

# PREFACE



This summary notes doesn't guarantee passing the exam.  
***IT IS ONLY MEANT TO CONDENSE THE HUGE CONTENT OF ICMAI.***

One needs to have a visualisation of connected questions with every concept studied here.

***THE VISUALS COME ONLY WHEN YOU HAVE PRACTICED THE CONNECTED SUMS AT LEAST 3 TIMES AFTER UNDERSTANDING THE LOGIC BEHIND THE CONCEPTS.***

For effortless understanding of logic and practice of sums once, Join full classes of SFM with Satish Sir.

Exclusively taught as per **CMA Final Course.**  
**ICMAI Material Covered with all practicals and theories.**

***YOU WILL FALL IN LOVE FOR FINANCE, FOR SURE***

"I believe in - showing students how to cook rather than to give the food. Specially, I have also given sessions for preparing summary notes, where I am showing the process of how to summarise the big chapters. This would help you in all other subjects." - **Satish Sir**



## Reviews of our regular classes of SFM

The books were great with regards to the content and coverage that has been provided. I really liked the numerous variation of sums that were provided to us in the entire course. I really loved the flow of the classes and the content was very well covered.

Thanking You.  
Dipti Saraf

The content in the book is very good and well organized, there is extra space for page numbers and what is new is very useful and saves time for study, also the quality of the book is very good including the quality of paper and binding of the book.

Anjali Kumari Shaw

# Security Analysis



## Security Analysis



Objective: Expected / Intrinsic / Theoretical / Equilibrium

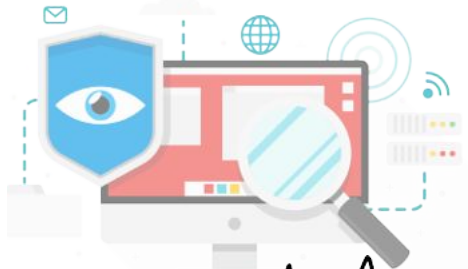
Price  $AP > EP = \text{Sell}$

$AP < EP = \text{Buy}$

Fundamental



Public info



Equity Analysis

Technical



Price & volume



charts

Discounted  
Cash flow

Price  
Multiple

Balance  
Sheet

Free  
Cash  
Flow

Economic  
Value  
Added

## Discounted Cash flow Analysis

Fair Price = PV of future cash flows disc @  
minimum return expected by the  
investor.



Minimum  
Desired return = Expected return by the  
investor

Constant Dividend Model

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

Dividend Discount Model or Gordon's Model

$$k_e = \frac{D_1}{P_0} + g$$

Earning Capitalisation Model

$$k_e = \frac{EPS}{MPS}$$

$$k_e = \frac{1}{PE \text{ Ratio}}$$

Realised Yield

IRR Method

$k_e = \text{rate}$   
where  
PV of IF = Inflow

CAPM

$$k_e = R_f + (R_m - R_f) \times \beta$$

Most Common



Single Period Valuation

$$P_0 = \text{fair price} = \frac{D_1 + P_1}{1 + k_e}$$

Ek Saal baad

Multi-Period Valuation

$$P_0 = \text{PV of all future cash flows} = \frac{CF_1}{1+k_e} + \frac{CF_2}{(1+k_e)^2} + \dots + \frac{CF_n}{(1+k_e)^n}$$

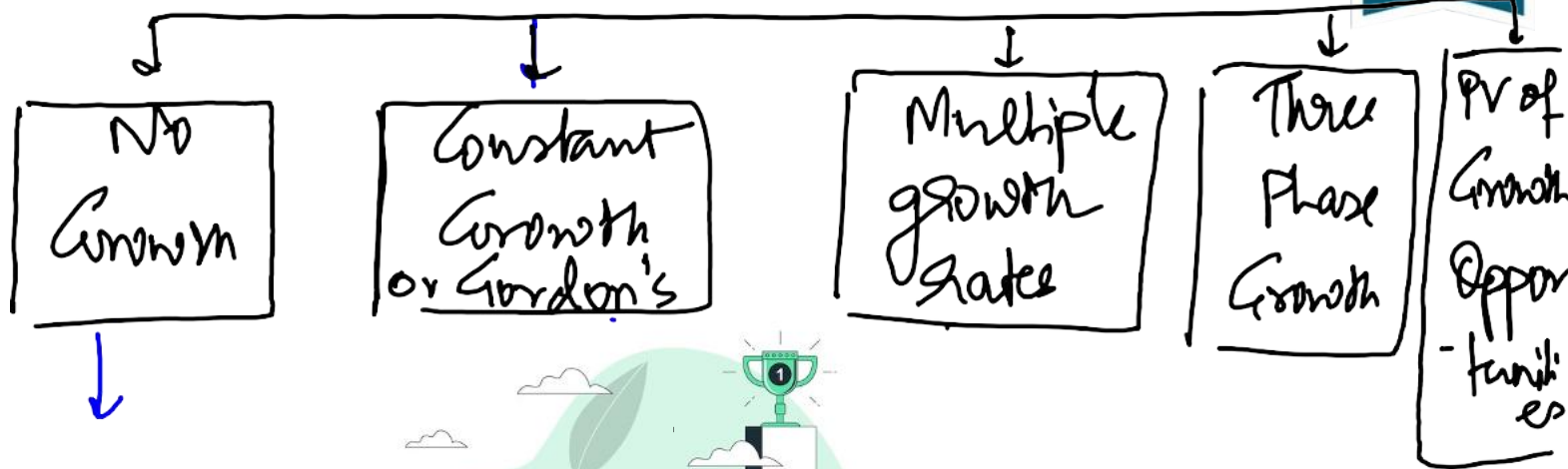
Multiple years

Infinite Period Valuation



Ka Cash flow  
Ka PV.

