Methods of Valuation

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Synopsis

- Basic Postulates
- Types of Valuation
- Approaches to Valuation
- Illiquidity Discount
- Control Premium

Basic Postulates

- Valuation is not an exact science
- Estimating values necessarily involves selecting a method or approach that is suitable for the purpose

Types of Valuation

Approaches to Valuation

Asset Based Approach

- Approach focuses on the asset base of the Business

Break up Value

- Also known as the Book Value. It is the Net-worth based on the Balance Sheet of the Company

Replacement Cost Approach

- Value based on Cost to be incurred to set-up a Green field project with similar capacities

Liquidation Cost Approach

- Value based on the value that is recovered if the company was to wind-up

NAV Approach

- A Market Value to Book Value Multiple of Comparable Companies is applied to arrive at the Fair Value under this Approach

Particulars		Amount
Non – Current Assets	(A)	XXX
Current Assets	(B)	XXX
Non – Current Liabilities	(C)	XXX
Current Liabilities	(D)	XXX
Net Asset Value (A) + (B) – (C) – (D)		XXX
Multiply By: Market Value/Book Value Multiple (Comparable Companies)		XXX
Value of Operating Business		XXX
Add: Surplus Assets		XXX
Adjusted Fair Value of Business		XXX

What are Surplus Assets ?

- Assets that are not essential for the operation of the business by a company
- It is therefore necessary to exclude them from the business value
- Examples of surplus assets-
  - Excess cash and bank balance of the company
  - Marketable securities held by the company
  - Unutilised assets

Situations where Asset Based Approach is more suitable

- Investment Companies
- Non-Banking Finance Companies
- Companies with no sustainable track record of profits
- Companies with no reliable evidence of future profits due to violent fluctuations/disruption of business
- Where there is an intention to liquidate and to realise the assets and distribute the net proceeds

Earnings Based Approach

- Approach involves deriving value based on Earnings potential of the Business

- Normalized Earnings are considered to arrive at a value under each of the above approach

Earnings Normalisation

EV/EBITDA Approach

PE Multiple Approach /Yield Approach

Market Value Approach

- Evaluates the value on the basis of prices quoted on the stock exchange
  - Stock Exchange with Higher Volume is considered
  - Attention may have to be drawn for:
    - Thinly traded / Dormant Scrip – Low Floating Stock
    - Significant and Unusual fluctuations in the Market Price
- Volume Weighted Average of quoted price for past 6 months
- Regulatory bodies often consider market value as important basis – Preferential allotment, Buyback, Takeover Code

Discounted Cash Flow Approach ("DCF Approach")

- Approach looks at the future cash flows (not profits)
  - Based on the present value of future estimated cash flows and terminal value using a risk-adjusted discount rate
  - PV of expected future cash flows + PV of terminal value
- Nominal or real Cash Flows
- Free Cash Flow ('FCF')
  - FCF to Firm
  - FCF to Equity
- FCF to Firm Preferred

Cash Flow Estimation

Free Cash Flow to the Firm (FCFF)

- Start with normalized earnings
- Add back interest expense
- Reduce an estimate of income taxes on operating income
- Add back depreciation
- Subtract a provision for capital expenditures and working capital

Free Cash Flow to Equity (FCFE)

- Start with FCFF
- Subtract after tax interest expense
- Add net new borrowing

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

Discount Rate

- Discount Rate for
  - FCFF is the WACC
  - FCFE is the Cost of Equity
- Weights used for WACC may be:
  - Industry Debt Equity
  - Market Debt Equity
  - Target Debt Equity
  - Book Debt Equity

Computation of WACC

Particulars	Cost	Weights (a)	Cost x Weights (b)
Equity [E]	ke = 20%	1000	200
Debt [D]	kd = 10%	500	50
Total		1,500	250
WACC (Σb/ Σa)			**16.67%**

Discount Rate Estimation Issues

Size Premiums

- Size effect can increase discount rate

Cost Debt

- Relative availability may be limited → increased cost of debt
- Higher operating risk → increased cost of debt

Projection Risk

- Uncertainty associated with future cash flows

Life Cycle stage

- Classification, early stage difficulties, company-specific risk

Cost of Debt

- Measure of cost of borrowed funds
- Post Tax Cost of Debt, since cash flows are after tax
- Cost of Debt(post-tax) = Pre-tax Cost of Debt x (1 – Tax Rate)

Cost of Preference Shares

- Yield on preference shares along is considered as the cost of preference shares

Cost of Equity

- Cost of Equity is generally computed using the CAPM Model (sometimes a risk premium may be added, say for size, called expanded CAPM)

- **ke = rf + ß [E(rm) – rf]**

  where,

  ke: Cost of equity

  rf: Risk-free rate of return

  ß: Systematic risk of the equity

  E(rm): Expected rate of return on overall market portfolio

  [E(rm) – rf]: Market risk premium

Beta

Unlevered and Re-levered Beta

Terminal Value for DCF

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

Calculation of Value for Equity Holders

PARTICULARS	AMOUNT
Enterprise Value as per DCF Working	XXX
Less : Debt as at Valuation Date	(XX)
Less : Contingent Liabilities likely to crystallize	(XX)
	XXX
Add : Surplus Assets	XX
Business Value as at Valuation Date	XXX
(÷) Number of Shares	XX
Value per share	XX
Less : Illiquidity Discount	(XX)
Value per share after illiquidity discount	X

Comparable Transaction Analysis

Turnover Multiple Approach

- Compares Entity's value to its sales
- Considers the Turnover based on the latest available Financial Statements
- Usually considered as a crude methodology
- The Average Enterprise Value to Turnover Multiple of Comparable Companies is applied
- Debt Considered as at the Valuation Date
- Does not take into consideration the Profit Margins of the Companies
- Can be used when earnings are negative

Benchmarking Approach

- Derives value for an asset by direct comparison with historic transactions for similar assets
- Usually, industry-specific operational factors are benchmarked
- For example,
  - In case of telecom industry – EV per subscriber
  - In case of cement industry – EV per ton of capacity
- Mainly used as cross-check

Fair Value

- The decision of the Supreme Court in *Hindustan Lever Employee's Union v. Hindustan Lever Limited and Others [(1995) 83 Company Cases 30]* endorses the use of a combination of methods as a fair and proper approach
- Weights may be assigned to the values calculated under different valuation approaches

Sum of Parts Method

- Used in case of conglomerates
- Each part of the business is valued according to the method(s) appropriate to that business, and the results are summed up to obtain total value of the business
- One of the recognized methods under the Draft Rules for Valuation under the Companies, Act, 2013

Prior Transaction Method

- Based on actual transactions in the stock of the subject company
- Based on either the actual price paid or the multiples implied from the transaction
- Most relevant when valuing the minority equity interest of a company

Illiquidity Discount

- Discount applied for non-marketability and low transferability and liquidity of shares
- *Ascendas (India) Private Limited*

Chennai Tribunal held that discounting rate accounts for all associated risks. Thus, illiquidity of shares cannot be accepted

- However, if Beta/ WACC are not adjusted for illiquidity, applying a discount would be appropriate

Control Premium

- When acquisition of a high stake is involved, the acquirer gets a representation in the management of the acquired company;
- In such a case the acquirer is willing to pay a premium for the control so acquired and this premium is termed as "Control Premium"

Thank You