Valuation for Amalgamation

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Valuation Concept

- Value – Price
- Valuation not an exact Science, More of Art and Subjective assessment
- Value varies with situations
- Date specific

Why Valuation?

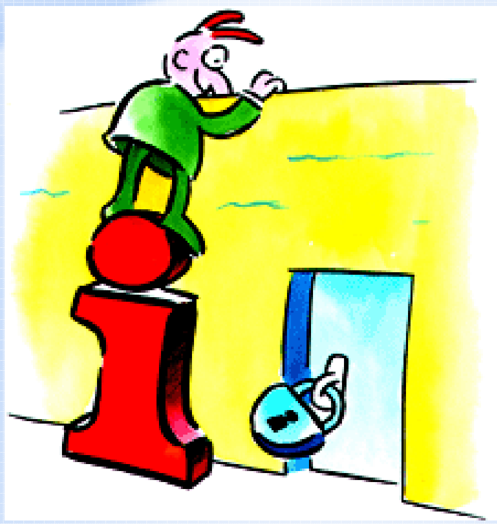
- Merger/ Demerger
- Private Equity
- IPO/ FPO
- Family Separation
- PPA
- Portfolio Value of Investments
- Regulatory Approval
- Litigation
- Test of Impairment/ IFRS
- Buyback of Shares
- Purchase / Sale of Business

Steps in Valuation

- Obtaining information
- Management Discussion and Industry Overview
- Data analysis and review
- Selection of method
- Applying Method
- Conducting sensitivities on assumptions
- Assigning Weights
- Recommendation
- Reporting

Sources of Information

- Historical data such as audited results of the company
- Future projections
- Stock market quotations
- Discussions with the management of the company
- Representation by the management
- Data on comparable companies
- Market surveys, news paper reports



Principal Methods of Valuation

Earning based approach

- Discounted Cash Flow
- Earnings Multiple Method

Market Approach

- Market Price
- Market Comparables

Asset Based Approach

- Net Assets Method
- Replacement Value/Realisable Value

Common Adjustments

Following adjustments may be called for:

- Investments
- Surplus Assets
- Auditors Qualification
- Preference Shares
- ESOPs / Warrants
- Contingent Liabilities/Assets
- Tax concessions
- Findings of Due Diligence Reviews

Discounted Cash Flow

- Values a business based on the expected cash flows over a given period of time
- Involves determination of discount factor and growth rate for perpetuity
- Value of business is aggregate of discounted value of the cash flows for the explicit period and perpetuity

Discounted Cash Flow (DCF)

- Considers Cash Flow and Not Profits
- Cash is King
- Free Cash Flow ('FCF')
  - FCF to Firm – 'FCFF'
  - FCF to Equity – 'FCFE'

DCF – Parameters

- Cash Flows
  - Projections
  - Horizon period
  - Growth rate
- Discounting
  - Cost of Equity
  - Cost of Debt
  - Weighted Average Cost of Capital ('WACC')

DCF - Projections

Factors to be considered for reviewing projections:

- Industry/Company Analysis
- Dependence on single customer/ supplier
- Installed capacity
- Existing policy/ legal framework
- Capital expenditure – increasing capacities
- Working capital requirements
- Alternate scenarios / sensitivities

DCF – Discounting

Weighted Average Cost of Capital (WACC)

$$WACC = \left\{ \frac{D}{(D + E)} \times Kd \right\} + \left\{ \frac{E}{(D + E)} \times Ke \right\}$$

D = Debt

E = Equity

Kd = Post tax cost of debt

Ke = Cost of equity

Cost of Equity

In CAPM Method, all the market risk is captured in the beta, measured relative to a market portfolio, which atleast in theory should include all traded assets in the market place held in proportion to their market value.

$$Ke = (Rf + (\beta \times Erp))$$

Where , Ke = Cost of Equity

Rf = Risk free return

Erp = Equity risk premium

β = Beta

DCF - Terminal value

Terminal Value is the residual value of business at the end of projection period used in discounted cash flow method.

Terminal Value

Liquidation Approach

Multiple Approach

Stable Growth Approach

The Final Value

Under the FCF to the firm approach - the Value is the summation of

- PV of the FCF to Firm during the horizon period
- PV of the residual value
- PV of the tax benefit on the WDV of the assets, 80IA, 10A/10B, sales tax, etc. beyond the horizon period
- Market value of the investments and other non-operating/ surplus assets (net of tax)/ surplus cash as at the valuation date
- Adjustment for contingent liabilities/ assets (net of taxes)

DCF – An Example

(Rs. In Mn)

