in or may also contact us on 0120-3045935 and Mobile No. 9868879548.

Director, Board of Studies

ATTN: ICAI-CAMPUS (AUGUST-SEPTEMBER, 2018) ASPIRANTS

Completion of MCS is mandatory for taking part in ICAI Campus Placement Programme, meant for Newly Qualified CAs. Accordingly, to cater to the needs of the Students appearing for the Final Examination in May, 2018 but are yet to complete MCS Course, adequate arrangement has been made by the Board of Studies. Aspirants for August-September, 2018 Campus are hereby advised to enroll (through Link- www.icaionlineregistration.org for MCS at any Centre convenient to them and get it completed before the Interview Process begins in the month of August, 2018. For assistance w.r.t. MCS course kindly contact MCS Helpdesk at 0120-3045915 and campus related queries kindly contact at 011- 30110555

Committee for Members in Industry & Business (CMI&B) of ICAI

CA Students Conference - JALGAON

Organized by: Board of Studies, ICAI

Hosted by: Jalgaon Branch of WIRC & WICASA of ICAI

THEME: KNOWLEDGE & TRAINING WITH ETHICAL QUOTIENT – PATHWAY TO PROFESSIONAL EXCELLENCE

12TH & 13TH AUGUST, 2018

**SENATE HALL, NORTH
MAHARASHTRA UNIVERSITY,
JALGAON-425001.**

DAY-1

8.00 am to 9.00 am	Registration
9.00 am to 10.00 am	Inaugural Session
10.00 am to 11.00 am	Special Session : I: Topic- BOS Presentation and Interaction with Board of Studies.
11.00 am to 12.30 pm	Technical Session: I: Topic: Taxation- Tax Benefit for Start-Up in India; Overview and Salient Features of ICDS; Taxation of Charitable Institution.
1.30 pm to 2.30 pm	Special Session : II: Topic : Success Stories
2.30 pm to 4.00 pm	Technical Session: II: Topic : Company Law- Recent Amendments in Companies Act 2013; Money Laundering and Benami Transactions; Remuneration of Key Managerial Personnel (Sec 197-200 & Sch V)
4.00 pm to 5.30 pm	Special Session: III: Topic: How to Face CA Examination

DAY-2

10.00 am to 11.30 am	Technical Session: III: Topic : Indirect Taxes- E Way Bill : A Game Changer in GST; Audit Under GST Regime; Composition Scheme under GST
11.30 am to 12.30 pm	Special Session : IV: Topic: Motivational Session on "This Time I Will "
1.30 pm to 3.00 pm	Technical Session : IV: Topic :Information Technology- Audit in Computerised Environment; Use of Technology in CA Profession; Threat of Data Theft & Financial Frauds Through Internet
3.00 pm to 4.30 pm	Technical session : V: Topic:Indian Economy and Current Affairs- NFRA; How Bitcoins and Block chain are disrupting the World; Insolvency and Bankruptcy Code
4.30 pm to 5.30 pm	Valedictory Session

Registration Fee	₹ 500/- Per Student if Registered before 30/07/2018. ₹ 600 /- if Registered after 30/07/18.	Accommodation (if required) @ ₹ 500 /- per student for One Day on Sharing Basis.
Payment Mode	The student has to register & make the payment online on the Portal itself, the link will be http://bosactivities.icai.org/	

CA. Dhinal Ashvinbhai Shah, Chairman, BOS; **CA. Vijay Kumar Gupta**, Vice-Chairman, BOS; **CA. Mangesh Pandurang Kinare**, Central Council Member & Conference Director; **CA. Ajay Jain**, Chairman, Jalgaon Branch of WIRC of ICAI & **CA. Sagar Patni**, Chairman, Jalgaon Branch of WICASA of ICAI, Conference Coordinators.

TOPPERS OF CHARTERED ACCOUNTANTS FOUNDATION EXAMINATION - MAY-2018



SWATI
NEW DELHI
FIRST



AYUSH AGRAWAL
RAIPUR
SECOND



SWALEHA SAJID
HALDWANI
THIRD



The Institute of Chartered Accountants of India (ICAI)

ICAI Commerce Wizard-2018:

A Talent Search Test

Organised By: Career Counseling Group (CCG), ICAI

For Details and Registration please visit the Exclusive Website for ICAI Commerce Wizard, 2018: icaicommercewizard.org

The Commerce Talent Search Test called as Commerce Wizard -2018 is a diagnostic test that measures the concept understanding ability of a student. Unlike regular tests which try only to find out how much a child knows, this test measures how well a student has understood the concepts.

