F.A.S.T
first attempt success tutorials

CA Final

Strategic Financial Management

OUTNOTES

UNIQUE STRUCTURED CONCEPT NOTES
ALONG WITH THEORY NOTES

Relevant for Nov- 23 & onwards...

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Meet Adish Jain

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Ex-Morgan Staley & ICICI Securities with 2+ years work-ex in Equity Research

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Taught 4000+ students across courses

His 2 core mantra for students:

- Conceptual Clarity
- Comprehensive Coverage

Adish Jain CA CFA

Hey! Let's connect here...

Adish Jain CA CFA

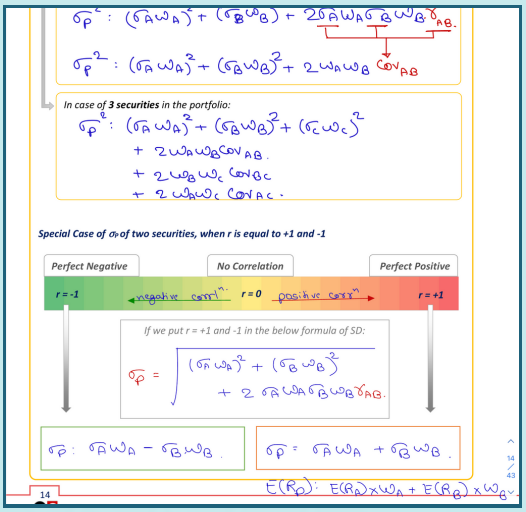
Adish Jain CA CFA

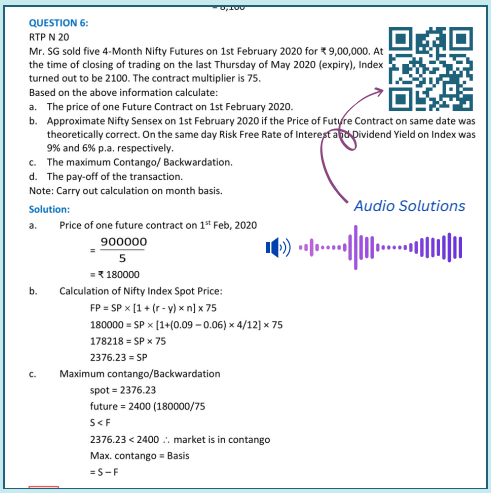
2 Amazing Features

Changing student's experience...

* Month & day counting Rule : eg 71 & 123.
* Rounding off Rules :

SCANNABLE COMPILER





QUESTION 6:

RTP N 20

Mr. SG sold five 4-Month Nifty Futures on 1st February 2020 for ₹ 9,00,000. At the time of closing of trading on the last Thursday of May 2020 (expiry), Index turned out to be 2100. The contract multiplier is 75.

Based on the above information calculate:

a. The price of one Future Contract on 1st February 2020.

b. Approximate Nifty Sensex on 1st February 2020 if the Price of Future Contract on same date was theoretically correct. On the same day Risk Free Rate of Interest and Dividend Yield on Index was 9% and 6% p.a. respectively.

c. The maximum Contango/ Backwardation.

d. The pay-off of the transaction.

Note: Carry out calculation on month basis.

Solution:

a. Price of one future contract on 1st Feb, 2020

$= \frac{900000}{5}$

= ₹ 180000

b. Calculation of Nifty Index Spot Price:

