

# Corporate Valuations “Techniques & Application”



**A compilation of research  
oriented valuation articles**

**May 2017**

# Contents

Obtain valuation for your company	3
Start-up and e-Commerce Valuation	8
Brand Valuation	14
Regulatory valuations	20
RBI valuation	24
Discounted Cash Flow Valuation	28
ESOP valuation	33
Relative Valuation	36
Sum of the Parts Valuation and Value Creation	40
Enterprise Valuation	43
Valuation discount applicable to holding companies	46
Valuation in information technology sector	49
Registered Valuer	53
Preferred Shares Valuation	61
Ind AS Valuation	67
About Corporate Professionals	73

**Disclaimer:**

The information contained herein is for general information only. We make no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or availability with respect to the background or the information, products or services or related graphics contained on the background for any purpose. In no event we will be liable for any loss or damage including without limitation, indirect or consequential loss or damage, or in connection with the use of this background. Every effort is made to keep the report up to date however Corporate Professionals takes no responsibility for and will not be liable for any content or omission.

## PREFACE

Knowing what business is worth and what determines its value is prerequisite for intelligent decision making. John Maynard Keynes said, "There is nothing so dangerous as the pursuit of a rational investment policy in an irrational world." Corporate valuations form the basis of corporate finance activity including capital raising, M&A and also to meet regulatory / accounting requirements or for voluntary purpose. Justifying the value of businesses has grown more complex and challenging as it's been accepted that valuation is not an exact science and depends upon a number of factors like purpose, stage, financials, industry, management and promoters strengths etc. Professional experience of valuer has a big role in choosing and applying out of different methodologies and concluding value.

As of now there are no formal standards for business valuation in India (barring ICAI Valuation Standard which too is recommendatory) specifically for unlisted and private companies, numerous conceptual controversies still remain, even among the most prominent valuation practitioners. Interestingly, the answer to this lies in focusing more on basics of valuations. [www.corporatevaluations.in](http://www.corporatevaluations.in) by virtue of its extensive promoters capital markets experience, dedicated valuation team, in-house research wing and proven expertise in corporate transaction advisory has made an attempt by identifying, preparing and compiling research oriented articles on such debated issues on Business valuation, Relative valuation, SOTP valuation, ESOP valuation, DCF valuation, Enterprise valuation, Holding company discounts, Valuation in IT sector, RBI valuation, Regulatory valuations, Registered valuer, Start up valuation and Brand valuation which will guide you how to apply the range of valuation techniques, including their appropriate application, advantages and disadvantages.

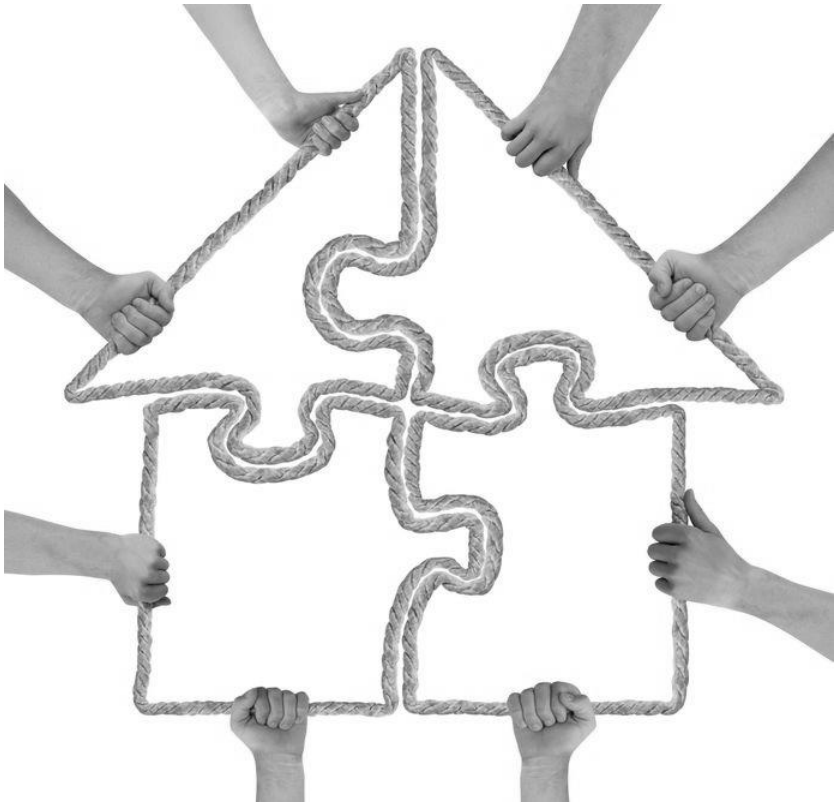
[www.corporatevaluations.in](http://www.corporatevaluations.in) is an online venture on valuation promoted by Corporate Professionals Capital Private Limited, a SEBI Registered (Cat-I) Merchant Banker headquartered at New Delhi. We hope this compilation of research oriented articles will give its readers rich insight and adequate knowledge about key valuation issues. We shall be happy to receive any comments /suggestions @ [info@corporatevaluations.in](mailto:info@corporatevaluations.in)

With warm wishes,

Valuation & Biz Modelling Team

Corporate Professionals Capital Pvt Ltd

SEBI Registered (Cat-I) Merchant Bankers



# Obtain valuation for your Company

Valuation is more of an art based on the professional experience of the valuer rather than a science based on empirical studies and logics. Though Internationally Business Valuations are governed by broadly various standards like: Valuation Standards of American Institute of CPAs (AICPA), American Society of Appraisers (ASA), Institute of Business Appraisers (IBA), National Association of Certified Valuation Analysts (NACVA), The Canadian Institute of Chartered Business Valuators (CICBV), Revenue Ruling 59- 60 (USA), ICAI Valuation Standard (recommendatory) however keeping in view the growing relevance and importance of valuation in business and investment decisions as well as in regulatory compliance processes the development of practice of valuation as a discipline and profession in the present context has become a necessity because of complex financial markets, emerging global economy, and changing framework of accounting and financial reporting.