Ka CF Ka PV



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



## Constant Growth or Gordon's Model

$$P_0 = \frac{D_1}{k_e - g} \quad \text{or} \quad k_e = \frac{D_1}{P_0} + g$$

N1 Price at diff yrs using Gordon's Model

$$P_3 = \frac{D_4}{k_e - g} \quad \text{or} \quad P_n = \frac{D_{n+1}}{k_e - g}$$

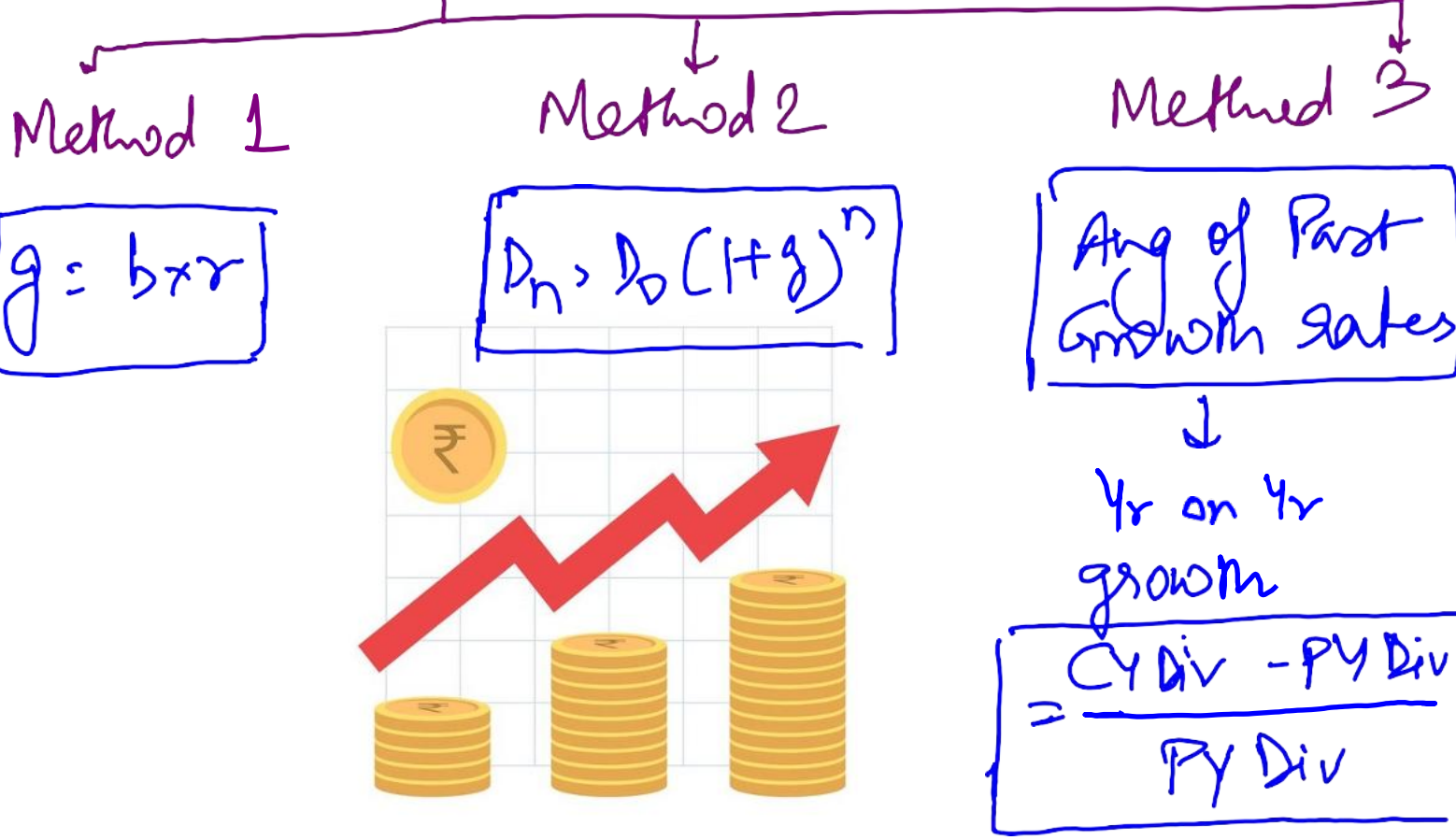
Q3, Q4, Q5, Q6, 7, 8

N2 Yr of start of constant growth rate

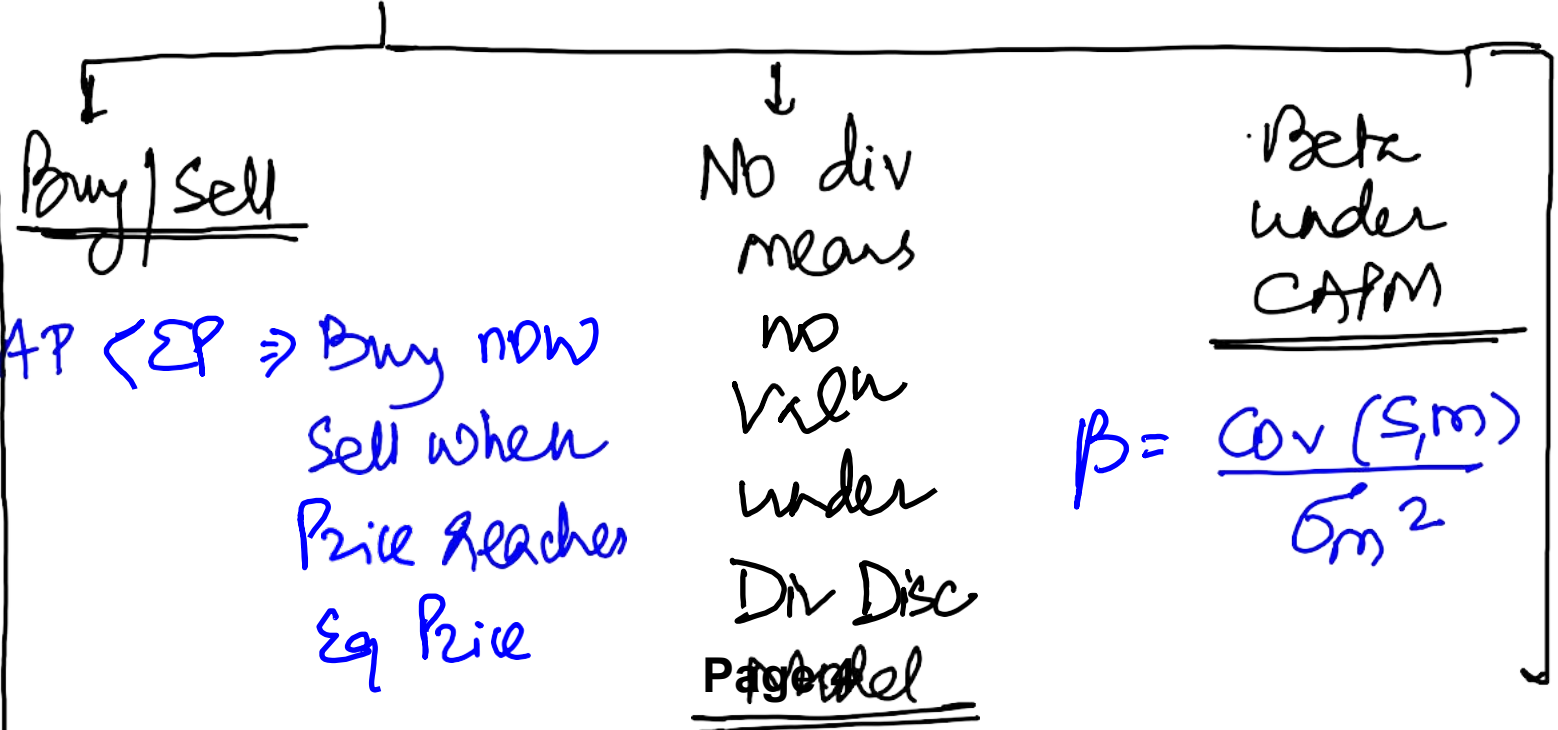
If Price is  $P_2 \rightarrow \text{Div} \Rightarrow D_3$

Constant growth rate =  $\frac{1}{4}$  to  $\infty$

N3 Growth rate



General Notes



$AP > EP \Rightarrow$  Sell now,  
Buy when  
Price reaches  
Eq Price

↓  
P/E  
Model  
↓  
Q15(C) (11)

Div Policy  
 $ROI > k_e =$  Growth  
firm  
(Optm P/O Ratio = Min)

$ROI < k_e =$  Declining  
(Op P/O = 100% firm)

$ROI = k_e =$  Normal  
(Op P/O = any)

Deferred Constant Growth Rate

Phase 1

No Growth or Same  
rate

growth rate

$$P_0 = \frac{D_1}{1+k_e} + \frac{D_2}{(1+k_e)^2} + \frac{D_3}{(1+k_e)^3} + \dots + \frac{D_n}{(1+k_e)^n}$$

