Valuation Principles & Techniques in Ind-AS

Corporate Professionals
WHERE EXCELLENCE IS LAW
SEBI REGISTERED MERCHANT BANKER - CAT I (INM000011435)

3rd September 2016
Gurgaon Branch of ICAI

Agenda – Ind AS

- Overview
- Fair Value
- Principles of Fair Value
- Fair Value Techniques
- Fair Value Hierarchy
- Application under different Ind AS
- Relative Valuation method
- Discounted Cash Flow method

Introduction to Ind AS

Transition to Ind AS

Indian corporates are in the process of transitioning to a new set of accounting standards called the Indian Accounting Standards (Ind AS) which converge closely with the International Financial Reporting Standards (IFRS).

Advantages of Transition

- Improved Comparability
- Transparency
- Qualitative Financial Statements
- Global Acceptability

Fundamental changes due to Ind AS

Significant increase in focus on FAIR VALUE accounting (Approx. 75% of Balance Sheet size need Fair Value)

Applicability of Ind AS

Financial year	Mandatorily applicable to
2016-17	Companies (listed and unlisted) whose net worth is equal to or greater than 500 crore INR
2017-18	Unlisted companies whose net worth is equal to or greater than 250 crore INR and all listed companies
2018-19 onwards	When a company’s net worth becomes greater than 250 crore INR

Ind AS using Fair Value as their guiding principle

Ind AS	Description
Ind AS 113	Dedicated Standard on Fair Value Measurement
Ind AS 103	Business Combination
Ind AS 38	Intangible Assets
Ind AS 16	Property Plant & Equipment
Ind AS 36	Impairment of Assets
Ind AS 102	Share – based payment
Ind AS 109	Financial Instrument
Ind AS 40	Investment Property

Objective of Ind AS 113

Defines **FAIR VALUE**

FRAMEWORK for measuring fair value

Disclosures about fair value

Fair Value Definition

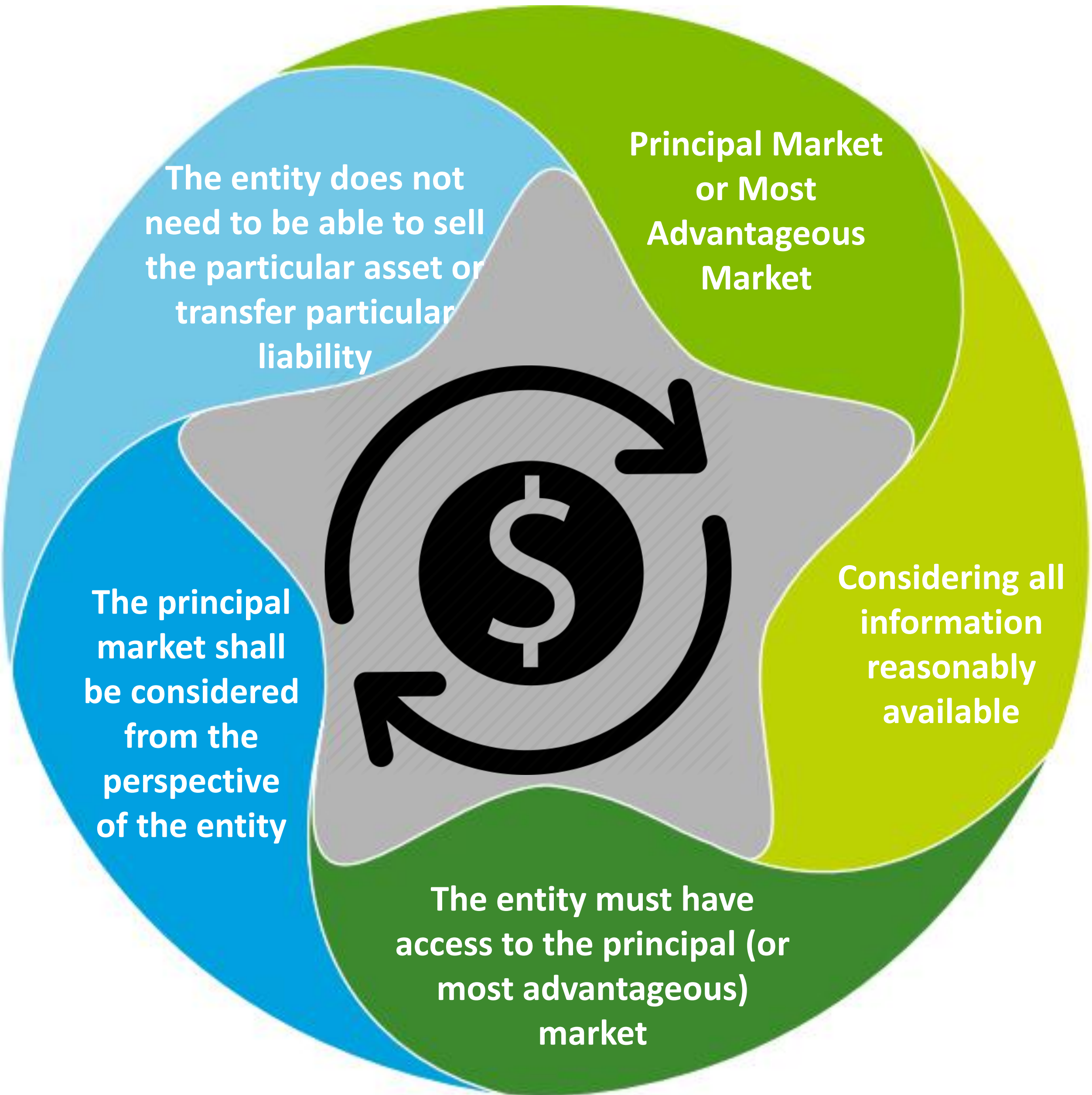
The PRICE that would be RECEIVED TO SELL AN ASSET or PAID TO TRANSFER A LIABILITY in an ORDERLY TRANSACTION between MARKET PARTICIPANTS at the MEASUREMENT DATE.

