#### Words to know beforehand ...

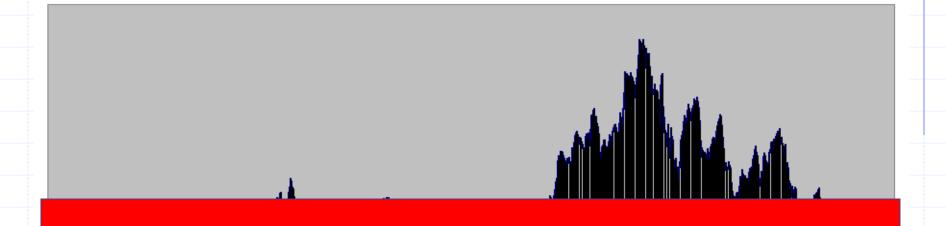
Capex; Compounded Annual Growth Rate (CAGR); Discount Factor (OR Discount Rate); Market Price Per Share; Book Value Per Share (BVPS or just, BV); Earnings Per Share (EPS); Net Profit (~ PAT); Networth: Market Capitalization; Standard Deviation;

# Valuation and Value Maximization Drivers

Ram Kumar Kakani
XLRI Jamshedpur

#### What is Value?

- Liquidation (Net Realizable) Value
- Replacement Value
- Going Concern (DCF) Value
- Others Methods (Interlinked to the above)
  - Relative Value
  - Contingent Claim Valuation (please ask ... I wish to explain later)



Valuation of a <u>asset</u> or <u>resource</u> or <u>organization</u> depends on two key issues:

- (a) Whose perspective are you looking at?
- (b) What is the purpose of valuation?

#### Ram needs your help ...

#### Year 2001

- He has Rs 40 Million of Investible Funds ...
- Decides to invest in Real Estate ...
- Picks Four Cities ...
- Agra, Bengaluru, Chennai, and Delhi
- Picks an apartment worth Rs 10 Million in each place

	Α		C	
 Investment in 2001	10	10	10	10

## Which City-Apartment (or Investment) of Ram has created value?

City				A	В	С	D
Inves	stment in	2001		10	10	10	10
Rent				0.4	1.3	0.1	0.5

# Which City-Apartment (or Investment) of Ram has created value?

<b>Ciy</b>		В	Ċ	1)
Investment in 200	10	10	10	10
Rent	0.4	1.3	0.1	0.5
Market Value	34	11	21	7

# Which City-Apartment (or Investment) of Ram has created value?

City		A	В	Ĉ	D
Investment in 200	1	10	10	10	10
Rent		0.4	1.3	0.1	0.5
Market Value		34	11	21	7
Market Value-to-Rent Ratio			8.5	210	14
Market Value-to-l	3.4	1.1	2.1	0.7	

#### Jargons in Corporate Context ...

Corporate Context	1	8	C	1
Networth of the Firm	10	10	10	10
Proft After Tax (PAT)	0.4	1.3	0.1	0.5
Market Capitalization	34	11	21	7
Market Cap-to-Rent Ratio	85	8.5	210	14
Market Cap-to-Investment Rati	o 3.4	1.1	2.1	0.7

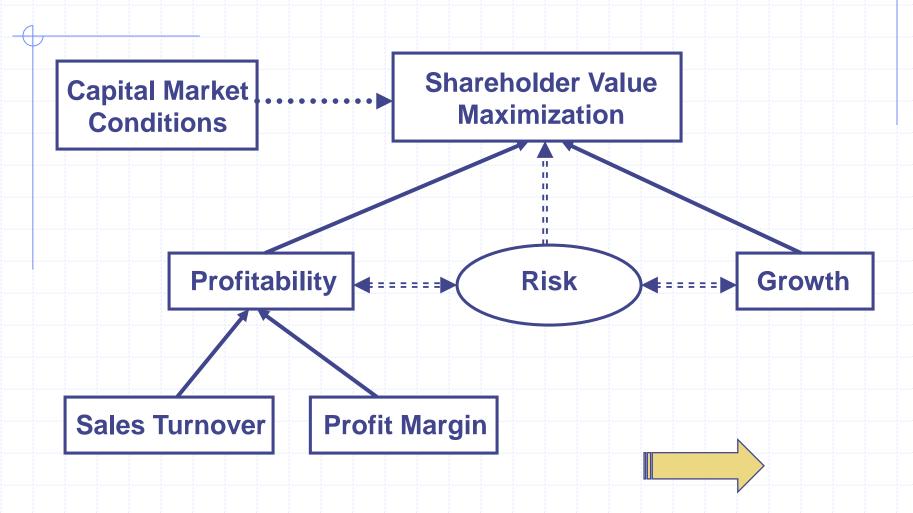
#### Jargons in Corporate Context ...