FP = SP × [1 + (r - y) × n] x 75

180000 = SP × [1+(0.09 – 0.06) × 4/12] × 75

178218 = SP × 75

2376.23 = SP

c. Maximum contango/Backwardation

spot = 2376.23

future = 2400 (180000/75

S < F

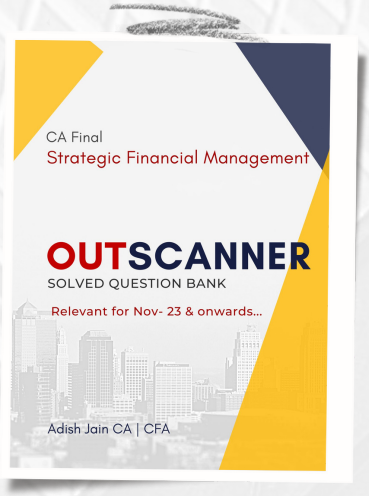
2376.23 < 2400 ∴ market is in contango

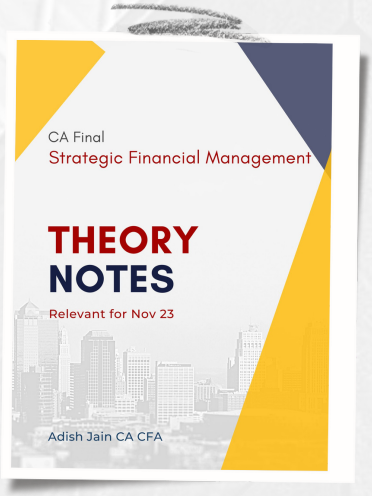
Max. contango = Basis

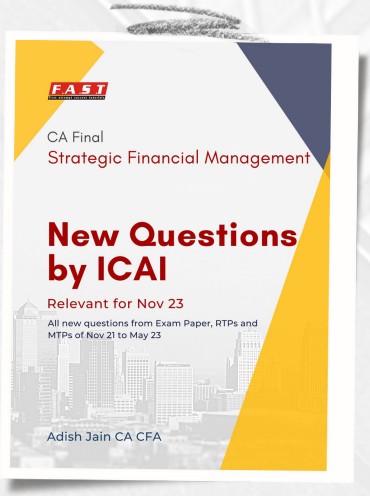
= S – F

Audio Solutions

UNIQUE STRUCTURED CONCEPT NOTES







OutNotes vs. ICAI Chapters

No.	ICAI Chapter Name	OutNotes Chapter Name
1	Financial Policy and Corporate Strategy	Financial Policy and Corporate Strategy
2	Risk Management	Risk Management & Security Analysis
4	Security Analysis	
3	Advanced Capital Budgeting Decisions	Advanced Capital Budgeting Decisions
5	Security Valuation	
	Preference Share Valuation	Fixed Income Securities
	Bond Valuation	
	Money Market Securities	
	Equity Valuation	Equity & Business Valuation
13	Business Valuation	
6	Portfolio Management	Portfolio Management
7	Securitization	Securitization
8	Mutual Funds	Mutual Funds
9	Derivatives Analysis and Valuation	Derivatives & Interest Rate Risk Management
12	Interest Rate Risk Management	
10	Foreign Exchange Exposure and Risk Management	Foreign Exchange & International Financial Management
11	International Financial Management	
14	Mergers, Acquisitions and Corporate Restructuring	Mergers, Acquisitions and Corporate Restructuring
15	Startup Finance	Startup Finance

Table of Content

Important Instructions

before we read this book...

- This book has been creatively designed to help you understand and remember the concepts easily. For this purpose, concepts have been presented in diagrams and charts format. However, for theory topics, answers must be written in simple pointers and paragraph format in exams.
- The purpose of text in **Grey Colour** is to give you the background of the main concept, which will be more useful while reading first time. At the time of revision, you should make use of colour coding & ignore grey text.
- Below theory chapters & topics have more importance and should be studied on priority to other chapters:

Chapters:

1. Start-Up Finance
2. Securitization
3. Financial Policy and Corporate Strategy
4. Risk Management
5. Security Analysis

Chapters	M 23	N 22	M 22	N 21	M 21	N 20 (II)	N 20	N 19
Start-Up Finance	8	8	4	8	8	8	7	8
Securitization	4	4	4	4	4	8	4	8
Financial Policy & Corp Strat	4	4	4		4	4		4
Risk Management			4	4	4			
Security Analysis				4			4	
Other Chapters	8	12	8	4	4		4	
Total	24	28	24	24	24	20	19	20

All the best!

Rounding off Rules.

If the number being calculated naturally has only 2, 3 or 4 digits after decimal point, then there is no need to round off and student can continue to use that number in the solution. However, if there are many digits after the decimal point then rounding off should be done as follows :

Basics of Financial Management

No. of digits after decimal points.

2

Returns : $k_e, R_F, E(R), \sigma, \sigma^2$, RoE, α
Weights & probabilities (%)
Mutual Fund Units & NAV
Amount not in Lakhs, million or Crore.

3

Beta (β)
PVF, FVF, etc.
Duration (Macaulays & modified.)
Correlation (γ)
Exchange Ratio (M & A)

4

Weights & probabilities (decimals)
Exchange Rate (Unless question has some other flow)
Binomial model : u & d.
B & S : $d_1, d_2, N(d_1)$ & $N(d_2)$
Mutual Fund NAV
Amount in Lakhs, million or Crore.