Phase 2

Constant Growth  
Rate

↓  
 $g = n + 2$

$D = n + 1$

$P = n$

a)  $P_n = \frac{D_{n+1}}{k_e - g}$

b)  $P_0 = \frac{P_n}{(1+k_e)^n}$

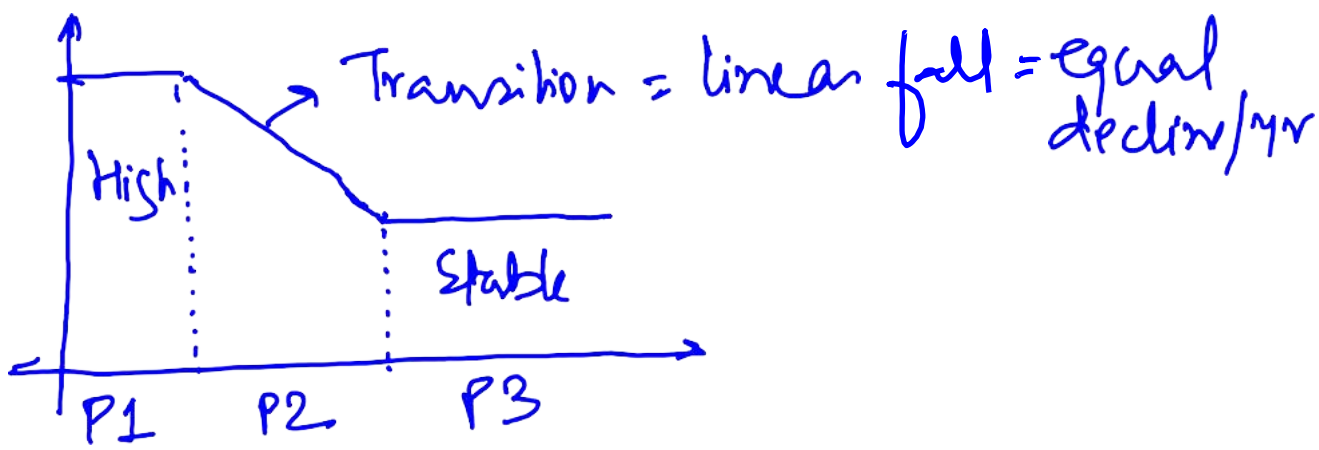
# General Notes

HPR p.a

$$\left[ \frac{SV - PC}{PC} \times 100 \right] \times \frac{1}{n}$$



## Three Phase Model (H-Model)



Phase 1:  $\gamma_1$  to  $\gamma_4 \Rightarrow g = 10\%$  P-9

Phase 2:  $\gamma_5$  to  $\gamma_7 \Rightarrow g = 9\%$   
8%  
7%

Phase 3:  $\gamma_8$  to  $\infty$  Page 6



$$P_7 = \frac{D_8}{k_e - g}$$

$$P_0 = \frac{P_7}{(1 + k_e)^7}$$

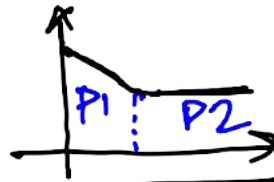
If payout ratio is given

Phase 1 :-  $CF = \text{Earnings at } Y_0 \times \text{Payout Ratio} \times (1 + g_1)^n$

Phase 2  $\Rightarrow CF \Rightarrow E_0 \times \text{New Payout Ratio} \times (1 + g_1)^n \times (1 + g_2)$

[Q22]

H Model Formula



$$\text{Value at } Y_0 = \frac{D_0 (1 + g_2)}{k_e - g_2} + D_0 \times H \times \frac{(g_1 - g_2)}{k_e - g_2}$$

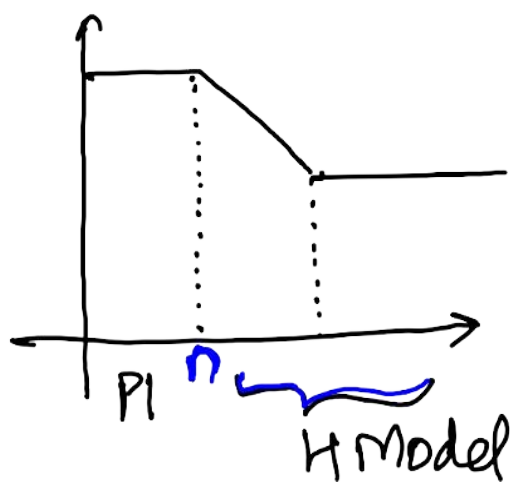
$g_1 =$  Higher rate = short term

$g_2 =$  Stable rate = long term

$H =$  Half life of transition period

[Q23]

# Assuming transition starts after n yrs



= PV of CF of Phase 1 + PV of H Model

$$= \text{PV of CF of Phase 1} + \left[ \frac{D_n(1+g_2)}{k_e - g_2} + \frac{D_n \times H \times (g_1 - g_2)}{k_e - g_2} \right]$$

H ka value Transition period  $k_e$   $\times \frac{1}{(1+k_e)^n}$  hisab se liya jata hai.