## An insight into business valuation

**Knowing what business is worth and what determines its value is prerequisite for intelligent decision making.** Corporate valuations form the basis of corporate finance activity including capital raising, M&A and also to meet regulatory / accounting requirements or for voluntary purpose. The rapid globalization of the world economy has created both opportunities and challenges for organizations leading to uncertainty blowing across global markets and raising the importance of independent valuations all over the world. Justifying the value of businesses has grown more complex and challenging as valuation as its been accepted that valuation is not an exact science and depends upon a number of factors like purpose, stage, financials, industry, management and promoters strengths etc.

Business Valuation is the process of determining the "Economic Worth" of a Company based on its Business Model and external environment and supported with reasons and empirical evidence. In business valuation, variety of business valuation methods typically categorized into three core Valuation approaches are considered and Premium & Discounts applied based on standard & premise of valuation to arrive at the Business Valuation for different purposes.

## Standard and Premise of value?

To determine the value of any business, the reasons for and circumstances surrounding the business valuation must be pre ascertained. These are formally known as the **“Standard of value”** and **“Premise of value”**.

To be precise, the **“Standard of Value”** is the hypothetical conditions under which the business is valued and the **“Premise of Value”** relates to the assumptions upon which the valuation is based.

## Key facts of business valuation

- Price is not the same as value
- Value varies with person, purpose and time
- Transaction concludes at negotiated prices
- Valuation is hybrid of art & science

## Some reasons to get business valuation

Purpose	Regulatory	Accounting	Dispute Resolution	Value Creation
Mergers	RBI	ESOP	Company Law Board/ Courts	Equity Research
IPO	Income Tax	Purchase Price Allocation	Arbitration	Credit Rating
Acquisitions / Investment	SEBI	Impairment / Diminution	Mediation	Corporate Planning
Voluntary Assessment	Stock Exchange			
	Companies Act			

## Generally acceptable methodologies of valuation

There are broadly three approaches to valuation which need to be considered in any business valuation exercise. A number of business valuation models can thus be constructed that utilize various methods under the broad business valuation approaches. Most treatises and court decisions encourage the valuer to consider more than one method, which must be reconciled with each other to arrive at a value conclusion. Understanding of the internal resources

and intellectual capital of the business being valued is as important as the economic, industrial and social environment.

- Asset approach
- Income approach
- Market approach
  
- **Asset approach (NAV)** - Generally the Net Asset Value reflected in books do not usually include intangible assets enjoyed by the business and are also impacted by accounting policies which may be discretionary at times. NAV is not perceived as a true indicator of the fair business value. However, it is used to evaluate the entry barrier that exists in a business and is considered viable for companies having reached the mature or declining growth cycle and also for property and investment companies having strong asset base.
  - **Book value method** - It is based on the balance sheet review of assets and liabilities;
  - **Replacement cost method** - It is based on current set up cost of plant of a similar age, size and capacity;
  - **Liquidation value method** - It is based on estimated realizable value of various assets.
  
- **Income approach** - The Income based method of valuations are based on the premise that the current value of any business is a function of the future value that an investor can expect to receive from purchasing all or part of the business.
  - **Discounted Cash Flow Method (DCF)** - DCF 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.

- **Capitalization of earning method** - The capitalization method basically divides the business expected earnings by the so-called capitalization rate. The idea is that the business value is defined by the business earnings and the capitalization rate is used to relate the two.
  
- **Market based approach** - In this method, value is determined by comparing the subject, company or assets with its peers or Transactions happening in the same industry and preferably of the same size and region. This is also known as relative valuation method.
  - **Comparable companies multiples method**- Market multiples of comparable listed companies are computed and applied to the company being valued to arrive at a multiple based valuation.
  - **Comparable transaction multiples method** - This technique is mostly used for valuing a company for M&A, the transaction that have taken place in the industry which are similar to the transaction under consideration are taken into account.

- **Market value method** - The Market value method is generally the most preferred method in case of frequently traded Shares of companies listed on stock exchanges having nationwide trading as it is perceived that the market value takes into account the inherent potential of the company.

#### Other valuations methods -

- **Contingent claim method** - Under this valuation method, option pricing model is applied to estimate the Value. Generally ESOP valuation for accounting purpose is done using the black scholes method. Now even Patent Valuation is also done using black scholes method.
- **Price of recent investment method** - Under this valuation method, the recent investment in the business by an independent party may be taken as the base value for the current appraisal, if no substantial changes have taken place since the date of such last investment. Generally the last investment is seen over a period of last 1 year and suitable adjustments are made to arrive at current value.
- **Venture Capitalist method** - Venture Capitalist Method is majorly used by venture capitalist looking for making investments in start-up companies.
- **First Chicago Method** - First Chicago approach takes into consideration three scenarios: Success, Failure and Survival case and associate probability to each case to find the weighted average price.
- **Adjusted discounted cash flow method** - This method is the scientific tool to judge the value of a start-up on the basis of its potential which is translated in the form of cash flow and adjusted

with differential discount rates based upon the risk perception

- **Rule of thumb** - Although technically not a valuation method, a rule of thumb or benchmark indicator (like EV per room in hotel business) is used as a reasonableness check against the values determined by the use of other valuation approaches.

#### Valuation - Indian considerations

For so long, valuation has been debated in India as an art or science and substantial part of the litigation in Mergers & Acquisitions (M&A) takes place on the issue of valuation as it involves an element of subjectivity that often gets challenged. More so, as in India, there are not much regulator prescribed standards for business valuation specifically for unlisted and private companies so in many cases the valuation lacks the uniformity and generally accepted global valuation practices. Even limited judicial guidance is available over the subject in India. Further, absence of any stringent course of action and non regulation under any statute is also leading to loose ends.