- **Fair Value is a <u>market-based</u> measurement, <u>NOT an entity-specific measurement</u>**

- **It is measured using the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk. As a result, <u>an entity's intention to hold an asset or to settle or otherwise fulfill a liability is NOT relevant when measuring fair value</u>**

Important considerations of Asset or Liability while determining fair value

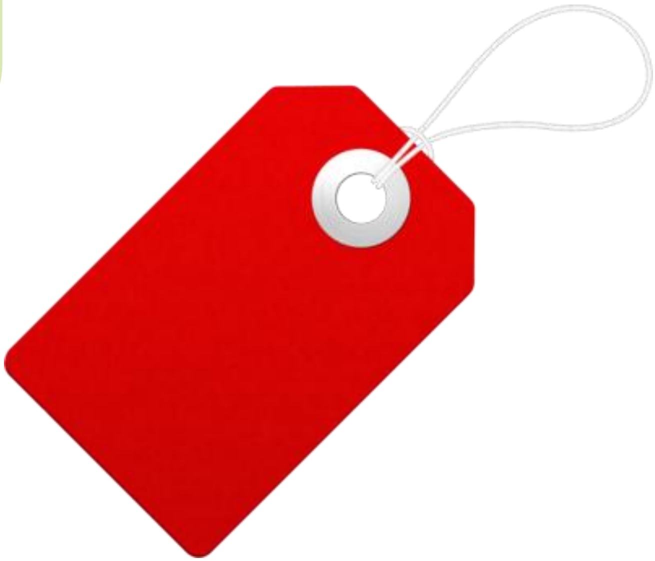
Transaction Assumptions in Fair Value measurement



The Price

Directly Observable

Estimated using another valuation technique



Recommended Price for Non Financial Asset is Highest and Best Use (HABU) that is Physically possible, Legally permissible and Financially feasible.

Fair Value – Use of Valuation Techniques

An entity shall use valuation techniques to measure Fair Value which is-

- Appropriate in the Circumstances and
- For which Sufficient Data is available and
- **Maximizing** use of relevant **Observable Inputs** and
- Minimize use of Unobservable Inputs

Valuation Techniques used to measure FAIR VALUE shall be applied consistently

Examples of Markets in which inputs might be Observable (Ex – Financial Instruments) include Stock Exchange Markets, Dealer Markets, Brokered Markets etc.