Op1: Sirf change wala period

Op2: From PV of change period

## PV of Growth Opportunities

= Diff in Price due to growth Opportunities

= Price with growth - Price without growth (No Retention)

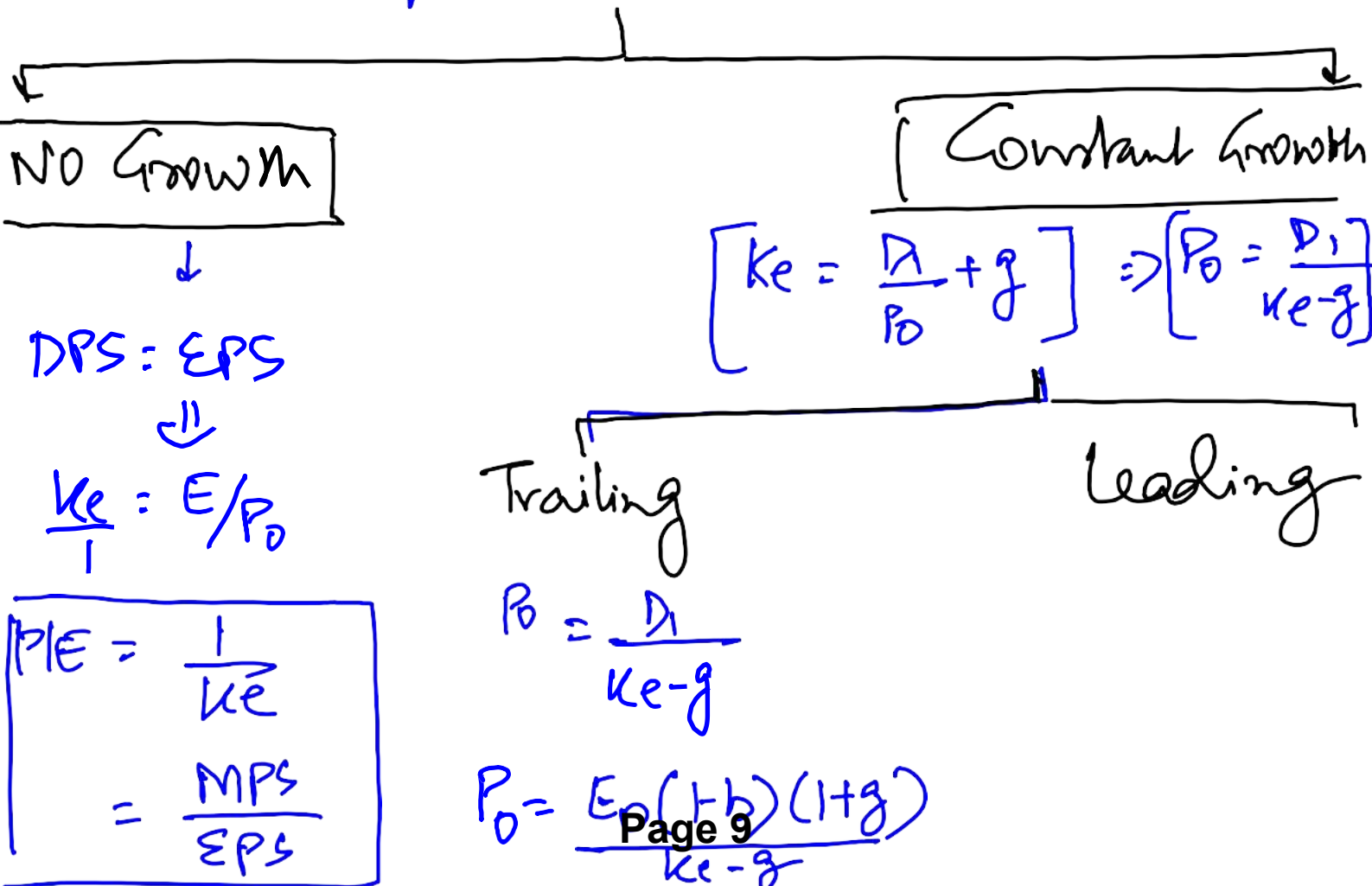
=  $\frac{D_1}{k_e - g} - \frac{E}{k_e}$  (E=D)

# PRICE MULTIPLES

$$\begin{aligned} \text{MPS} &= \text{Multiple} \times \text{Something} \\ &= \text{P/E Ratio} \times \text{EPS} \\ &= \text{P/BV Ratio} \times \text{BV} \\ &= \text{P/S Ratio} \times \text{Sales} \\ &= \text{P/EBITDA Ratio} \times \text{EBITDA} \end{aligned}$$

Ratio = Multiple = Expected / Comparable Co.

MPS = W.Ang of all values is also accepted.



$$\frac{P_0}{E_0} = \frac{(1-b)(1+g)}{k_e - g}$$

$$\frac{P_0}{E_1} = \frac{1+b}{k_e - g}$$

## Balance Sheet Method

S1 Closing Cap Ed for Eq sh holders

↓  
At Current MV

Asset Side

FA	✓	}	at MV
(+)-CA	✓		
(-)-CL	(✓)		
(-)-LT2	(✓)		
	✓		

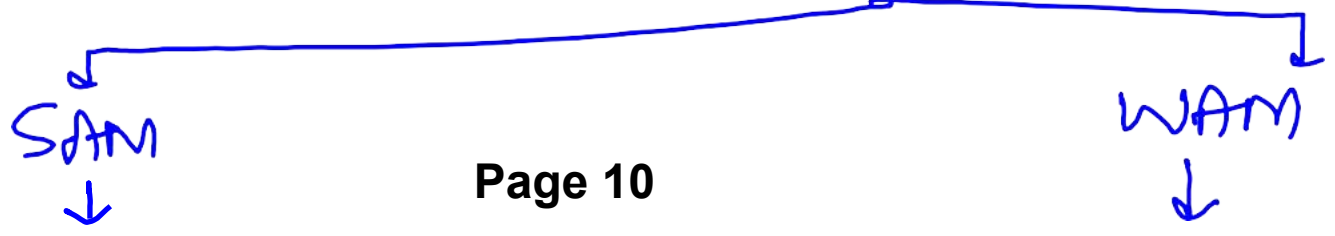
Liab Side

Sh Cap	✓
(+)-R/S	✓
(-)-NTI	(✓)
	✓

S2 Avg Cap Ed = Op Cap +  $\frac{1}{2}$  CY PAT  
 OR  
 Cl Cap -  $\frac{1}{2}$  CY PAT

