



Comparative Methods of RELATIVE VALUATION

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POPULAR METHOD

- Less Time and Resource Intensive as Compared to DCF.
 - Easy to Understand and Communicate to Clients.
 - Can be Defended Easily
 - Reflects the Current Market Mood.
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PITFALLS

- Inconsistent estimates of value where key variables (risk, growth and cash flow potential) are ignored
 - Values move with market moods
 - Lack of transparency in Underlying Assumptions
 - Vulnerable to manipulation and biases
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BASIC STEPS USING MULTIPLES

Define consistently and clearly (Example:- Different variations of P.E Ratio)

Logical choice of numerator and denominator(Example :-Equity Value with Equity Value)

Uniform application across firms. (Example:- Different Accounting Standards /Closing Year) Description Tests

Outliers and Averages

Biases due to elimination




Qualitative Tests

What are the fundamentals that affect the multiple

How will the multiple react to changes in these fundamentals

Determinants of the multiples are the same as before – risk, growth and cash flow potential




Relative Valuations vis-à-vis DCF

DCF assumes markets may be wrong – at overall level and at firm level

Relative Valuation assumes markets are right at overall level and could be wrong at firm level

Thus, you could find a stock overvalued on DCF basis, but undervalued on relative basis if the sector is overvalued



PRICE EARNING RATIO (P.E RATIO)

$P.E = \text{Market Price Per Share} / \text{Earning per Share}$

Most Widely Used Tool due to Easy Availability and Understanding

Logically Defined – both relate to an Equity Share

Common Parlance Low P.E = Undervaluation and Vice Versa

P.E – Tool to Estimate Simple Payback Period



LOGICAL STEPS IN DERIVING P.E

Adjusting for Diluted Earnings w.r.t ESOPS

Adjusting the probabilities of Future Conversions.

Removing The effect of Extraordinary Adjustments/One Offs.

Using Similar Earnings for Comparison – like Trailing, Forward, Current, Basic or Diluted



SOME EXAMPLES /CASE STUDIES IN P.E ADJUSTMENT

LOSS MAKING COMPANIES/ CYCLICAL COMPANIES

Loss is due to one off Factors OR due to Cyclical Nature of the Business

Taking Average of last 5 years OR the Entire Cycle.

Also using other ratios to come to a logical conclusion

Above Steps to enable a Measured Decision



K CEMENT	
(A Domestic Cyclical Company)	
YEAR	EPS
2014	13.4
2013	32.3
2012	24.5
2011	8.8
2010	31.3
AVERAGE EPS	22.06
PRICE	640
LATEST P.E	47.8
P.E BASED ON AVERAGE EPS	29.0
SECTOR P.E	32.0
<i>SOURCE:- CAPITALINE</i>	

SANGHVI MOVERS	
(A Domestic Cyclical Company)	
YEAR	EPS
2014	-3.4
2013	9.3
2012	23
2011	19.5
2010	20.4
AVERAGE EPS	13.8
PRICE	180
LATEST P.E	N.A
P.E BASED ON AVERAGE EPS	13.1
SECTOR P.E	26.0
<i>SOURCE:- CAPITALINE</i>	

BANKING AND FINANCIAL COMPANIES

Unique Nature of Business makes at times using P.E misleading

As all Assets are priced at Current Value, P/BV a more apt measure

More Detailed Discussion at time of P/BV discussion.



COMPANIES WITH HIGH FINANCIAL LEVERAGE

Earnings depressed due to high leverage .

Debt ratio is at elevated levels

High Financial Leverage may be due to Faulty Capital Structure or Prevailing High Interest Rates

High Financial Leverage correction may happen via New equity issuance or Debt Refinancing

EBITDA/EBIDTA is a better tool in such a scenario



DCF Perspective with regards to PE

PE Multiples derivation from DCF Formulae

PE Multiple is positively impacted by growth (both in high growth period and stable period)

PE Multiple is negatively impacted by risk

PE Multiple is positively impacted by return on equity



Multiples across time

Comparison of current multiples with history is very common

However, if underlying fundamentals have changed, such historical comparison may not be valid

An increase in interest rates should result in higher cost of equity and a lower PE multiple

A greater propensity to take risks will result in a lower risk premium expectation and thus lower cost of equity and increase PE multiples

An increase in expected growth rates will increase PE multiples

An increase in return on equity will increase PE multiples



Multiples across countries

Countries with higher real interest rates would have lower PE Multiples

Countries with higher expected real growth rates will have higher PE Multiples

Countries which are viewed to be high risk and would hence require higher risk premiums would carry lower PE Multiples.

Countries which are more efficient and hence earn higher ROE will have higher PE Multiples

G Ratio

$\text{PEG Ratio} = \text{PE Multiple} / \text{Expected Growth Rate}$

Growth is on current year's earnings, PE should be Current PE

Growth is based on trailing earnings, PE should be Trailing PE

Forward PE is never used as it will result in double counting

Enterprise Value to EBIDTA

one of the Most Theoretically strong multiple.

firm level multiple

fewer firms with negative EBIDTA as compared to negative EPS – hence, fewer firms

in aggregation

depreciation policy differences impact on EPS eliminated in EBIDTA

comparable across companies with different leverage levels

only Core Operating Earnings are concerned

widely used in Mergers and Acquisitions

EBIDTA

$\text{EV} / \text{EBIDTA} = (\text{Market Value of Equity} + \text{MV of Debt} - \text{Cash}) / \text{EBIDTA}$

h netted out of numerator

rest Income netted out of EBIDTA

difficulties in case of investments in subsidiaries and joint ventures as incomes
() are not fully recognized

Book Value of Debt is normally taken (as in India we don't have a thriving Bond Market)

TATA MOTORS (CONSOLIDATED)