Basics of Financial Management

A. Basic Ratios

1) Earnings Per Share

Earnings Per Share (EPS)

$$\frac{EAES}{n}$$

n: no. of shares.

In the absence of preference dividend, EAES = PAT.

P&L extract:

Particulars	*Amount*
PAT	xx
(-) Pref. div	(xx)
EA to ES	xx

2) Price Earnings Ratio & Market Price per Share

Price Earnings Ratio (PE Ratio): *PE Ratio is 'how much are the investors ready to pay for a share of a company, for every rupee of income earned from it'. And a lot more…*

PE: $\frac{MPS}{EPS}$.

Market Price Per Share (MPS)

MPS: EPS x PE.

3) Dividend: Absolute & Percentage

Dividend Per Share (DPS) : $\frac{\text{Total dividend}}{n}$.

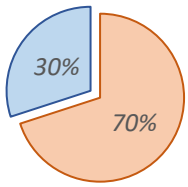
Dividend Rate	***Dividend Yield***	***Payout Ratio***	***Retention Ratio***
(as a % of FV)	*(as a % of MPS)*	*(as a % of EPS)*	RE: EPS - DPS.
DPS: FV x Div. Rate.	Div yield: $\frac{DPS}{MPS}$.	$\frac{DPS}{EPS}$	RR: $\frac{RE}{EPS}$ or 1 - DPR

4) Market Capitalization

Market Capitalisation (M-Cap) *means total market value of equity shares of the company.*

Example: Justdial Ltd has 1000 equity shares outstanding. Current market price is ₹ 15 per share.

Shareholding Pattern	*Number of Shares*	*Holding %*
Promoters	*700*	*70%*
General Public	*300*	*30%*



Free float

Total or Full Market Cap	***Free-float Market Cap***
It is the total value of all equity shares of the company.	*It is that part of total market cap that is not held by promoters i.e., held by general public*
Calculation of M-Cap	
Total no. of shares × MPS = 1000 × 15 = 15,000	Free-float no. of shares × MPS. 300 × 15 = 4500.
X	∴ Total m-Cap × Free float holding (%) ∴ 15,000 × 30% ∴ 4,500

5) Book Value per Share

Book-value per Share (BVPS) *is the per share value of equity shareholders in the net assets of the company as per books.*

: $\frac{ESHF}{n.}$

Net assets or Net worth.

Equity Shareholders Funds (ESHF) *is the total value of equity shareholders in the net assets of the company as per books.*

ESHF : ESC + R&S − P/L (Dr) − mis. Exp. (Dr.)

: Total Asset − External Liability − P/L (Dr) − mis. Exp. (Dr

6) Return on Equity

Return on Equity (ROE) *is the accounting return to the equity shareholders as per books.*

$\frac{EAES.}{ESHF}$ or. $\frac{ERS}{BVPS.}$

B. Different types of Rates of Return

1) Expected Rate of Return

It is the rate of return that an investor estimates (expects) that he will earn on an investment. It reflects the perception of investor for that investment. It is usually calculated from 1 year's perspective on the share of the company.

Example: A share is bought today @ ₹ 100 and investor estimates that it can be sold @ ₹ 115 after a year. Then, expected rate of return on the investment is 15%.

$E(R_i)$: $\frac{P_1 - P_0 + D.}{P_0.}$

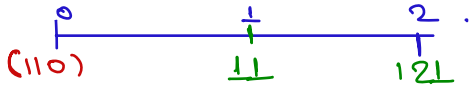
: $\frac{115 - 100 + 0}{100}$

: 15%.

2) Internal Rate of Return (technique)

It is the discounting rate at which PV of cash inflows from an investment is equals to initial cash outflow. It is calculated to determine the compounded rate of return actually earned (in case of ex-post data) or to be earned (in case of ex-ante data) on any investment.

Example:



Year	Cash Flows (₹)
0	- 110
1	11
2	121

$$110 = \frac{11}{(1+r)^1} + \frac{121}{(1+r)^2}$$

r : 10 %.

→ Trial & error method.

Verifying the return earned:

Year	Amount Invested	Return Accrued	Return received	Due Amount

3) Required Rate of Return

→ depends on risk taken

It is the minimum rate of return required from an investment. Also called as Opportunity Cost, it is used as discounting rate to calculate PV of cash flows. When compared with expected rate of return, it helps in investment decision.