S3 PAT

- Given
- Multiple yr given -  $\frac{\text{Avg PAT}}{J}$





$$\frac{\sum PAT}{n}$$

$$\frac{\sum W \times PAT}{\sum W}$$

weights - more to

Recent yrs  $\Rightarrow$

Yr	W
22	3
21	2
20	1

S4 FMP

Avg PAT

(+) Extra Ord exp

(-) Extra Ord inc

(-) Future normal exp

Avg FMP

Avg	OR	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>3</sub>
✓				
✓				
(-)	(+) Adj	✓	✓	✓
(-)	FMP	✓	✓	✓
		Avg +		

S5 Normal Pfts

Avg Cap Ed  $\times$  Normal rate of return

where NRR = Mkt Yield rate + Risk return of the Co.

S6 Super Pft

= FMP - Normal Pft

# Q7 Value of GIW

Super Pft

Avg Pft

with TV of Money

W/O TV of Money

$$\frac{\text{Value of GIW}}{\text{Avg Pft}} = \text{No. of Yrs of Pft}$$

(Service industry)

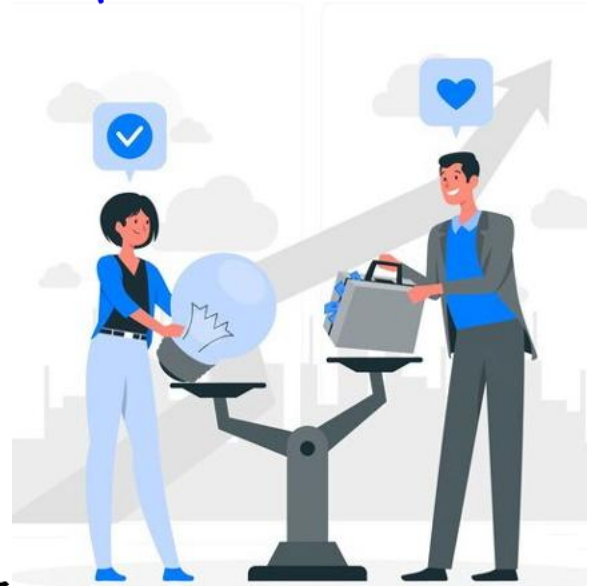
for definite period

for infinite period

$$\frac{\text{Value of GIW}}{\text{Avg Pft}} = \text{Super} \times \text{No. of Yrs Pft}$$

$$\frac{\text{Value of GIW}}{\text{Avg Pft}} = \text{Super Pfts}$$

$$\frac{\text{Value of GIW}}{\text{Cap rate}} = \text{Super Pft}$$



## Q8 Value of Business

- Op 1: Value of GIW ✓
- MV of Net assets ✓
- Value of Business ✓
- No. of Eq Sh ✓
- MPS ✓

Op 2: Avg Pft / P/E Ratio

Note: Partly Paid up shares are given

$$\text{Value / Share} = \text{Surplus / share} + \text{Paid up Value per share}$$

OR

Partly paid up can be called up provisionally to make it fully paid up.

↓  
Increases the mv of assets & also the paid up capital

↓  
Surplus / share will be same



# Fundamental & Technical Analysis

<u>Fundamental</u>	<u>Technical</u>
<ul style="list-style-type: none"> <li>a. Public info</li> <li>b. IV</li> <li>c. Practical</li> <li>d. LTI</li> </ul>	<ul style="list-style-type: none"> <li>a. Past Price movements</li> <li>b. Future Price</li> <li>c. Sentimental</li> <li>d. STI</li> </ul>

## APPROACHES

<u>TOP-DOWN</u> <span style="color: red;">(More Preferred)</span>	<u>BOTTOM-UP</u>
<p>Eco Analysis (GDP, Infl<sup>n</sup>)</p> <p style="text-align: center;">↓</p> <p>Industry analysis (dd/SS, Region, PESTEL)</p> <p style="text-align: center;">↓</p> <p>Co. Analysis (PL, BS, Mgmt)</p>	<p>Co. Analysis</p> <p style="text-align: center;">↓</p> <p>Eco.</p> <p style="text-align: center;">↓</p> <p>Industry</p>

## Purpose

<p><u>Growth Stock</u></p> <p>Highly priced shares with growth prospects</p>	<p><u>Value Stock</u></p> <p>low priced, strong Balance sheet</p>
------------------------------------------------------------------------------	-------------------------------------------------------------------