Fair Value Techniques prescribed in Ind AS - 113

Market Approach

Market Approach uses prices and other relevant information generated by market transactions involving comparable assets/liabilities/business, considering qualitative and quantitative factors (*Comparable Companies Valuation Method*)

Cost Approach

Cost Approach reflects the amount that would be required currently to replace asset (Replacement Cost method)

Income Approach

Income Approach converts future amounts to current (i.e. Discounted) amount (ex-Cash Flows or Income and Expenses) resulting in the current market expectations about those future amounts.

Income Approach Techniques could include-

- Present Value Techniques (*Discounted Cash Flow Method*)
- Option Pricing Models (*Black Scholes or Binomial models*)
- Multi period excess earning method (used for Intangibles)

Choice of Valuation Techniques

When a single valuation technique will be appropriate?
Ex - When valuing an Asset or Liability using Quoted prices in an Active market for identical assets or liabilities

When multiple valuation techniques will be more appropriate?
Ex- When valuing a Cash generating unit

How to Conclude Value ?
If multiple valuation techniques are used to measure Fair Value, the results shall be evaluated considering reasonableness of the range of values.

Fair Value measurement is the point within the range that is most representative of the Fair Value in the circumstances.

Components of Present Value Measurement (Discounted Cash Flow Method)

- An estimate of **future cash flows** for the asset/liability being measured;
- Expectations about possible variations in **amount and timing of cash flows** representing uncertainty inherent in cash flows;
- Time value of money, represented by the rate on Risk Free Monetary Assets having maturity coinciding with period of cash flows **(Risk Free rate)**
- Price for bearing the uncertainty inherent in cash flows **(Risk Premium)**
- Other factors that market participants would take **(CSRP)**

Notes

1. An entity shall develop unobservable inputs using best information available in circumstances. An entity may begin with own data but shall adjust that if market participants would use different data (which is reasonably available).

Discount rates should reflect assumptions consistent with those inherent in Cash Flows.

2. Assumptions about Cash Flows and Discount rates should be internally consistent (Nominal Cash Flows v, Real Cash Flows, Tax adjustments etc.)

3. Discount rates should be consistent with underlying economic factors of currency in which cash flows are denominated

Fair Value Hierarchy prescribed in Ind AS - 113

Level -1

If there is principal market for asset or liability with Quoted Price

<u>Quoted Price</u> - <u>Unadjusted</u> (whether that price is directly observable or estimated using another valuation technique)

Level -2

If there is principal market for asset or liability <u>but quoted price is not available</u>

Quoted Price for Comparable Companies (CCM Method)

<u>Adjustments to Level-2 Inputs are permitted</u> including for condition or location of Asset; Volume of activity in markets within which inputs are observed

Level-3

Unobservable Inputs shall be used, where there is little, market activity for the asset/liability at the measurement date. An entity may begin with own data but shall adjust that if market participants would use different data (which is reasonably available).

Discounted Cash Flow Method

Black Scholes or Binomial models

Other methods

Discounts & Premium

Depending on the Characteristics of the Assets or Liabilities that market participants would take into account, the application of Adjustments might be required.

These adjustments can be defined as –

1. Premium or

2. Discounts

(<u>Ex. Control Premium or Non Controlling Interest Discount allowed</u>)

However, Fair Value measurement shall not incorporate a Premium or Discount that is inconsistent with the unit of account

Premium or Discounts that reflect Size as a characteristic of entity's holding are <u>not</u> permitted in a fair value measurement (Ex- a blockage factor that adjusts the quoted price of an Asset or Liability because market's normal daily trading volume is not sufficient to absorb the quantity held by the entity)