Real Rate to discount Risky CFs.

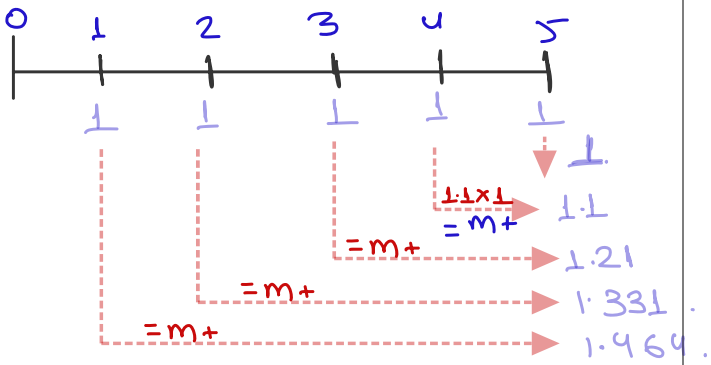
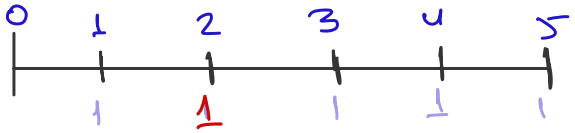
Inflation Premium	+	Real Risk-free Rate	+	Risk Premium	=
Compensation for loss of purchasing power of money invested		Compensation for allowing use of money to other		Compensation for taking risk while making a risky investment	Nominal rate for risky CFs.

Nominal Rate to discount RF cashflows.

C. Time Value of Money

~~6 months' period~~ 1 year.	1	2	3	4	5
Cash Flows (₹)	200	200	200	200	200

Example: Discounting rate = 10%

Future Value	Present Value
Single Sum:	
Value of ₹ 200 at the end of year 5th period: (~~of today~~.) FV : PV × $FVF_{(10\%,5)}$: $200 \times (1.1)^5$: 200×1.611 : 322.2.	*Value of ₹ 200 today:* PV : FV × $PVF_{(10\%,5)}$: $200 \times \frac{1}{(1.1)^5}$: 200×0.621 : 124.2.
Annuity: [A]	
Regular Annuity	
Value of all CFs at the end of 5th period assuming CFs occur at the end of the period:  FV = A × $FVAF_{(10\%,5)}$: 200 × 6.105 : 1221.	*Value of all CFs today assuming CFs occur at the end of the period:*  PV : A × $PVAF_{(10\%,5)}$: 200 × 3.791. : 758.2.

Annuity Due	
Value of all CFs at the end of 5th period assuming CFs occur in the beginning of the period.	*Value of all CFs today assuming CFs occur in the beginning of the period.*
X	X
Perpetuity	
Value of infinite number of CFs of ₹ 200 at the end of infinite period:	*Value of infinite number of CFs of ₹ 200 today:*
Impossible to calculate.	PV: $\frac{A}{r}$: $\frac{200}{0.1}$: ₹ 2000.

List of Ratios used in SFM →

- Asset Turnover Ratio
- Asset to sales Ratio
- ROEE: $\frac{EBIT}{CE = E+D+P}$
- NPA Ratio (%): $\frac{NPA\ (₹)}{Advances\ (loan\ given)}$
- CAR: $\frac{Capital}{Risk\ wtd\ assets}$

Debt Ratio
Debt to Equity Ratio

- Capital gearing Ratio.

D. Types of Cash Flows

Nominal Cash Flows	*Real Cash Flows*
Nominal cash flows are the amount of future revenues or expenses the company expects to receive or pay. Nominal cash flow has effect of inflation included in it.	*When effect of inflation is removed from such future cash flows, they are called Real cash flows. Real cash flow does not have effect of inflation included in it.*
Relationship between Nominal cash flow and Real cash flow: Nominal CF : Real CF $(1 + \text{Inflat}^n\ (\%))^2$	
To calculate PV of nominal cash flow, nominal discounting rate is used.	*To calculate PV of real cash flow, real discounting rate is used.*
Relationship between Nominal and Real discounting rate: $(1 + \text{Nominal}) = (1 + \text{Real})\ (1 + \text{Inflat}^n)$	

Example: Cipla Ltd has forecasted cash inflow of ₹ 100 crores to be received at the end of 2nd year. Real discounting rate is 10% and inflation in the economy is at 5%. Calculate PV of future cash flow using Nominal discounting rate and Real discounting rate.