- Institute of Chartered Accountants of India (ICAI) has recently developed and recommended Business Valuation Practice Standards (BVPS) aiming to establish uniform principles, practices and procedures for valuers performing valuation services in India.
- The introduction of concept of Registered Valuer (yet to be notified) in the Companies Act, 2013 could now set the Indian valuation standards for standardizing the use of valuation practices in India, leading to transparency and better governance.

## Concluding thoughts

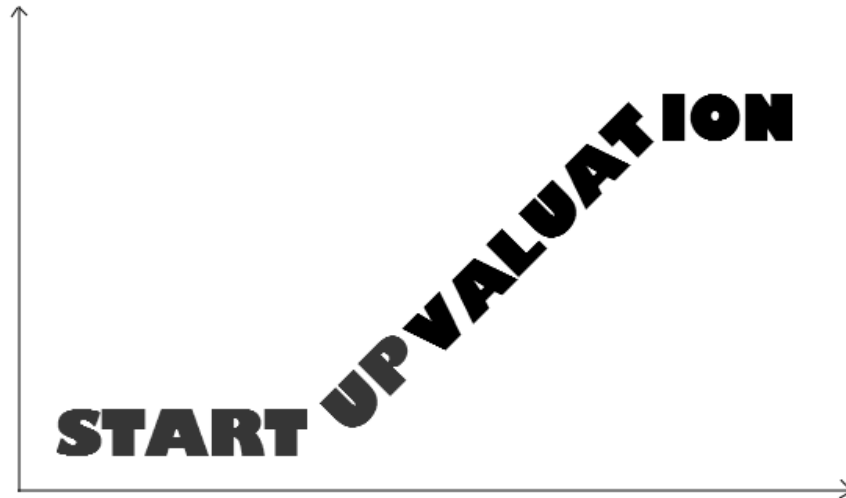
Valuation is more of an art based on the professional experience of the valuer rather than a science based on empirical studies and logics. Though Internationally Business Valuations are governed by broadly various standards like: Valuation Standards of American Institute of CPAs (AICPA), American Society of Appraisers (ASA), Institute of Business Appraisers (IBA), National Association of Certified Valuation Analysts (NACVA), The Canadian Institute of Chartered Business Valuators (CICBV), Revenue Ruling 59- 60 (USA), ICAI Valuation Standard (recommendatory) however keeping in view the growing relevance and importance of valuation in business and investment decisions as well as in regulatory compliance processes the development of practice of valuation as a discipline and profession in the present context has become a necessity because of complex financial markets, emerging global economy, and changing framework of accounting and financial reporting.

-----

-----

**This Space is intentionally left blank**





# Start-up and e-Commerce Valuation

Start-up valuation is more about understanding promoters and management background, experience and vision, future potential of business, people, technology, competitive landscape, traction and the probability of success and failure attached. In a way, Start-up valuation involves also involves validation/review of business model which makes it complicated vis-à-vis other valuations. It can be rightly concluded while valuating a start up, the experience of valuer plays a significant role in value conclusion as its certainly an art not science.

## Start-up and e-Commerce valuation- Art or Science?

The e-Commerce businesses globally have seen unprecedented growth and now with India taking a center stage in global markets because of high growth / reform expectations, demographic dividend and large market, many Indian e-Commerce firms have come out, especially in the last couple of years, building scalable businesses (substantially Tech-enabled) to solve a multitude of problems we face in our daily life. As per Industry Research, 75% of online population in India is 15-34 year old.

## Key Stats in favor of online Trade in India

- 1 in every 3 internet users globally will come from India over next Three years.
- No. of Internet Users in India estimated to increase from 213 mn to 612 mn at CAGR of 16% (2013-2020).
- Interestingly, no. of Online Shoppers in India estimated to increase at a faster pace from 20mn to 220mn at CAGR of 41% with average online spending increase from 147 \$ to 464 \$ at a CAGR of 18% (2013-2020)
- Online shoppers as a % of Internet Users in India to reach 36% by 2020
- India's Internet market to hit 137 bn \$ by 2020. e-Commerce to contribute 74% (100 bn \$+) with online penetration of 11% by 2020. Existing online penetration is under 2%.
- India's e-Commerce sales growth to grow at CAGR of 66%

(2013-2020) making it the fastest growing market globally

- Indian Internet Companies M-Cap to reach 160-200 bn \$ by 2020
- Over 80% of Internet Users in India would access the Internet through Smartphone by 2020

## Key Characteristics of start-up companies

- No past history, operations not reached the stage of commercial production
- Negligible revenue with high operational losses
- Limited promoter's capital infused and high dependence on external sources of funds
- Illiquid investments

## There are two perspectives while valuing the start-ups companies-

### Entrepreneur's Perspective:

- How much is my company worth?
- What are the unique, tangible and intangible assets (value components) we have to offer?

### Investor's Perspective:

- How much should I pay for this investment opportunity?
- Can I earn an appropriate return on investment (ROI) to justify the risk being taken?

**Start-up valuation is more about understanding promoters and management background, experience and vision, future potential of business, people, technology, competitive landscape, traction and the probability of success and failure attached. In a way, Start-up valuation involves also involves validation/review of business model which makes it complicated vis-à-vis other valuations.**

**Indian digital retail and e-Commerce companies and their valuations are being closely linked to the soaring valuation of US tech start-ups and investors are under the fear of missing out. The online retail companies rely on a different metric of valuations – “GMV” which is defined to indicate total sales value for merchandise sold through a marketplace over a period. However, it must be noted that GMV is not reflected on their financial statements and their actual revenues are just a fraction of GMV. The GMV or sales (as per financial statement) is then multiplied by a multiple (x times) to get the Valuation of the entity.**

*As per a study undertaken by Luis Villalobos and William H. (Bill) Payee “Investing in seed and start-up companies is extremely risky, Angel investors typically realize about 85% of their total portfolio return comes from 15% of their portfolio start-up companies”.*

While valuing the start-up companies, the valuer, and the venture capitalist have to be more creative while attaching the value proposition as these companies do not have any past track record, market presence, and financial history. Everything is future driven in start-up and any investment need to be made very cautiously as start-up stage of any company is called the valley of death where only few survive and majority perish.