Application Under Different Ind-AS

Ind AS 103: Business Combination

Particulars	IGAAP (AS 14)	Ind AS 103
Scope	• The transactions that meet the definition of amalgamations under the Companies Act are accounted for in compliance with AS 14 • Goodwill arises, only if an amalgamation is in the nature of purchase	• If an acquirer obtains CONTROL of a business then acquisition will be accounted as a business combination • Goodwill will be recognized if a business is acquired irrespective of the legal structure of an acquisition (Except Common Control Acquisitions)
Initial Recognition	Assets and Liabilities reflected in the books of the acquiree and acquired by the acquirer will be considered while arriving at the Goodwill	• Fair Value of the identifiable assets (tangible and intangible) and liabilities as of the acquisition date. PPA methodology to be followed • Intangible will get amortized over their estimated useful economic life which will impact the profit and loss statement going forward
Impairment Testing Timing	Goodwill arising on amalgamation is to be amortized over a period not exceeding 5 years	Goodwill arising on business combination is to be tested for impairment annually
Identifiable Assets	-	• Contingent consideration • Contingent Assets / Liabilities • Intangible Assets (Trademarks, Patents, Licenses) • Non Controlling interests

Ind AS 16: Property Plant & Equipment (PPE)

Particulars	IGAAP (AS 10)	Ind AS 16
Scope	• Revaluation is permitted	• One time option is given on the Transition Date to opt for either of the two accounting models viz. Fair Value or Cost • PPE may be revalued at fair value periodically • Revaluations do not affect the income statement, but rather are recognized in equity, unless the revaluation decreases an asset value below its net book value • Component approach is to be followed for accounting of PPE

Ind AS 102: Share Based Payments

Particulars	Guidance Note by the ICAI and SEBI guidelines	Ind AS 102
Scope	• Option is to measure based on the fair value or intrinsic value of the equity instruments as on the grant date • Disclosure needed if fair value not used	• Measured on grant date based on <u>fair value only</u> • Fair Value should be determined based on observable market values for identical or similar instruments • If observable market values are not available, then use other estimation techniques such as option pricing models (Black Scholes, Binomial model)

Ind AS 109: Financial Instruments

<table>
<tr><th>Particulars</th><th>IGAAP (AS 13 / 30)</th><th>Ind AS 109</th></tr>
<tr><td>Scope</td><td>• Measurement is currently not mandatory (AS 30)</td><td>• All financial instruments are initially measured at fair value
• With deal structures becoming increasingly more sophisticated and complex financial instruments becoming popular, application of Ind AS 109 will increase</td></tr>
<tr><td>Initial Recognition</td><td rowspan="2">• Investments are classified as long term or current depending on intended holding period on the date the investment
• Long term investments are carried at cost less provision for permanent diminution in value
• Current investments are carried at lower of cost and fair value</td><td>• All financial instruments are classified as measured at amortized cost or Measured at Fair Value</td></tr>
<tr><td>Subsequent Recognition</td><td>Measurement depends on how the financial instrument is classified</td></tr>
</table>

Ind AS 36: Impairment of Assets
Ind AS 38: Intangible Assets (Impairment)

Particulars	IGAAP (AS 28)	Ind AS 38
Scope	• Applies to all assets except inventories, assets arising from construction contracts, deferred tax assets, assets arising from employee benefits, financial assets and investments.	• Applies to all assets except inventories, assets arising from construction contracts, deferred tax assets, assets arising from employee benefits and financial assets that are within the scope of Ind AS 39. • Applies to financial assets classified as subsidiaries, associates and joint ventures.
Timing of Impairment Testing	Annual Impairment irrespective of whether the impairment indicators exits or not • An intangible asset not yet available for use • An intangible asset with an estimated useful life of more than ten years	Annual Impairment of following assets: • An intangible asset not yet available for use • An intangible asset with an indefinite useful life • Goodwill acquired in a business combination

RELATIVE VALUATION

Pros/Cons of Different Multiples

PE Multiple

Earnings : Audited Earnings (PAT)
:TTM Earnings (PAT)

Price : Latest / Volume Weighted / Simple Average of say 6 Months

(+) Easy to apply
Net Profitability linked

(-) Prone to Accounting Adjustments

EV/EBITDA Multiple

- Best multiple to apply
- Considers Operational Profits
- Not prone to Accounting Adjustments (Depreciation & Amortizations)
- Values irrespective of Debt levels