					(IN CRORES)	(IN CRORES)	(IN CRORES)	
	Market Price	EPS	P.E RATIO	NET DEBT	MARKET CAP	EV	EBIDTA	EV
	31.6	-10.9	-	30853	8110	38963	2548	
	134.3	5.4	25.1	26365	38267	64632	9875	
	211.8	28.6	7.4	21401	67149	88550	17478	
	234.1	44.5	5.3	28910	74208	103118	22141	
	228.6	32.2	7.1	32601	72930	105531	24809	
	342.0	45.9	7.5	30931	109106	140037	34681	

Source:- Capitaline

Multiple Perspectives

Companies with lower tax rates should command higher multiples

Higher depreciation and amortisation levels should result in lower multiples

Higher reinvestment requirements should depress the multiple

Companies with lower cost of capital should enjoy higher multiples

Companies with higher expected growth should enjoy higher multiples



Price to Book (Adjustments)

Book Value however affected by accounting policies

Comparisons across countries may be difficult

Some firms especially tech may have low book values and hence very high ratios

Adjustments for acquisition accounting may be difficult and complex

Technological changes may make Assets redundant . (ex Camera Film Roll, Pagers)


Good Will needs to be looked at in Detail. (Case Study)

TATA STEEL	BOOK VALUE	
2009	305	
2010	257	
2011	369	
2012	439	
2013	351	(Impairment Charge of Rs. 88 Per share)
2014	417	
RUS ACQUISITION		200
GOODWILL IMPAIRMENT CHARGE		201

ical Time Lag between Error and Admission seems to be about 5 years (Source : ECONOMIST

Source :-
italine

PBV Perspectives

- PBV increases with higher ROE
 - PBV increases with a higher payout ratio
 - PBV decreases with a higher Cost of Equity
 - PBV increases as growth rate increases
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Applications – [part 1]

Investors use *PBV* as a screen to pick undervalued stocks

Investors combine this with other fundamentals to pick undervalued stocks

A *ROE* combined with *Low PBV* is taken as a proxy for low risk

High Usage in Valuing Banks and Financial Stocks as no Historical Bias in their Balance Sheet.

Myer and French concluded that firms in the *Low PBV* class earned 1.83% per month vs. High *PBV* firms earning 0.30% during 1963 to 1990

Applications – [part – 2]

Benjamin Graham uses price to be less than 2/3rd of book value as a criterion since 1934

Modaran tested low PBV portfolios (with high ROE) and found they earned 25.6% annually against S&P earning 17.49% during 1982-1991

The reverse portfolio (high PBV and low ROE) earned 10.61% in this period

	ICICI BANK	AXIS BANK	HDFC BANK	YES BANK
PRICE	350	490	950	740
BV AS ON MARCH 14	127	163	181	197
P/BV	2.8	3.0	5.2	3.8
ROE	14%	17%	21%	25%
P.E	21	19	28	17
<i>Source :- Capitaline</i>				

COMPANY	PRICE	BV	P/BV	EPS	ROE	Rational Cost of Equity	Implied P/BV	Implied Cost of Equity	P.E
TTLE	6148	245	25.1	118	48%	12%	4.01	1.9%	52.1
	756	16	47.3	18	113%	12%	9.38	2.4%	42.0
	372	34	10.9	11.6	34%	12%	2.84	3.1%	32.1
NSUMER	5800	431	13.5	129	30%	12%	2.49	2.2%	45.0
GATE	1750	24	72.9	38	158%	12%	13.19	2.2%	46.1

HIGH ROE /HIGH BV COMPANIES

Revenue Multiples

Revenues cannot be negative unlike EPS or EBIDTA

Revenues are not so much influenced by accounting policies as EPS or EBIDTA

Revenues are less volatile than EPS or EBIDTA

Disadvantage – it can lull you into investing into high revenue low profit firms

Recent Investments in Firms Like Flipkart, Snapdeal are done on these
Revenue Multiples

Preferred by Venture Capital Firms.

Comparison OF Shares with Differential Voting Rights

	PRICE	P
ATA MOTORS	480	11
ATA MOTORS DVR (Carries 1/10 Right of Normal Share) (Entitled to 5% Higher Dividend)	330 (A discount of 31%)	7

Source :- Capitaline

Is Such a Big Discount Justified?

Shares Issued at a discount of 10% By Company in 2008

Internationally Shares with Differential Voting Rights Trade at 5-10 % Discount

**SINGLE C SHARE
(Carries No voting Right)**

\$528 (Discount of less than 10%)

**SINGLE A SHARE
(Carries 1 Vote for Every 1 Shares)**

\$537

**SINGLE B SHARE (Held by Promoters)
(Carries 10 Vote for Every 1 Shares)**


Valuation is an Art with Skepticism

derive financial ratios from the financial statements. While these ratios do help an investor support a value investment analysis, investing is not a paint by numbers exercise.

Skepticism and judgement are always required. For one thing, not all factors affecting value are recorded in a Company's financial statement – for example Inventories can become obsolete, receivables uncollectible, liabilities are sometimes unrecorded and asset values over or understated.

Secondly Valuation is an art, not a science. As the value of a business depends on numerous variables, it can be typically assessed only in a range.

Finally, the outcomes of all investments depend to some extent on the future, which cannot be predicted with certainty; for this reason, even some carefully analysed investments fail to achieve desirable outcomes. Sometimes a stock may become cheap for good reason like a failed business model, hidden liabilities, protracted litigation or incompetent or corrupt management.

- Investment must always be practiced with caution and humility, and with a relentless search for additional information while realizing that you will never know everything about a company.
 - In the end, the most successful investors combine detailed business research and valuation work with endless discipline and patience, intellectual honesty, sensitivity analysis and years of analytical and investment experience.
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▶ **THANK YOU**