Particulars		2012-13	2013-14	2014-15	2015-16	2016-17	Perpetuity
Operating PBT		**170**	**187**	**205**	**226**	**248**	
Add: Inflows							
Interest		69	70	72	73	75	
Depreciation		81	85	90	94	99	
Total Inflows		**320**	**342**	**367**	**393**	**422**	
Less: Outflows							
Capital Expenditure		25	25	25	25	25	
Incremental Working Capital		39	49	61	54	62	
Tax		77	83	90	97	105	
Total Outflows		**141**	**157**	**176**	**176**	**192**	
Free Cash Flows (FCF)		**179**	**185**	**191**	**217**	**230**	
Free Cash Flow for 2016-17							**230**
Growth Rate							**2%**
Capitalised Value for Perpetuity							**1,956**
Discounting Factor	14.00%	0.88	0.77	0.67	0.59	0.52	0.52
Net Present Value of Cash Flows		**157**	**142**	**129**	**128**	**119**	**1,016**
Enterprise Value							**1,692**
Less: Loan Funds							(350)
Less: Contingent Liabilities							(50)
Less: Preference Share Capital							(800)
Add: Surplus Funds							120
Add: Value of Investments							1,000
Adjusted Value for Equity Shareholders							**1,612**
No. of Equity Shares							**79,69,000**
Value per share (FV Rs. 10)							**202**

Earnings Multiple Method

Commonly used Multiples

Price to Earnings Multiple:	• Market Cap/PAT
Enterprise Value to EBITDA Multiple:	• Enterprise Value/EBITDA
Sales Multiple:	• Enterprise Value/Sales

Price Earnings Capitalization Method (PECV) - Parameters

- **Future Maintainable Profits**
- **Appropriate Tax Rate**
- **Capitalisation Rate/Multiple**

PECV

- Based on past performance and /or projections
- Non-recurring & extraordinary items excluded
- Profits of various years are averaged (simple or weighted). Current profit is accorded the highest weight
- Projected profits discounted for inflation
- By applying effective tax rate, arrive at maintainable profit
- Finally appropriate multiple is applied to arrive at the value

Multiples

- Multiples to be applied represent the growth prospects/ expectations of the Company
- Factors to be considered while deciding the multiple:
  - Past and Expected Growth of the Earnings
  - Performance vis-à-vis Peers
  - Size & Market Share
  - Historical Multiples enjoyed on the Stock Exchange by the Company and its peers

PECV – An Example

Calculation of Adjusted PBT & EBIDTA			(Rs. in Mn.)
Particulars	**2009-10**	**2010-11**	**2011-12**
Reported PBT	98	116	136
Less: Non recurring / Non operating Income			
Profit on sale of investments	28	17	18
Dividend Income	25	15	15
Profit on sale of fixed assets	4	-	20
Interest Income	7	9	-
Other income	10	10	10
Total of Non Recurring Income	**74**	**51**	**63**
Add: Non recurring Expenditure			
VRS written off	7	8	9
Preliminary Expenditure	15	15	15
Loss on sale of fixed assets	-	15	-
Amortisation of Share Issue Expenses	10	10	10
One time settlement amount paid to third party	-	-	58
Total of Non Recurring Expenditure	**32**	**48**	**92**
Adjusted PBT	**56**	**113**	**165**
Add: Interest	**59**	**63**	**65**
Add: Depreciation	**70**	**75**	**79**
Adjusted EBIDTA	**185**	**251**	**309**

PECV – An Example (Contd.)

(Rs. in Mn.)

Particulars	Adj. PBT	Weight	Product
2009-10	56	1	56
2010-11	113	2	225
2011-12	165	3	495
Total		**6**	**776**
Maintainable PBT			**129**
Less: Taxes	32.45%		(42)
Maintainable PAT			**87**
PE Multiple			14
Capitalised Value			**1,224**
Adjustments			
Add: Deferred Tax Asset			20
Less: Preference Share Capital			(800)
Add: Value of Investments			1,000
Less: Contingent Liabilities			(50)
Add: Surplus Funds			120
Equity Value			**1,514**
No. of Equity Shares			79,69,000
Value per Share (FV Rs. 10)			**190**

Enterprise Value/EBITDA Multiple Method

- Determination of Maintainable EBIDTA
- Capitalisation Rate/Multiple
- Not affected by the pattern of Funding adopted by Company/ Comparable Companies

Enterprise Value/EBITDA Multiple Method

- Based on past performance and /or projections
- Non-recurring & extraordinary items excluded
- EBIDTA of various years are averaged (simple or weighted). Current EBIDTA is accorded the highest weight
- Projected EBIDTA discounted for inflation
- Finally appropriate multiple is applied to arrive at the value

EV/EBIDTA – An Example

(Rs. in Mn.)