When a start-up go for funding there is a chicken and egg story, the start-up contends that they command a post money valuation and the stake dilution need to be carried out on the basis of post money value, however the investor contends that the post money value is not the right criteria as the company is reaching that status and scale because of their investment so there need to be a pre money valuation for deciding the stake value.

**Post Money valuation = Pre money valuation + Investment.**

Valuing mature companies which have a past track record, business in place, having a market visibility and already have made a consumer reach is not such a daunting exercise as valuing a company which is in its infancy stage i.e. in its conceptual stage, prepared its business plan blue prints and has limited promoter resources.

For valuing **mature companies** there are broadly three approaches to valuation namely **Asset Approach, Income Approach & Market Approach**

However these approaches do not find much of relevance for valuing the Start-ups as they often have insignificant revenue or EBITDA metrics, insufficient history, no meaningful comparable(at their stage) and long term **income/ cash flow projections are quite difficult to estimate.**

### Valuation Methodology for start-ups

1. Venture Capitalist method
2. First Chicago Method
3. Adjusted discounted cash flow method.

#### Venture Capitalist Method

Venture Capitalist Method is majorly used by venture capitalist looking for making investments in start-up companies. Let's take an example

Suppose Venture Capitalist (VC) is willing to make investment of \$ 1.0 Million in a start-up Technology Company for a period of 5 years. The company is presumed to be earning \$ 2 Mn, in year 5 and the company comparable are fetching a price earning (PE) multiple of 10 x and the VC requires a 20% return on its investment. The critical question is, how much equity stake the VC should need to get for its investment.

**Required Future value of Investment** = (Investment) X (1+ IRR)<sup>5</sup>

$$\begin{aligned} \text{At year 5} &= (\$ 1.0 \text{ Mn}) \times (1+20\%)^5 \\ &= \$ 2.49\text{Mn} \end{aligned}$$

Now, at that point the company must be valued at

$$= 5\text{th Year Net Income} \times \text{PE Multiple}$$

$$= \$ 2\text{Mn} \times 10 = \$ 20 \text{ Mn}$$

$$\text{Hence VC shall be getting} = \$ 2.49 / \$ 20 = 12.44\%$$

#### First Chicago Method

First Chicago approach takes into consideration three scenarios: Success, Failure and Survival case and associate probability to each case to find the weighted average price.

#### Example

Particulars	Success	Survival	Failure
Base Year Revenue	\$ 1 mn	\$ 1 mn	\$ 1 mn
Revenue Growth Rate	100%	50%	5%
Revenue Level after 5 year	32.00	7.59	1.28
After Tax Profit Margin	20%	10%	Negative
Net Income at Liquidity	6.40	0.76	0.00
Value of company at a PE Multiple of 10	64.00	7.59	1.00 (Projected Liquidation Value)
PV of company using discount rate 20%	25.72	3.05	0.40
Probability	33.33%	33.33%	33.33%
Expected PV under each scenario	8.57	1.02	0.13
Overall Expected PV	9.72		
% Ownership in order to invest \$ 1.0 Mn	10.28%		

This method is the scientific tool to judge the value of a start-up on the basis of its potential which is translated in the form of cash flow. The steps involved in this method are detailed below

### 1. Determine potential market for the product/service of start-up:

The first step while deriving the revenues for the firm is estimating the total potential market for its products and services. The valuer has to accurately define the products and services of the start-up as this has a direct bearing on the market size.

### 2. Market Share:

To estimate the share of the market that would be captured by the start-up, business valuers need to consider the parameters like Promoters experience particularly in same sector at senior position, Management credentials and team, Market size of project and Revenue size, Competitive landscape and Entry barriers, Stage of business, Validation of Technology and Quantum of Funding required. From this market share, the revenue amount can be estimated.

### 3. Operating expenses:

The valuator will also have to estimate the operating expenses of the start-up. The operating expenses can be estimated as a

percentage of revenue and also considering the specific management plans.

### 4. Investments for growth:

The investments in working capital and capital expenditure required to achieve the estimated growth must be determined. These investments will contribute towards things like R&D, registering new patents, enhancing the products and acquiring experienced human resource and also significant marketing expenses. Capex and Opex both need to be factored in. This figure is important to the investor in the start-up business as it also indicates the amount of recapitalization the start-up company might need in the future.

**From the above estimates the cash flow from operation can be estimated and discounted at an appropriate cost of capital for the start-up business. The significant departure from the traditional DCF in the adjusted DCF is the validation of the revenue and expenses by validating the business model.**

**While applying adjusted DCF approach, another significant aspect is use of differential discount rates depending upon the stage of operations and inherent risk of the business model at that stage (like pre and post development / validation of a product is critical in its success/failure and thus should command different risk). This must be factored in the Valuation while calculating cost of capital.**

## Conclusion

Start-up valuation is more about understanding promoters and management background, experience and vision, future potential of business, people, technology, competitive landscape, traction and the probability of success and failure attached. In a way, Start-up valuation involves also involves validation/review of business model which makes it complicated vis-à-vis other valuations. It can be rightly concluded while valuating a start up, the experience of valuer plays a significant role in value conclusion as its certainly an art not science.

---

**This Space is intentionally left blank**



# Brand Valuation

Thus brand valuation is not considered as a mainstream practice, but instead a niche. There are traditional methods available to measure the value of business, but to value the Brand categorically there is a need to understand the modern ways which includes measuring various attributes of brand like clarity , Protection, Commitment, Responsiveness, Authenticity, Relevance, Differentiation, Consistency, presence & understanding and assigning value to these attributes in monetary terms. There requires an experience of the valuer who can perceive and attach a monetary value to the intangibles.