Using Nominal discounting rate:

nominal discounting Rate : $(1.1)(1.05) - 1$.

: 15.5 %.

PV : $\frac{100}{(1.155)^2}$.

: 74.96

Using Real discounting rate:

Real CF : $\frac{\text{Nominal}}{(1 + \text{Inflation.})^2}$.

: $\frac{100}{(1.05)^2}$

: 90.70.

PV : $\frac{90.70.}{(1.1)^2}$

: 74.96.

E. Types of Interest Rates

1) Fixed vs Floating Interest rates

Fixed Rate

This rate of interest does not change during the tenure of borrowing or lending
Example: Loan taken or given @ 8% pa

⇩

No risk of change in Interest Rates

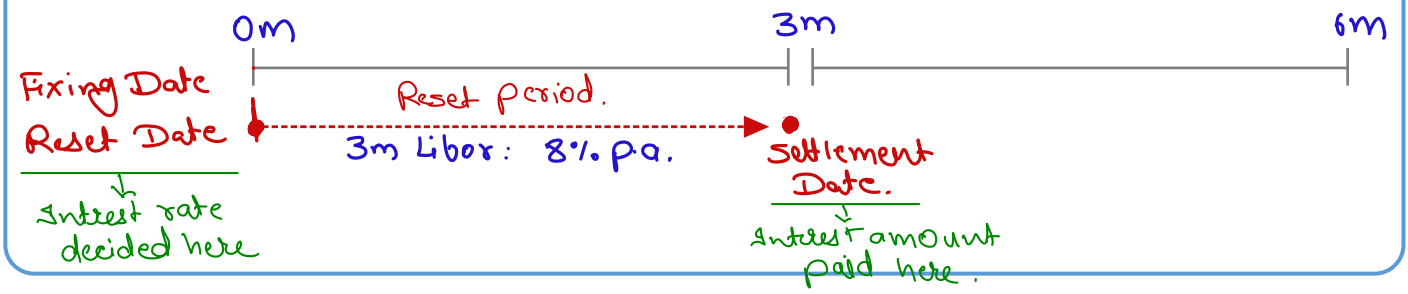
Floating / Variable Rate

This rate of interest may change during the tenure of borrowing or lending
Example: Loan taken or given @ LIBOR