Corporate Context	A	i	Ċ	
Book Value per Share	10	10	10	10
Earnings Per Share (EPS)	0.4	1.3	0.1	0.5
Market Price (MP) per Share	34	11	21	7
P/E Ratio	85	8.5	210	14
P/BV Ratio	3.4	1.1	2.1	0.7

## Importance of Market Value

- Factors influencing market value or shareholder(s) value
  - Profitability
  - Growth
  - Risk
  - Capital Market Conditions
- Can we put this in a framework and find measures?

#### Valuation Framework ...



**Source**: Ram Kumar Kakani, Doctoral Dissertation 'Financial Performance and Diversification Strategy of Indian Business Groups', Indian Institute of Management Calcutta, 2001.

#### Value Maximization Measures

- If 'n' is the number of equity shares
- Earnings Per Share (E.P.S.) = PAT/n
- Market Capitalization = (Market Price per share) x n
- Book Value of Equity (BV) = NW/n
- Price-to-Earnings Per Share (P/E Ratio)
- = Market Price per Share/EPS = Market Capitalization/PAT
- Price-to-Book Value Per Share (P/BV Ratio)
- = Market Value per Share/BV per share
- = Market Capitalization/Net Worth

5-Aug-18	CM	Prof	Gr	Risk	Total
Infosys Technologies					
Colgate Palmolive (India)					
Tata Steel					
Bata India					
Relaxo Footwear					
Lawreshwar Polymers					
Nagarjuna Fertilizers					
Reliance Communication					
Zee Entertainment					

5-Aug-18	Price	BV	P/BV	EPS	P/EPS
Infosys Technologies	1364	297	4.6	74.0	18
Colgate Palmolive (India	1123	56	20.1	26.7	42
Tata Steel	554	495	1.1	111.3	5
Bata India	938	115	8.2	19.1	49
Relaxo Footwear	817	64	12.8	13.4	61
Lawreshwar Polymers	34	19	1.7	8.0	41
Nagarjuna Fertilizers	14	18	8.0	-ve	NA
Reliance Communication	16	19	0.8	-ve	NA

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5-Aug-18	Price	BV	P/BV	EPS	P/EPS
Infosys Technologies	1364	297	4.6	74.0	18
Colgate Palmolive (India	1123	56	20.1	26.7	42
Tata Steel	554	495	1.1	111.3	5
Bata India	938	115	8.2	19.1	49
Relaxo Footwear	817	64	12.8	13.4	61
Lawreshwar Polymers	34	19	1.7	8.0	41
Nagarjuna Fertilizers	14	18	0.8	-ve	NA
Reliance Communication	16	19	0.8	-ve	NA
Zee Entertainment	521	79	6.6	15.3	34

- Zee Tele (during years 1999, 2002, and 2017)
  - Year 1999 was period when stock market was on a bull run especially for IT and Media sectors ... then (?)
  - Profitability (+, –, and 0)
  - Growth (+, -, and +)
  - Risk (-, -, and 0)
  - Capital Market Conditions (+, -, and +)
- Result: Prices moved from 1900 to 70 to 500-600
- ◆P/BV moved from 22 to 0.7 to 7

Note: After FY2006, Zee Tele has been split into Zee Entertainment, Zee News, and Zee Learning