## Brand Valuation

*"If this business were split up, I would give you the land and bricks and mortar, and I would take the brands and trademarks, and I would fare better than you."* — John Stuart, Chairman of Quaker

Brand has come a long way from the time when it was first thought that the brand was just another word for Logo. It is widely appreciated that brand is one of the most valuable assets an organization owns. This is because of the economic impact that brands have. Brand influence the choices of customers, employees, investors and government authorities. A study concluded that on average brands account for more than one-third of shareholder value. The study reveals that brands create significant value either as consumer or corporate brands or as a combination of both.

## Need of Brand Valuation

A brand can be valued anytime and for many reasons, that includes- **Brand strategy, Financial Reporting, Mergers and acquisitions, value reporting, licensing, legal transaction, accounting, strategic planning, management information, taxation planning and compliance, liquidation.**

Several studies have tried to estimate the contribution that brands make to shareholder value. On an average brands account for more than one-third of shareholder value. The study reveals that brands create significant value either as consumer or corporate brands or as a combination of both.

Company	2012 Brand Value (Mn \$)	Brand Contribution to market capitalization of the parent company %
Coca Cola	77, 839	45%
Microsoft	57, 853	18%
IBM	75,532	37%
GE	43,682	17%
Intel	39,385	30%
Disney	27, 438	65%
Macdonald's	40, 062	21%
Mercedes Benz	30, 097	40%

The ISO standard sets out the appropriate process of valuing brands and sets out six key requirements, transparency, validity, reliability, sufficiency, objectivity and financial, behavioral and legal parameters.

## Traditional Financial Approaches to Brand Valuation

- **Cost Based Approach**
- **Market Based Approach**
- **Income Based Approach**



**Cost Based Approach:** Cost-based approaches define the value of a brand as the aggregation of all historic costs incurred or replacement costs required in bringing the brand to its current state: that is, the sum of the development costs, marketing costs, advertising and other communication costs, and so on. This approach fails because there is no direct correlation between the financial investment made and the value added by a brand.

**Market oriented Approach-** The market approach is an approach which investigates value based on the transaction value of assets. Its valuation is priced according to transactions between third parties, so it is characterized by high objectivity, but especially in the case of intellectual property rights, similar transaction with a similar awareness, strength, or economic and legal situation often do not exist, and its adoption is really difficult.

**Income oriented Approach-**It is the most commonly used approach used to measure the value of the brand. The income approach focus on the present value of the economic benefits which brand shall generate in the future. This method evaluates profits gained in the future by actually utilizing the brand name, but it is accompanied by the uncertainty of future forecasts. Few of its methods are as follows:

- **Relief from Royalty Method-** ‘Royalty Relief’ is an ‘economic use’ approach to valuation which determines the value of the brand in relation to the royalty rate that would be payable for its use were it owned by a third party.

- **Premium Price Method** – This method estimates the value of a brand by the volume premium it generates when compared to a similar but unbranded product or service. This method is not well accepted as it is difficult to find a generic product to which the premium price of the branded product can be compared.

- **Incremental cash flow method-**The incremental cash flow method identifies all cash flows generated by the brand in a business, by comparison with comparable businesses with no such brand. Cash flows are generated through both increased revenues and reduced costs.

However all these are traditional financial approaches and not able to compute the brand value as in valuing brands there are qualitative factors as well which needed to quantified based on research on consumer behavior. **So while valuing brands there is a need to look both the financial approaches detailed above and the research based approaches as well.**

There are research based approach to measure the value of brands, majority of which uses consumer behavior and attitudes that have an impact on the economic performance of brands. Although the sophistication and complexity of such models vary, they all try to explain, interpret and measure consumers' perceptions that influence purchase behavior. They include a wide range of measurement tools such as levels of awareness, knowledge, familiarity, relevance, specific image, purchase consideration, preference, satisfaction and recommendation.

These attributes are assigned different brand equity score, the sum of these score assigned to different attributes provide the overall brand score

A change in one or a combination of indicators is expected to influence consumers' purchasing behavior, which in turn will affect the financial value of the brand in question. However, these approaches do not differentiate between the effects of other influential factors such as R&D and design and the brand. They therefore do not provide a clear link between the specific marketing indicators and the financial performance of the brand. A brand can perform strongly according to these indicators but still fail to create financial and shareholder value.

The understanding, interpretation and measurement of brand equity indicators are crucial for assessing the financial value of brands. After all, they are key measures of consumers' purchasing behavior upon which the success of the brand depends. However, unless they are integrated into an economic model, they are insufficient for assessing the economic value of brands. Thus research based approach fails to quantify the value of the brand in monetary terms.

**To capture the complex value creation of a brand, the following steps needs to be taken:**

### **Market segmentation:**

Brands influence customer choice, but the influence varies depending on the market in which the brand operates. Split the brand's markets into non-overlapping and homogeneous groups of consumers according to applicable criteria and the brand is valued in each segment and the sum of the segment valuations constitutes the total value of the brand.

### **Financial analysis:**

Identify and forecast revenues and earnings from intangibles generated by the brand for each of the distinct segments determined in Step 1. Intangible earnings are defined as brand revenue less operating costs, applicable taxes and a charge for the capital employed. The concept is similar to the notion of economic profit.