Online Registration

Eligibility: Students appearing in class IX/X/XI/XII & B.Com./BBA/BMS/Allied subjects examination

Registration Fees : ₹100/- upto 31st Oct. 2018

After Due Date : ₹150/- 1st Nov., 2018 to 15th Dec., 2018

The Commerce Wizard will be conducted by means of in two levels i.e. Level I (Online) & Level II (Online/Pen & Pencil test) in English language for Students studying in class IX/X/XI/XII & B.Com./BBA/BMS/Allied Subjects:

Class	No. of Questions	Duration	Subjects	Mode	Negative Marking	Max. Marks	Pattern
IX	100	1 Hr 15 Min	(I) Social Studies (Economics) (II) Mathematics (III) Business Awareness (IV) Aptitude	Online/Pen & Pencil	0.25	100	Objective - type (Multiple Choice) questions
X	100	1 Hr 15 Min	(I) Social Studies (Economics) (II) Mathematics (III) Business Awareness (IV) Aptitude	Online/Pen & Pencil	0.25	100	
XI	100	1 Hr 15 Min	(I) Business Studies (II) Accountancy (III) Economics (IV) Aptitude	Online/Pen & Pencil	0.25	100	
XII	100	1 Hr 15 Min	(I) Business Studies (II) Accountancy (III) Economics (IV) Aptitude	Online/Pen & Pencil	0.25	100	
B.Com./BBA/BMS/ Allied Subjects Examination	100	1 Hr 15 Min	(I) Business Studies (II) Accountancy (III) Economics/ Financial Studies (IV) Aptitude	Online/Pen & Pencil	0.25	100	

Date Timings for the aforesaid test :

Class/Levels of Exam and Date	Level-I (Online test) 16 th December, 2018 (Sunday)	Level-II Test : Online or Pen Pencil Mode in the designated test centre 23 rd December, 2018 (Sunday)
Class IX & Class X	09:30 AM to 10.45 AM	1. 09:30 am. to 10.45 am. for Class IX & Class X 2. 11:45 am. to 1.00 pm. for Class XI 3. 2:00 pm. to 3:15 pm. for Class XII 4. 4:15 pm. to 5:30 pm. for Class B.Com./BBA/BMS/Allied Subjects
Class XI	11.45 AM to 1.00 PM	
Class XII	2.00 PM to 3.15 PM	
Graduation-B.Com./BBA/BMS/Allied Subjects	4.15 PM to 5.30 PM	

Prizes for Participants

Level-I Test

- All participants In Level-1 test will receive a Participation Certificate.

Level-II Test

- 1st Rank holder will be awarded with Rs 1, 00,000/- for Class IX, Class X, Class XI, Class XII & B.Com./BBA/BMS/Allied Subjects Separately, if multiple winners are there, the prize amount will be shared by them. If more than 50 joint rank holders for the same, the awardee will at least awarded with the cash prize of Rs 2,000/-
- 2nd Rank will be awarded with Rs 50,000/-for Class IX, Class X, Class XI Class XII & B.Com./BBA/BMS/Allied Subjects separately, if multiple winners are there, the prize amount will be shared by them. If several joint rank holders for the same are there, the awardee will at least awarded with the cash prize of Rs 1,500/-
- Top 500 consolation prizes will be awarded worth Rs 500/- along with an appreciation certificate for Class IX, Class X, Class XI, Class XII & B.Com./BBA/BMS/Allied Subjects separately
- Participation Certificate will be given to each participant appeared for the Level-II Test.

ICAI Scholarship scheme will also be provided for the wards of Military/Para Military/ Railways Personnel

For further details please visit at: https://www.icaai.org/post.html?post_id=14927

Other Important Dates:

Award Ceremony: Award Ceremony will be held in January/February, 2019 at Delhi NCR.

ICAI/Test Management Committee reserves the right to change in any of the modalities cited above.

Deputy Convener

Career Counseling Group (CCG), ICAI

Convener

Career Counseling Group (CCG), ICAI



For any Query please contact :

Secretary, Career Counselling Group (CCG), The Institute of Chartered Accountants of India

ICAI Bhawan, A-29, Sector 62, Noida (U.P.) - 201309

Telephone (O): 0120-3876871, 886 Email: ccc.events@icaai.in

Live Virtual Classes e-Pathshala



Uniformity - Continuity - Consistency

The Board of Studies of the Institute of Chartered Accountants of India has decided to augment its education delivery mechanism in a big way and conduct Live Virtual Classes for the benefit of the students who are spread across the nation

- Expert faculty members → Tests to review → Low fees → Convenient timings
- Exam focussed approach → Timely resolution of problems
- Smart classes having the state of art technology