EV/Sales

(+) Simplest to apply even when in Losses
- Used to Value e-Commerce Companies / Media Companies in Losses

(-) Not a preferred method as such, other than for Mature Companies

Book Value Multiple

- Book Value is the Investment (Net Worth) that equity shareholders have put in & earned in Company
- Not much relevant as Earnings not factored in (other than mature cos)

Discounted Free Cash Flow Valuation

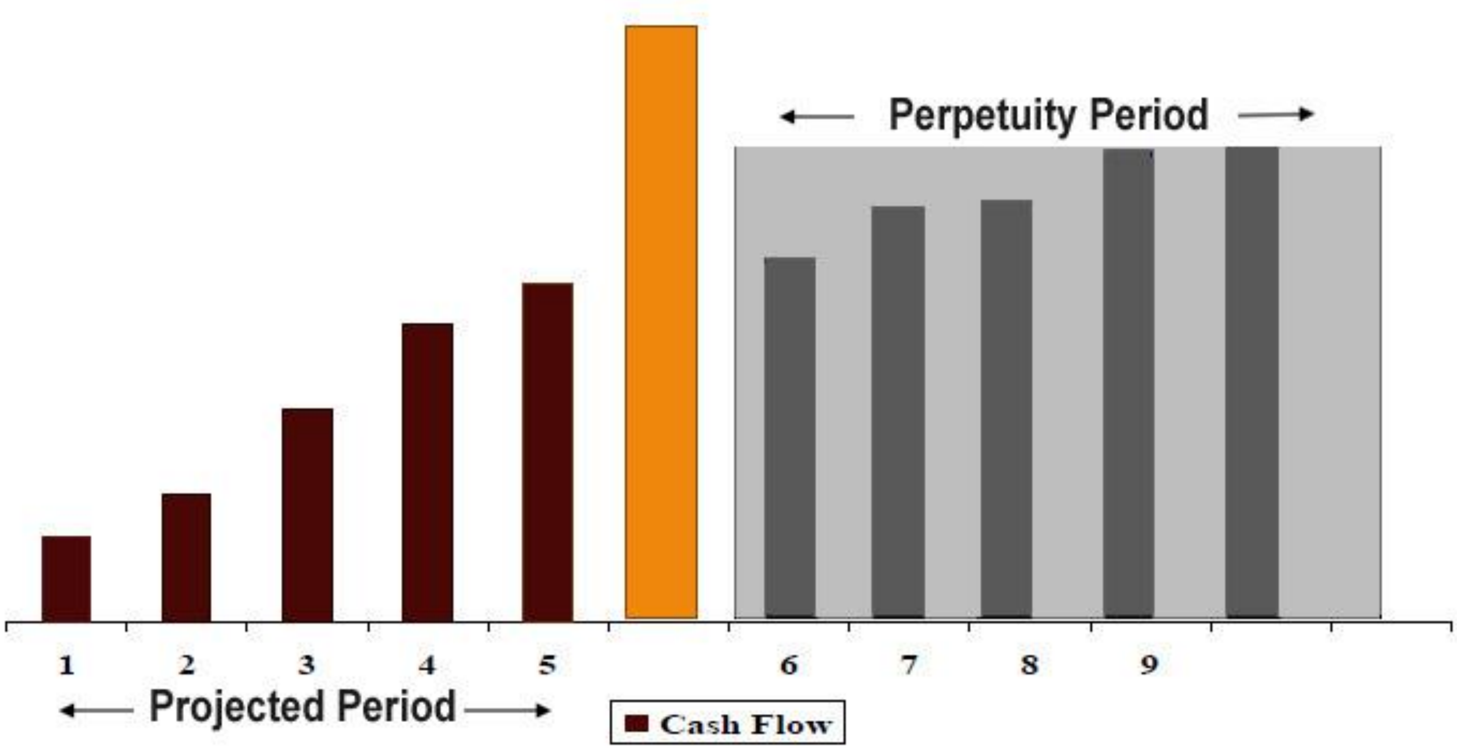
Discounted Free Cash Flow Method (DFCF)

DFCF expresses the present value of the business as a function of its future cash earnings capacity. In this method, the appraiser estimates the cash flows of any business after all operating expenses, taxes, and necessary investments in working capital and capital expenditure is being met. Valuing equity using the free cash flow to stockholders requires estimating only free cash flow to equity holders, after debt holders have been paid off.