### **Demand analysis:**

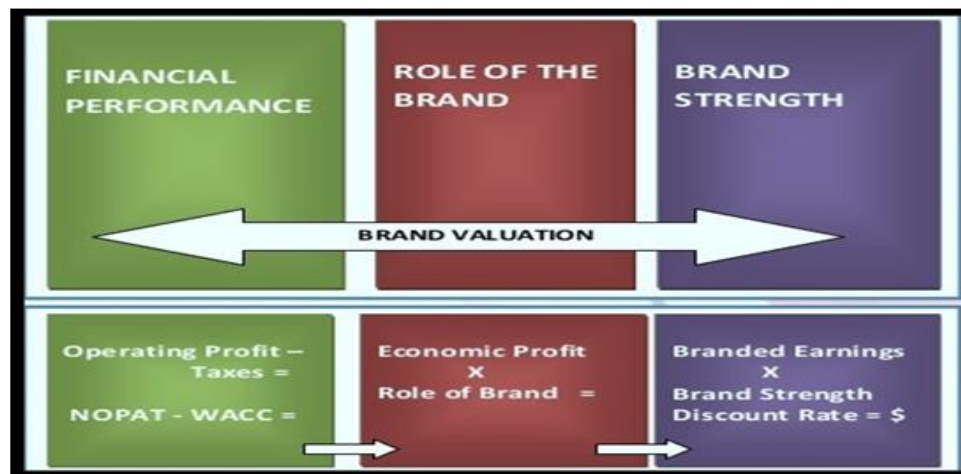
Assess the role that the brand plays in driving demand for products and services in the markets in which it operates, and determine what proportion of intangible earnings is attributable to the brand measured by an indicator referred to as the **"role of branding index."** The role of branding index represents the percentage of intangible earnings that are generated by the brand. Brand earnings are calculated by multiplying the role of branding index by intangible earnings.

## Competitive benchmarking:

Determine the competitive strengths and weaknesses of the brand to derive the specific brand discount rate that reflects the risk profile of its expected future earnings (this is measured by an indicator referred to as the “**brand strength score**”). This comprises extensive competitive benchmarking and a structured evaluation of the brand’s market, stability, leadership position, growth trend, support, geographic footprint and legal protectability.

## Brand value calculation:

Brand value is the net present value (NPV) of the forecast brand earnings, discounted by the brand discount rate. The NPV calculation comprises both the forecast period and the period beyond, reflecting the ability of brands to continue generating future earnings.



## Brand Strength Score

Brand strength measures the ability of the brand to create loyalty. The brand strength is based on evaluation of scorecard on 0-100 basis. It is based on 10 factors i.e Clarity, Commitment, Protection, Responsiveness, Authenticity, Relevance, Differentiation, Consistency, Presence & Understanding.

## Branding Index

Branding Index is the parameter which leads to purchase of a particular brand apart from price and feature. The score is assigned for each of the parameter and the mean score for each parameter and for each brand have been taken and multiplied with weights assigned to each of the attribute.

## Brand Strength Discount Rate

The Industry Weighted Average Cost of Capital has been calculated taking average of WACC of all the similar brands.

Corporate Professionals uses an algorithm which calculates the brand discounting factor from brand strength score. We presume that a brand strength score of 100 would entitle a discounting rate which is equivalent to industry WACC.

Finally brand earning were discounted with the brand discount rate (arrived from brand strength score) to arrive at the present value of the future cash flows.

## Concluding Remarks

Thus brand valuation is not considered as a mainstream practice, but instead a niche. There are traditional methods available to measure the value of business, but to value the Brand categorically there is a need to understand the modern ways which includes measuring various attributes of brand like clarity , Protection, Commitment, Responsiveness, Authenticity, Relevance, Differentiation, Consistency, presence & understanding and assigning value to these attributes in monetary terms. There requires an experience of the valuer who can perceive and attach a monetary value to the intangibles

---

**This Space is intentionally left blank**



# Regulatory Valuations

The role of the valuer is to remove the bias and subjectivity in the valuation process and find the fair value of the business based on science, logic, empirical studies, case law and last but not the least, professional experience of the valuer on an objective basis. As such, the valuation approaches / methods being applied must take into account the standard of value and premise of value and also suitable adjustments to make Valuation discounts and premium based on the facts of each case. The ongoing concept of “registered valuer” is also expected to bring clarity on the methods of Valuation and would lead Valuation practice as a discipline in India.

## Introduction

It has rightly been said that “What has never been doubted, has never been proven”. Valuation is a specialized field which has evolved in response to developments in law, taxation, finance, accounting, and economics and has graved impact on financial health of the valued company. Connected to this aspect, there has been increasing interest seen in valuation by all stakeholders.

## Navigation to valuation approaches

The rapid globalization of the world economy has created both opportunities and challenges for organizations leads to uncertainty blowing across global markets which raise the importance of independent valuations all over the world. There is no simple recipe to determine the economic worth of the company, However Globally there are only three broad approaches to valuation:

- **Asset approach:** The asset based approach views the business as a set of assets and liabilities that are used as building blocks to construct the picture of business value. Since every operating business has assets and liabilities, a natural way to address this question is to determine the value of these assets and liabilities. The difference is the business value. However, it is used to evaluate the entry barrier that exists in a business and is considered viable for companies having reached the mature or declining growth cycle and also for property and investment companies having strong asset base.
- **Income approach:** The Income based approach of valuations are based on the premise that the current value of any business is a function of the future value that an investor can expect to receive from purchasing all or part of the business. It is generally used for valuing businesses that are expected to continue operating for the foreseeable future.
- **Market Approach:** In this approach, value is determined by comparing the subject, company or assets with its peers in the same industry of the same size and region. Most Valuations in stock markets are market based. This is also known as relative valuation approach

## Valuation – Indian perspective

At present there are not much prescribed standards and codes on valuation in India and in many cases the valuation lacks the uniformity and generally accepted global valuation practices. A number of business valuation models can be constructed that utilize various methods under the broad business valuation approaches.