# Fundamental Analysis - Useful Ratios

1. EPS
2. PE Ratio
3. PEG  
=  $\frac{\text{PE Ratio}}{\text{Growth Rate}}$
4. P/S Ratio
5. P/B Ratio
6. Div Yield  
=  $\frac{\text{DPS}}{\text{MPS}}$
7. Pay Out Ratio
8. BV/share
9. ROE
10. DuPont's ROE  
= NP Ratio  $\times$   $\frac{\text{Asset}}{\text{T/O}}$   $\times$  Eq Multiplier
11. Current Ratio
12. D/E Ratio
13. GIW Val<sup>n</sup>
14. MOAT
14. M&A
15. Diversification

## Technical Analysis

Basics

Theories

Mkt Indicators

Charts & Patterns

Indicators





# Basics

↓  
Study of price movement

↓  
3 Ideologies

Price controls everything

Not totally Random

Value of Nothing

## Theories

DJ Theory

RW Theory

EW Theory

## DJ Theory

3 Types of Market Movement

Three Phases of Trading

Confirm<sup>n</sup> of Trend

Two Aiges

◦ Primary - 4yly (Trend)

◦ Secondary

- Weekly/monthly

◦ Daily

◦ Accumul<sup>n</sup> Phase

- less investment / active buying

- against the market

◦ Public Particip<sup>n</sup>

- trend followers

◦ DJIA

Top 30 Cos of USA

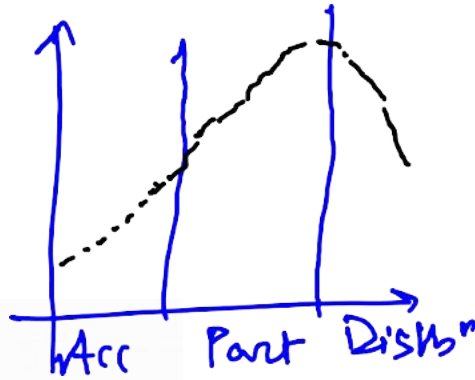
◦ DJTA

Tramph Cos

- Daily

Distb<sup>n</sup> Phase

Active players  
now sell



MV based



Price ↑	↓	↑
Vol ↑ (B)	↑ (S)	No change
Trend up	down	-

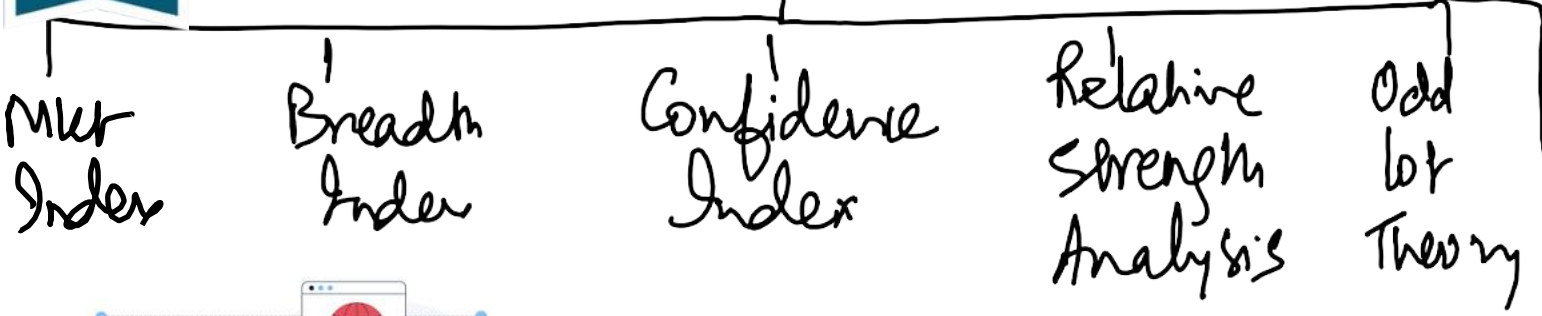
RW Theory

- Price changes are random
- Past movements cannot predict the future

EW Theory

- Price movement is in the form of wave
  - upward trend
  - downward connector
- Cycle: 5-3 move

# Market Indicators



Stochastic Indicator

◦ Mkt Index - Nifty

◦ Breadth Index = Adv / Dec Ratio

◦ Confidence Index = Spending / Employment

◦ RSA = Two indices of diff economies  
 or  
 Two cos. or Cos. & Mkt Index

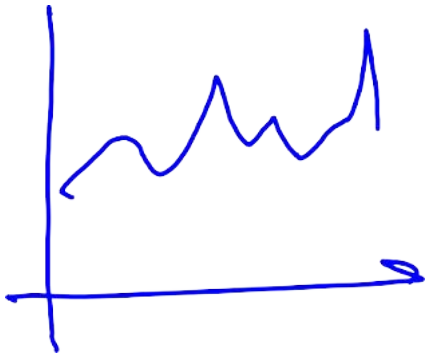
◦ Odd lot = Any trade against the mkt

◦ Stochastic = Location of closing price relative to high low range

# Charts & Patterns

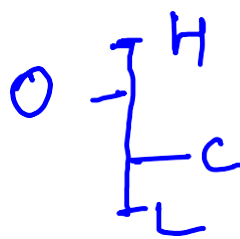
## Charts

1. Line Chart

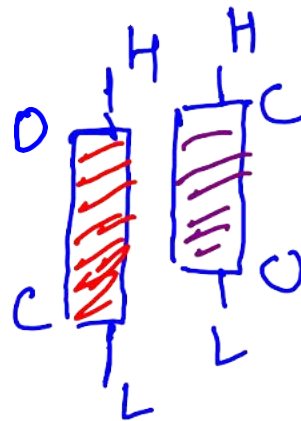


2. Bar Chart

OHLC



Candle Stick



Point & Figure

X = Inc  
O = dec



## Patterns

Bullish & Bearish

Support & Resistance

Channel

Wedge

Triangle  
or  
Coil

1  
Flags & Penanti

Double Top (M)