5-Aug-18	CM	Prof	Gr	Risk	Total	P/BV
Infosys Technologies	0	+ve	0	+ve	2+	4.6
Colgate Palmolive (India	+ve	+ve	0	+ve	3+	20.1
Tata Steel	+ve	0	+ve	-ve	1+	1.1
Bata India	+ve	+ve	0	0	2+	8.2
Relaxo Footwear	+ve	+ve	+ve	0	3+	12.8
Lawreshwar Polymers	0	-ve	+ve	+ve	1+	1.7
Nagarjuna Fertilizers	0	-ve	0	0	1-	0.8
Reliance Communication	-ve	-ve	-ve	-ve	4-	0.8
Zee Entertainment	0	+ve	+ve	0	2+	6.6

#### **Conclusions**

- (a) The relationship between value and the underlying financial factors works;
- (b) The relationship is stable over time; and
- (c) It is important is to fully understand the sector business dynamics and corporate characteristics (more so of the firm and its recent past history)

Why do two firms with the same growth story, strong brand equity, playing in the same market command different valuations in their price to book ratios?



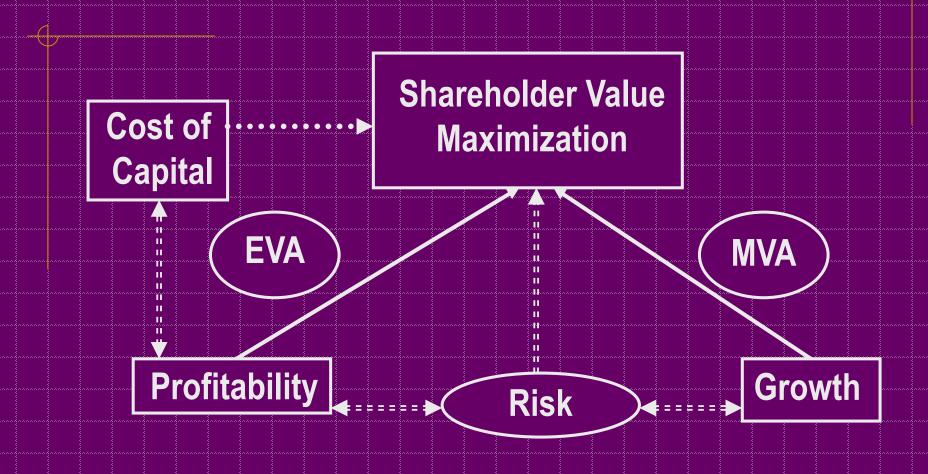
Can some part of the stark premium in P/B values be attributed to difference in governance standards?

## Investors seem to retain faith and reward disproportionality better perceived corporate governance standards



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### Can you connect this to Costs or EVA ...



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@RamKakani

- → Market Capitalization = EVA + Present Value (of Future EVAs) ...
  - → Market Capitalization = EVA + MVA ...

The Fo	our Diffe	Example	
EVA P	ositive	MVA Negative	?
EVA P	ositive	MVA Positive	?
EVA N	egative	MVA Positive	?
EVA N	egative	MVA Negative	?

		Remarks
EVA Positive	MVA Negative	Firms not able to adjust to environment changes
EVA Positive	MVA Positive	
EVA Negative	MVA Positive	Firms with value accumulation or future dependent
EVA Negative	MVA Negative	Organizations with a different goal (not SVM)

Figure 1.1: A Simple View of a Firm

Assets	Liabilities	
Assets in Place Existing Investments Generate cashflows today  made	Debt Borrowed money	
Growth Assets Expected Value that will be created by future investments be made	Equity Owner's funds	

#### Connecting a few more dots ...

- Is Training Expense a Capex OR Opex?
- What about R&D Expense
- What about Marketing Expense
- All the above are a firms' Self-Created Intangibles
- Have we got to know more on Intangibles ... and how & where their benefits are captured
- Capex Vs Opex in various type of firms
- ◆ IRR, NPV, MIRR and such figures
- Real Options ... ?
- EBITDA & Cash Flow Statement Data ...

#### Purpose of this discussion includes ...

- Perspectives of Valuation vis-à-vis the unit of our analysis i.e., the firm
- Understand the factors driving Market Capitalization; and the way they do it
- Link EVA, MVA, NPV, and Capex type jargons to the Valuation of the Organization
- Appreciate key financial numbers / ratios (and their related aspects) of the three financial statements

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