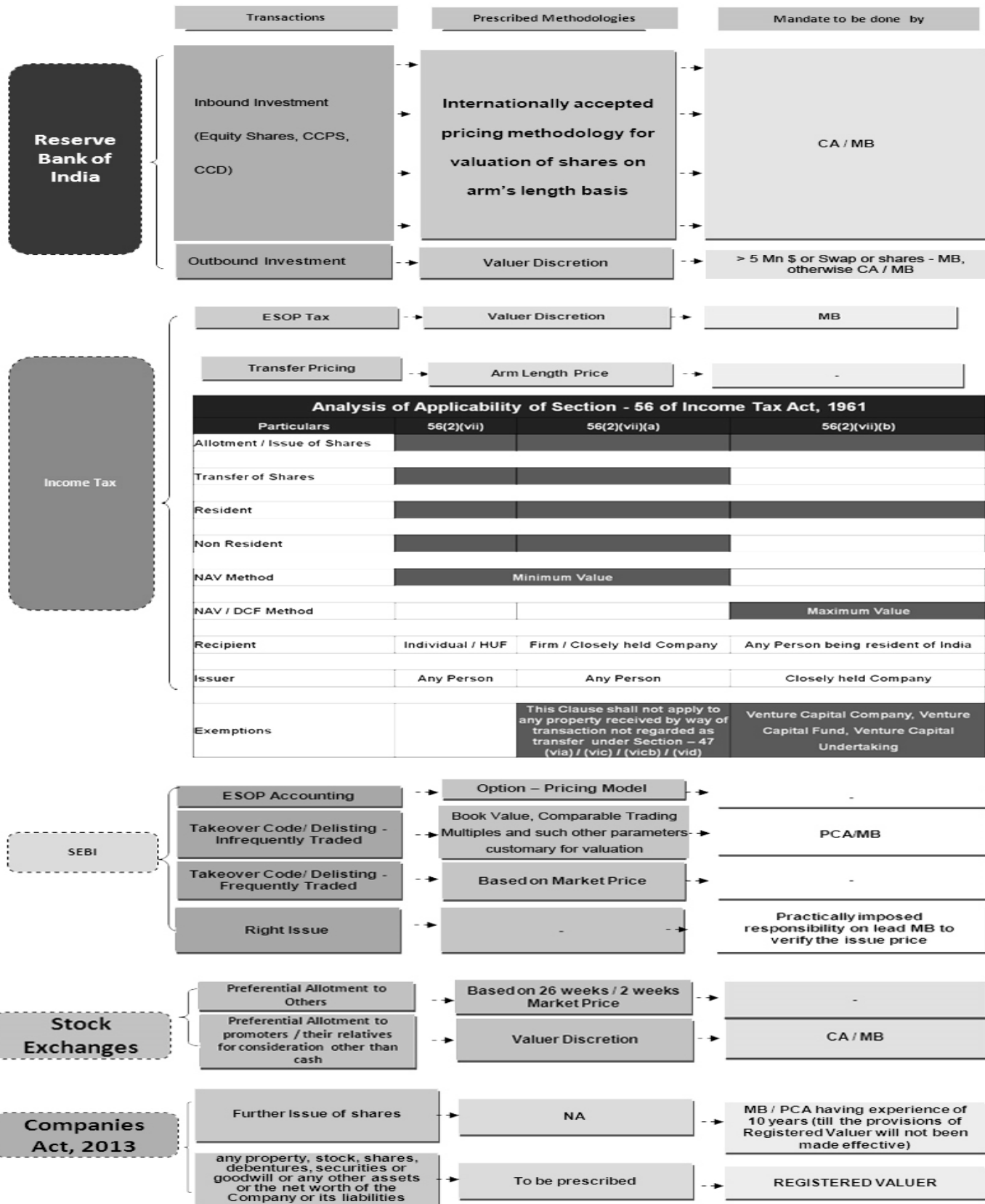
In determining approaches and methods to use, the valuation professional must exercise discretion. Each technique has advantages and drawbacks, which must be considered when applying those techniques to a particular business. Most treatises and court decisions encourage the valuer to consider more than one method, which must be reconciled with each other to arrive at a Value conclusion. Understanding of the internal resources and intellectual capital of the business being valued is as important as the economic, industrial and social environment

## Regulatory valuations

To keep pace with ever evolving economic and business environment, various regulatory bodies in India (RBI, Income Tax, SEBI, etc) have prescribed different and in some cases even conflicting valuation methodologies creating practical difficulties. In some cases, absolute discretion is given to valuers on one hand and in other cases strict adherence to practical method like NAV, DFCF, Market price etc is sought. However, in most cases, there is not much guidance on how to apply a particular method like DFCF; comparable companies market multiples method. A diagrammatic view for all regulatory valuations in India is provided on next page:

# Comprehensive comparison of regulatory valuations in India

## SNAPSHOT OF REGULATORY VALUATIONS IN INDIA







# RBI Valuation

As per latest RBI guidelines, the fair valuation of Equity shares / Compulsory convertible instruments of an Indian Company in case of allotment/transfer to/from Non Resident must be carried out in accordance with any internationally accepted pricing methodology. The same shall be duly certified by a chartered accountant or SEBI registered (cat-I) Merchant Banker, where the shares of the company are not listed on any recognized stock exchange in India. As it has not been clarified which internationally accepted pricing methodology should be adopted, there is flexibility to choose the methodology based on the context and purpose of transaction.

## RBI guidelines for valuation of shares

For Foreign Direct Investment (FDI) transactions, Notification No. FEMA 20/2000-RB dated May 3, 2000, as amended from time to time deals with Foreign Exchange Management (Transfer or Issue of Security by a Person Resident Outside India) Regulations, 2000.

In terms of Schedule 1 of the Notification, an Indian company may issue equity shares/compulsorily convertible preference shares and compulsorily convertible debentures (equity instruments) to a person resident outside India under the FDI policy, subject to inter alia, compliance with the pricing guidelines. The price/ conversion formula of convertible capital instruments is also require to be determined upfront at the time of issue of the instruments.