Double Bottom (W)

Head & Shoulder

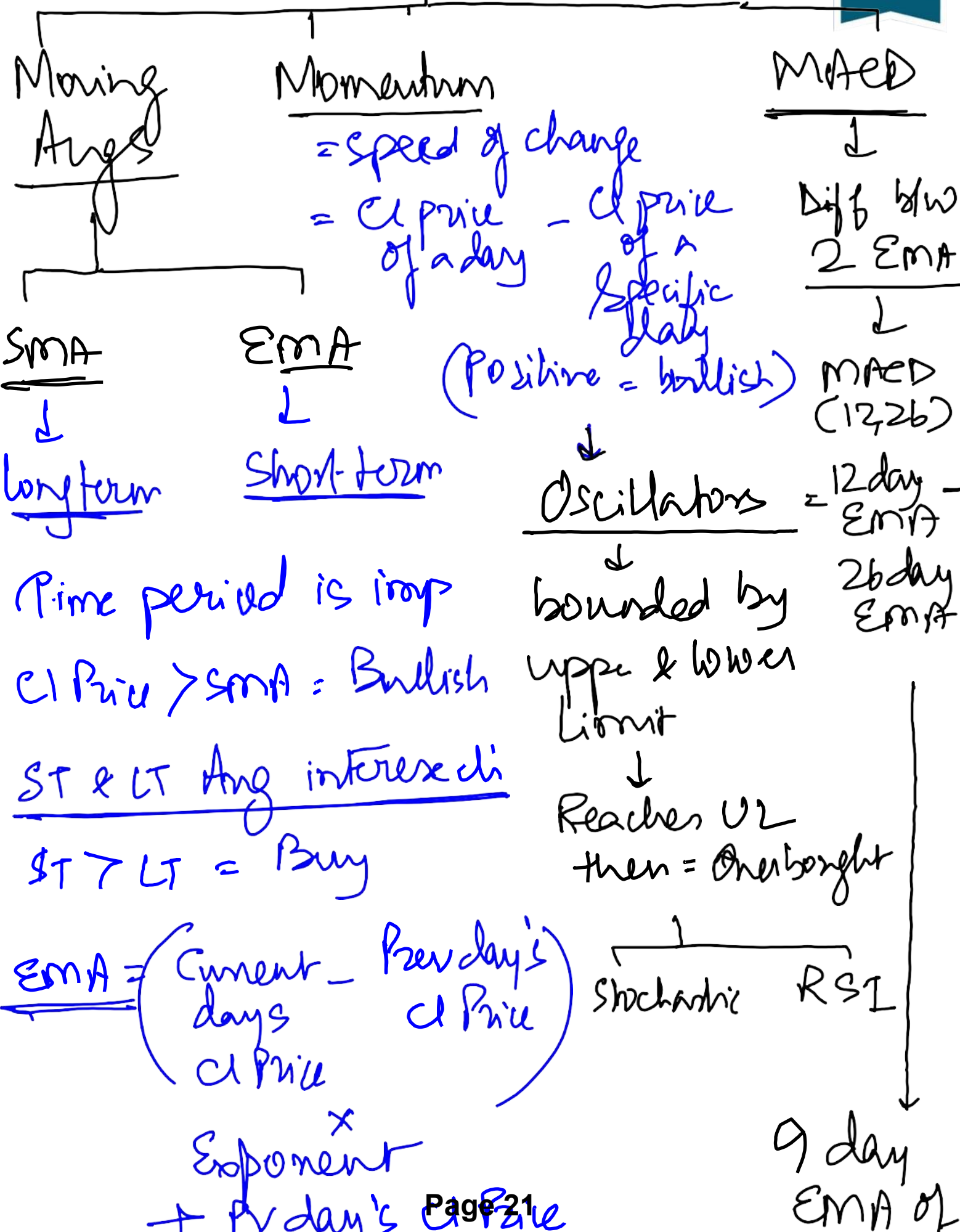
Inverted H&S

Rounding Bottom

Cup & Handle Pattern



# Indicators



Exponent =  $2/n$   
 $n$  = no. of days avg is used  
Stock Price > EMA = buy

MAED  
= Signal  
Line  
= Zero  
Line  
⇓

MAED >  
Signal =  
Buy



**Liked our efforts?**

**The fees that you may pay to us is  
your REFERENCE.**

**Please refer your friends or family to  
take all classes of CA/CMA only from  
SJC Institute.**

**Thank You.**