Particulars	Adj. EBIDTA	Weight	Product
2009-10	185	1	185
2010-11	251	2	501
2011-12	309	3	927
Total		**6**	**1,613**
Maintainable EBIDTA			**269**
EBIDTA Multiple			8
Capitalised Value			**2,151**
Adjustments			
Less: Loan funds			(350)
Less: Preference Share Capital			(800)
Add: Value of Investments			1,000
Less: Contingent Liabilities			(50)
Add: Surplus Funds			120
Equity Value			**2,071**
No. of Equity Shares			79,69,000
Value per Share (FV Rs. 10)			**260**

Market Price Approach

- Evaluates the value on the basis of prices quoted on the stock exchange
  - *Thinly traded / Dormant Scrip – Low Floating Stock*
  - *Significant and Unusual fluctuations in the Market Price*
- It is prudent to take weighted average of quoted price for past 6 months
- Regulatory bodies often consider market value as important basis – Preferential allotment, Buyback, Takeover Code

Market Comparables

- Generally applied in case of unlisted entities
- Estimates value by relating an element with underlying element of similar
  listed companies.
- Based on market multiples of Comparable Companies
  - Book Value Multiples
  - Industry Specific Multiples
  - Multiples from Recent M&A Transactions.

Market Price Method – An Example

Month	Volume	Turnover
August 2012	3,07,47,312	460,92,75,753
September 2012	1,20,40,227	267,78,68,740
October 2012	1,96,63,244	347,62,64,011
November 2012	1,61,18,953	350,32,16,645
December 2012	1,81,15,567	403,70,62,216
January 2013	2,99,08,604	653,54,15,743
Total	12,65,93,907	2483,91,03,108
Weighted Average		196

NAV Formula

The Value as per Net Asset Method is arrived as follows:

Total Assets (excluding Miscellaneous Expenditure and debit balance in Profit & Loss Account)
Less: Total Liabilities
NET ASSET VALUE

OR

Share Capital
Add: Reserves
Less: Miscellaneous Expenditure
Less: Debit Balance in Profit & Loss Account
NET ASSET VALUE

NAV – An Example

(Rs. in Mn.)

Particulars	Amount	Amount
Net Fixed Assets		700
Investments		950
Deferred Tax Asset (Net)		20
Current Assets,Loans & Advances	1,290	
Current Liabilities & Provisioins	(960)	
Net Current Assets		330
Loan Funds		(350)
Net Assets Value		**1,650**
Add/ (Less): Adjustments		
Appreciation in value of Investments		50
Contingent Liabilities		(50)
Preference Share Capital		(800)
Adjusted Net Assets		**850**
No. of Equity Shares (FV - Rs. 10 each)		79,69,000
Net Assets Value per Share		**107**

Reaching a Recommendation

- Methods throw a range of values
- Consider the relevance of each methodology depending upon the purpose and premise of valuation
- Mathematical weightage
- Professional judgment
- Subjective Value

Fair Value

(In Rs.)

Method	Value per Share (In Rs.)	Weight	Product (In Rs.)
Net Assets Method	107	1	107
PECV Method	190	1	190
EV/ EBIDTA Method	260	1	260
DCF Method	202	1	202
Market Price Method	196	2	392
Total		**6**	**1,151**
Fair Value per share (in Rs.)			**192**

A Ltd. - B Ltd.

Calculation of Fair Value per Share

Method	A Ltd.			B Ltd.		
	Value per Share	Weight	Product	Value per Share	Weight	Product
Net Assets Method	27.67	1	27.67	57.47	1	57.47
PECV	84.49	2	168.98	108.03	2	216.06
Market Price Method	90.49	2	180.98	141.40	2	282.80
Total		**5**	**377.63**		**5**	**556.33**
Fair Value per Share			**75.53**			**111.27**
Ratio						**1.47**
Rounded off						**1.50**

2 (Two) Equity Shares of B Ltd. of Rs.10 each fully paid for Every 3 (Three) Equity Shares of A Ltd. of Rs.10 each fully paid.

Case Laws

It is fair to use combination of three well known methods - asset value, yield value & market value

- *Hindustan Lever Employees' Union Vs. HLL (1995) 83 Com. Case 30 SC*

Valuation job must be entrusted to people who know the Company rather than giving to outsiders who will start from scratch

- *Consolidated Coffee V/s Arun Kumar Agrawal (1999) 21 SCL 11 (Kar)*

Cont…

Case Laws

"Exchange Ratio not disturbed by Courts unless objected and found grossly unfair"

- *Miheer H. Mafatlal Vs. Mafatlal Industries (1996) 87 Com Cases 792*
- *Dinesh v. Lakhani Vs. Parke-Davis (India) Ltd. (2003) 47 SCL 80 (Bom)*

"Valuation will take into account number of factors such as prospective yield, marketability, the general outlook for the type of business of the company, etc. Mathematical certainty is not demanded, nor indeed is it possible "

- *Viscount Simon Bd in Gold Coast Selection Trust Ltd. vs. Humphrey reported in 30 TC 209 (House of Lords)*

Valuation Report

- Introduction/ Background
- Purpose of Valuation
- Key Financials
- Sources of Information
- Methodologies of Valuation
- Important consideration & assumptions
- Recommendation of Ratio.
- Exclusions and Limitations


Thank You