Special sessions by experts and renowned faculty

**Classes from: Intermediate - August 06, 2018 & Final - August 16, 2018
(Comprehensive Coverage - Classes will run for about eight months)**

Details at : <https://bit.ly/2LmOmfv>

Online Registration : <https://www.icai.org/bos/vc/>

Queries: virtualclasses@icai.in

Classes available in selected regions and branches of ICAI



The Institute of Chartered Accountants of India
(Set up by an Act of Parliament)



CA Students Conference, Ernakulam: ICAI Past President, CA. Devaraja Reddy M., Central Council Members, CA. G. Sekar, CA. Babu Abraham Kallivayalil, branch Chairman, CA. P. T. Joy, branch SICASA Chairman, CA. Paulose Paul, SIRC Vice Chairman, CA. Jomon K. George and other dignitaries at the inaugural ceremony.



CA Students Conference, Vasai: Immediate Past President, ICAI, CA. Nilesh Vikamsey, branch Chairman, CA. Sumeet Doshi, Vice Chairman, CA. Xavier Rajan, branch WICASA Chairman, CA. Bhanwar Borana and the branch Managing Committee Members and other dignitaries at the inaugural session.



CA Students Conference, Tirupati: ICAI Past President, CA. Devaraja Reddy M. with the students and other dignitaries at the inaugural session.



CA Students Conference, Jaipur: CIRC Chairman, CA. Gyan Chandra Mishra lighting the lamp to inaugurate the Conference in the presence of ICAI Past President, CA. Sunil Goyal, ICAI Central Council Member, CA. Prakash Sharma, branch Chairman, CA. Ankit Jain, CIRC Vice Chairman, CA. Rohit Agarwal, branch CICASA Chairman, CA. Shishir Agarwal and other office bearers.



ICAI President, CA. Naveen N. D. Gupta with the participants of the 57th Batch of the Residential Programme on Professional Skills Development at the Centre of Excellence, Hyderabad.

CROSSWORD - AUGUST 2018

1	2	3	4	5		6		7		8			9
10													
11								12	13		14		
15								16					
				17		18					19		
20	21	22				23				24			
	25		26										
	27				28				29				
		30								31			
32		33			34				35				36
37	38			39				40			41		
	42						43						
	44										45		

ACROSS

- Prospective buyers of a business or corporation
- Ditto
- To explain into intelligible language
- Love and respect (someone) deeply
- Commission on reinsurance ceded is an _____ for an insurance company
- Bog, swamp
- The fiscal year in India starts in _____
- _____ As is the accounting standard adopted by companies in India
- The lowest odd number
- _____ is a computer network that interconnects computers within a limited area such as a residence, school, laboratory, university campus
- Part of a person's mind
- Refund of Govt. Grant is an _____ item
- _____ Friday an American restaurant chain focusing on casual dining
- A distinctive practice, system, or philosophy, typically a political ideology or an artistic movement.
- Hurts
- A nucleic acid present in all living cells.
- _____ is payable by the seller who collects in turn from the buyer and it is provided under section 206C of Income Tax Act, 1961 at the sale of some goods which are specified.
- A preposition
- _____ is the total market value of all final goods and services produced by the factors of production

- _____ highest desert city in the Himalaya.
- A type of indirect tax system launched on 1st July, 2017 by Government of India
- A person who plays a minor part in a large organisation.
- Opposite of come
- By now or then.
- Approximately (Latin)
- Raise (a question or topic) for discussion
- An institution of self government for the rural areas
- _____ is a form of computer data storage that stores data and machine code currently being used

DOWNWARD

- _____ is a formerly used exonym for Thailand,
- _____ This command allows you to nullify the last action you performed in the program in computer
- The Revenue officials.
- Brief, short
- unrefined mineral
- A title of respect used before the name of a man, a god, or a sacred book.
- A fixed periodical payment of any kind
- Roman Numeral of 1601
- A particular branch of study or sphere of activity or interest
- An Indian Citizen who stays abroad for employment/carrying on business or vocation outside India.
- Form of government in which supreme power is restricted to a few

- An anxious awareness of danger
- A method of calculating rate of return
- Assets and liabilities of non-integral foreign operations should be converted at _____ exchange rate.
- Cash advances to customers and the repayment thereof may be reported on _____ basis.
- Latin term for "out of Grace"
- A person related on one's mother's side
- A shade or variety of a colour.
- A Latin phrase that means "for example"
- _____ Ask.
- Plunder
- An individual article or unit
- A means of securely transferring computer files between a local host and a remote host or between two remote hosts
- Roman numeral for 300
- One of the Famous Tourist State of India

If undelivered, please return to: The Institute of Chartered Accountants of India, ICAI Bhawan, Indraprastha Marg, New Delhi-110104