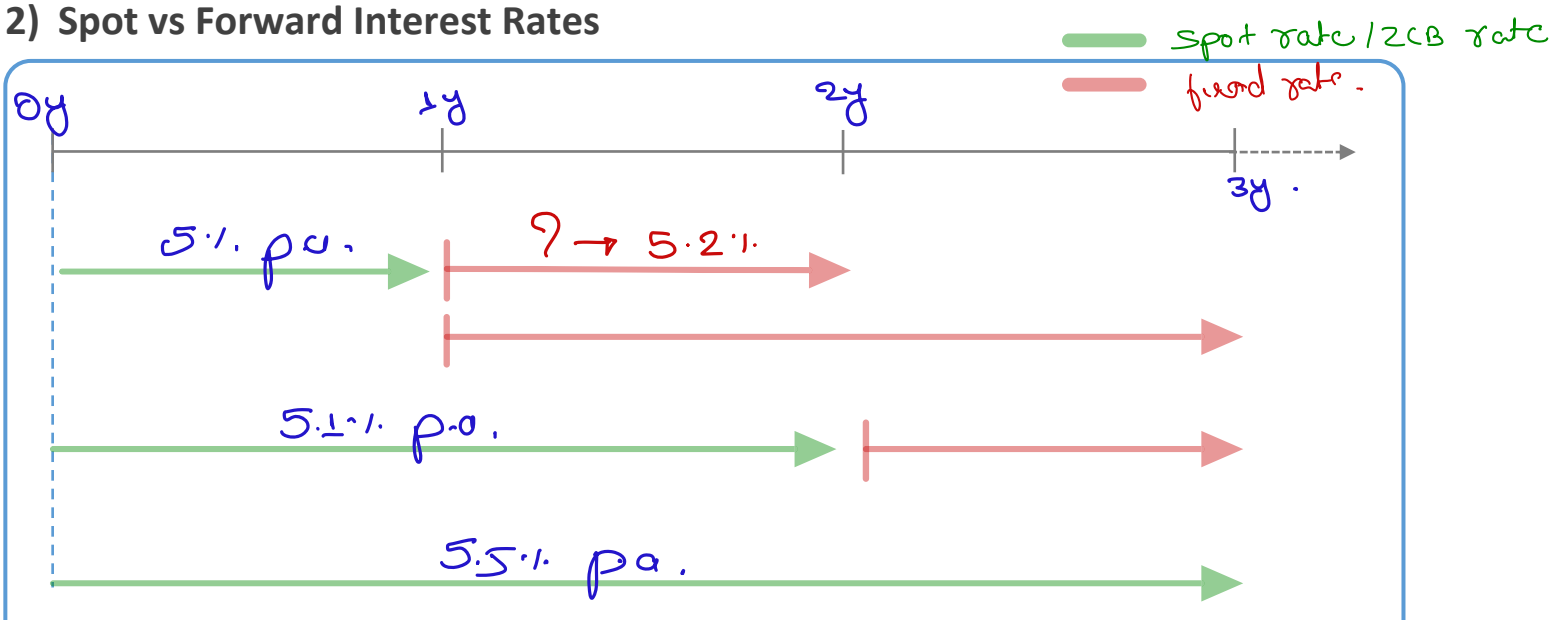
⇩

Risk of change in Interest Rates

⇩

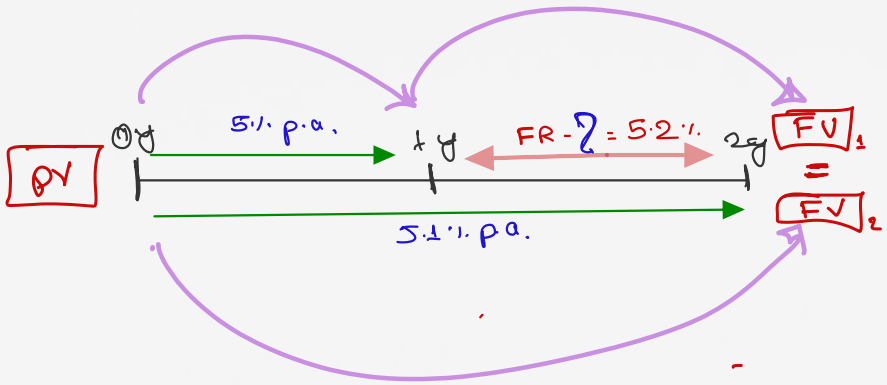


2) Spot vs Forward Interest Rates

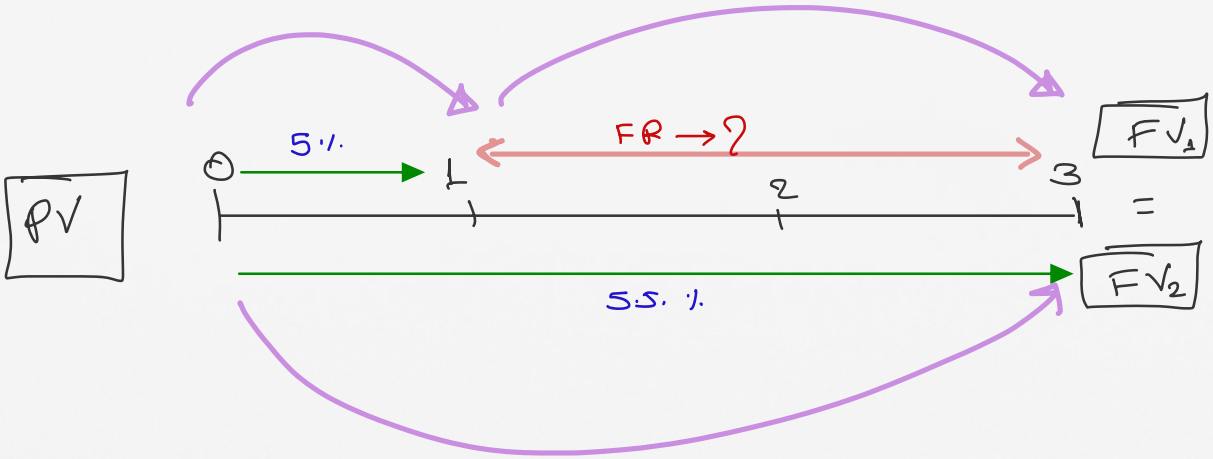


NOTE An interest rate can be used for compounding (PV to FV) or discounting (FV to PV) the cash flows only for that time period to which that rate belongs.