DFCF Valuation Process

- ❑ Understand Business Model
- ❑ Identify Business Cycle
- ❑ Analyze Historical Financial Performance
- ❑ Review Industry and Regulatory Trends
- ❑ Understand Future Growth Plans (including Capex needs)
- ❑ Segregate Business and Other Cash Generating Assets
- ❑ Identify Surplus Assets (assets not utilized for Business say Land/Investments)
- ❑ Create Business Projections (Profitability statement and Balance Sheets)
- ❑ Discount Business Projections to Present (Explicit Period and Perpetuity)
- ❑ Add Value of Surplus Assets and Subtract Value of Contingent Liabilities

Free Cash Flows – Value Trend



Terminal Value is calculated for the Perpetuity period based on the Adjusted last year cash flows of the Projected period.

Free Cash Flows Calculation

FREE CASH FLOWS

Free cash flows to firm (FCFF) is calculated as

EBITDA − **Taxes** / **Change in Non Cash Working capital** / **Capital Expenditure** = **Free Cash Flow to Firm**

Note that **an alternate to above is following (FCFE) method in which the value of Equity is directly valued in lieu of the value of Firm**. Under this approach, the Interest and Finance charges is also deducted to arrive at the Free Cash Flows. Adjustment is also made for Debt (Inflows and Outflows) over the definite period of Cash Flows and also in Perpetuity workings.

Theoretically, the value conclusion should remain same irrespective of the method followed (FCFF or FCFE), (Provided, assumptions are consistent).

Cost of Capital Calculation

DISCOUNT RATE – WEIGHTED AVERAGE COST OF CAPITAL

$$\textbf{WACC} = \frac{(K_d \times D) + (K_e \times E)}{(D + E)}$$

Where:
D = Debt part of capital structure
E = Equity part of capital structure
K_d = Cost of Debt (Post tax)
K_e = Cost of Equity

In case of following FCFE, Discount Rate is Ke and Not WACC

Cost of Equity Calculation

DISCOUNT RATE - COST OF EQUITY

The Cost of Equity (Ke) is computed by using Modified Capital Asset Pricing Model (Mod. CAPM)

Mod. CAPM Model

ke = Rf + B (Rm-Rf) + SCRP + CSRP

Where:

Rf = Risk free rate of return (Generally taken as 10-year Government Bond Yield)

B = Beta Value (Sensitivity of the stock returns to market returns)

K_e = Cost of Equity

Rm= Market Rate of Return (Generally taken as Long Term average return of Stock Market)