Part from Fixed Income : Calculating Fwd rate using spot



Equity & Corporate Valuation



$(1.05)^1 (1+FR)^2 = (1.055)^3$

FR : 5.75%

- Term structure / yield curve
- Term of ZCB : spot.

Dividend Based Valuation Models

- *Zero Growth Model*
- *Constant Growth Model*
- *Variable Growth Model*
- *H Model*

Cash Flow Based Valuation Models

- *Free Cash Flow to Firm Approach*
- *Free Cash Flow to Equity Approach*

Asset Based Valuation Models

- *Net Asset Value Method*

Earnings Based Valuation Models

- *Earnings Capitalisation Method*
- *Walter's Model*

Relative Valuation

- *Equity Value Multiples Based Valuation*
- *Enterprise Value Multiples Based Valuation*
- *Chop - Shop Approach*

Other Important Topics

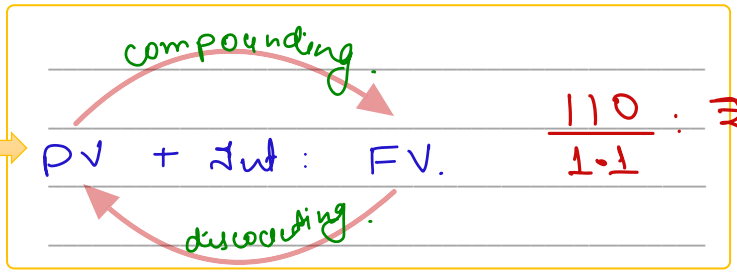
- *Economic Value Added*
- *Market Value Added*
- *Concept of Rights Issue*
- *Concept of Buy-back*
- *Concept of Bonus Issue*

A. Dividend based Valuation Models

Fundamental Principle of Valuation: *Value of any asset today is the present value (PV) of all future cash flows (CFs) generated from that asset. Value of:*

Equity Share	PV (Div.) + PV (Sales price)
Bonds	PV (Coupon) + PV (RV.)
Any other asset	PV (FCF)

Common sense behind the principle: *Suppose a share can be sold @ ₹ 110 at the end of one year. Your required rate of return is 10%. How much will you be ready to pay for that asset so that you earn required return of 10%?*



Dividend Discount Models (DDMs) use dividends as the basis of calculating ***Intrinsic Value*** *(IV- what should be the valued) of shares.*

Definite number of years

Value of Share: PV (Div) + PV (Sales price)

Yes Bank is expected to distribute dividends of ₹ 10 and ₹ 12 next year and a year thereafter. At the end of this period, its share is expected to be sold at ₹ 150. Calculate the value of share if discounting rate is 15%.

Indefinite number of years

Value of Share: PV ($D_{1,2,3\ldots\infty}$) [DDMs discussed ahead.]

Calculation of cost of equity

We know that dividends belong to ESHs, therefore, discounting rate to be used to calculate PV will be required rate of return to ESHs i.e., ***Cost of Equity (K_e)****:*

- *Preference # 1:* ***CAPM****

K_e or R_j or $E(R_i)$: $R_F + \beta_i (R_m - R_F)$

market risk premium

security risk premium

**CAPM is covered in detail in the chapter 'Portfolio management'.*

- *Preference # 2:* ***Gordon's Formula***

Without Floatation Cost	***With Floatation Cost***
$K_e : \frac{D_1}{P_0} + g$	$K_e : \frac{D_1}{\text{Net proceed}^*} + g$ *: P_0 / Issue price − Floation Cost

- *Preference # 3:* ***Earning's Yield***

$K_e : \frac{EPS}{MPS} : 1/PE$

Required Rate of Return (R_j) vs Expected Rate of Return ($E(R_i)$)

Many times, examiner uses the words 'Required Rate of Return' and 'Expected Return' interchangeably. This is simply because:

If $E(R_i) = R_j$ ➡ *then* $P_0 = IV$	***OR***	*If* $P_0 = IV$ ➡ *then* $E(R_i) = R_j$

It means that examiner is assuming the security as fairly valued. Hence, by whatever name ($E(R_i)$ or R_j) rate is given in the question, it will be used as discounting rate to calculate IV.

Conclusion: *In other words, solve the question normally by treating the given rate as R_j.*