SCRP = Small Company Risk Premium

CSRP= Company specific Risk premium

Terminal Value Calculation

PERPETUITY FORMULA

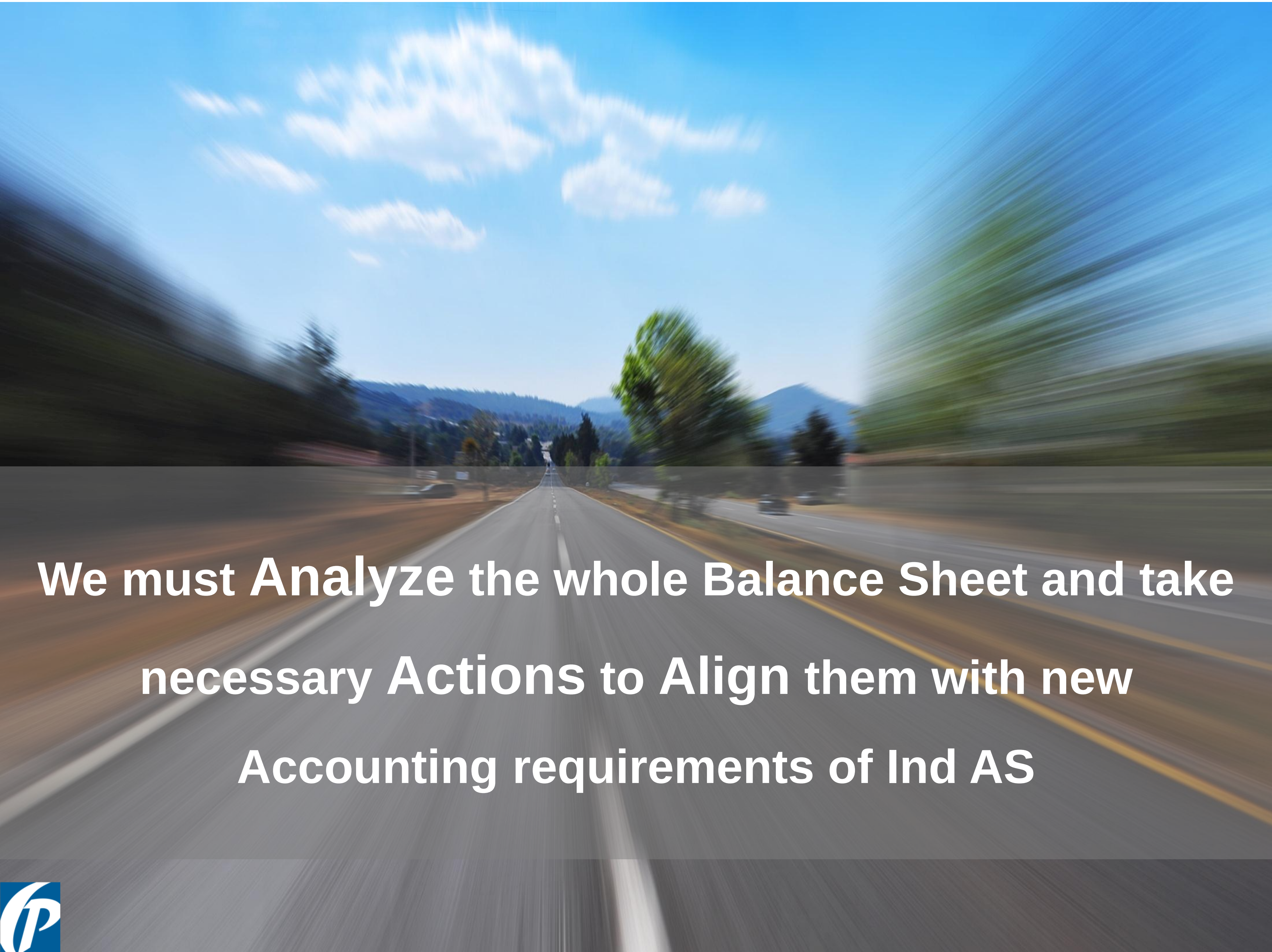
- Usually comprises a Large part of Total Value and is sensitive to small changes
- Capitalizes FCF after definite forecast period as a growing perpetuity;
- Estimate Terminal Value using Terminal Value Multiplier applied on last year cash flows
- Gordon Formula is often used to derive the Terminal Cash Flows by applying the last year cash flows as a multiple of the growth rate and discounting factor

$$\frac{(1 + g)}{(WACC - g)}$$

- Estimated Terminal Value is then discounted to present day at company's cost of capital based on the discounting factor of last year projected cash flows

IMPORTANT TIP- It is advised to do Sanity check by applying Relative Valuation Multiples to the Terminal Year Financials and also doing Scenario Analysis.

Where Things can go Wrong


We must Analyze the whole Balance Sheet and take necessary Actions to Align them with new Accounting requirements of Ind AS

Chander Sawhney

FCA, ACS, Certified Valuer (ICAI)

Partner & Head – Valuation & Deals

Corporate Professionals
WHERE EXCELLENCE IS LAW
SEBI REGISTERED MERCHANT BANKER - CAT I (INM000011435)

M: +91 9810557353; E: chander@indiacp.com

D-28, South Extension, Part-I, New Delhi-110049

www.corporatevaluations.in