In order to make the valuation of shares in line with global business valuation practices, Reserve Bank of India (RBI) has introduced revised valuation guidelines for FDI allowing use of any internationally acceptable pricing method which until a few years back was based on Discounted Cash Flow Method only, a prominent method based on Income Approach of valuation which is entirely based on the “Future Cash Earning Capacity” of any business and thus often lead to optimum value scenario (from exchange control perspective).

This valuation article is covering different situations envisaged under RBI Law for both FDI as well as Overseas Direct Investment (ODI) transactions and some valuation methodologies are also suggested based on our practical experience and global valuation principles.

## RBI notified FDI pricing guidelines

**RBI vide notification no. FEMA 306/2014-RB effective from dated 8<sup>th</sup> July 2014 has notified the pricing guidelines in case of Transfer or Issue of Security by a Person Resident Outside India as regards Foreign Direct Investment (FDI), accordingly for all unlisted companies having FDI, the fair valuation of shares has to be done as per any internationally accepted pricing methodology for valuation of shares on arm's length basis, duly certified by a Chartered Accountant or a SEBI registered Merchant Banker.**

## ODI Valuation Guidelines

**Mandatory Valuation by Merchant Banker where the investment is being made outside India for more than USD 5 million,** valuation of the shares of the foreign company shall be made by a Category I Merchant Banker registered with SEBI or an Investment Banker / Merchant Banker outside India registered with the appropriate regulatory authority in the host country.

**In case investment is by way of swap of shares where foreign company is involved** irrespective of the amount, valuation of the shares will have to be made by a Category I Merchant Banker registered with SEBI or an Investment Banker outside India registered with the appropriate regulatory authority in the host country.

**In all other cases, valuation of shares can be made by a Chartered Accountant or a Certified Public Accountant.**

It is clarified herein that no method for valuation of shares has been prescribed by RBI in case of ODI valuation. From an exchange control perspective the price of shares issued by foreign entity shall not be more than the price determined by SEBI registered category- I merchant banker / CA as the case may be.

### **In case Indian Resident is Listed Company**

Under the revised pricing guidelines, allotment / transfer of listed company shares in India by Indian Resident to Non-Resident shall not be made at less than the price at which the preferential allotment of shares can be made under the SEBI (ICDR) Regulations 2009, which provides that If the equity shares of the issuer have been listed on a recognized stock exchange, then the equity shares shall be allotted at a price not less than the higher of the following:

“Average weekly high and low closing price over a trailing six month period, or a trailing two week period, from the "relevant date of transaction.”

**In case of transfer of shares from Non Resident to Indian Resident, the same DFCF price would govern to be the maximum price for transaction.**

**This Space is intentionally left blank**

**Face to Face comparison of CCI Guidelines, DFCF Guidelines and latest RBI Guidelines**

Particulars	Valuation before April 21, 2010	Valuation before April 1, 2014	Valuation after 8 <sup>th</sup> July 2014
Guidelines in Force	CCI Guidelines	<b><u>In case of FDI Transactions:</u></b> <ul style="list-style-type: none"> <li>Listed Company: Market Value as per SEBI Preferential Allotment Guidelines</li> <li>Unlisted Company: DFCF</li> </ul> <b><u>In case of ODI Transactions:</u></b> No method has been prescribed	<b><u>In case of FDI Transactions:</u></b> <ul style="list-style-type: none"> <li>Listed Company: Market Value as per SEBI Guidelines as applicable</li> <li>Unlisted Company: Any international accepted pricing methodology for valuation of shares on arm's length basis</li> </ul> <b><u>In case of ODI Transactions:</u></b> No method has been prescribed
Methods Prescribed	<ul style="list-style-type: none"> <li>Net Assets Value (NAV)</li> <li>Profit Earning Capacity Value(PECV)</li> <li>Market Value (in case of Listed Company)</li> </ul>		
Discount	15% Discount has been prescribed on account of <b>Lack of Marketability</b>	No such Discount has been prescribed	No such Discount has been prescribed
Historical / Futuristic	It is based on <b>Historical Values</b>	It is based on <b>Future Projections</b>	Depends upon method being used
Possibility of variation in Value Conclusion	As valuation is more Formulae based, final values came standardized	As valuation is more dependent on Assumptions and choice of factors like Growth Rate, Cost of Capital etc, value conclusion may vary significantly.	There is flexibility to choose valuation methods as per the facts of the case

It is clarified that as per the recent RBI policy, non-resident investor is not guaranteed any assured exit price at the time of making such investment/agreements and shall exit at the fair price computed as any internationally accepted pricing methodology for valuation of shares on arm's length basis, duly certified by a Chartered Accountant or a SEBI registered Merchant Banker.



# Discounted Cash Flow Valuation

Discounted Cash Flow (DCF) method is one of the most important finance tools to derive value of a company based on the future cash flows of business. However it needs to be used with great care as it's a very sensitive model where the values get affected significantly with a small change in assumption like beta value, terminal growth rate, risk free rate of return and market return. It is strongly recommended to do sanity check with the market approach to valuation like CCM and asset approach i.e. net asset value before concluding the DCF value.

## Discounted Cash Flow –The Prominent income approach to valuation

While undertaking the valuation of any company there are three broad approaches to valuation namely Asset approach, Income approach and Market approach. Discounted cash flow (DCF) is one of the prominent income approaches to valuation and is used to estimate the attractiveness of any investment opportunity on the basis of future cash flow projections of business. So far DCF is considered as the most scientific financial tool to derive the value of any company based on parameters like projected cash flows, cost of capital, growth cycle of business, perpetual growth rate etc. This method mostly yields control valuation result and is sensitive to even minor changes in these parameters.

“The Discounted Cash Flow method expresses the present value of the business attributable to its stakeholders as a function of its future cash earnings capacity. This methodology works on the premise that the value of a business is measured in terms of future cash flow streams, discounted to the present time at an appropriate discount rate”.

Discounted Cash Flow can be used to derive the value of equity shareholders of company and also the value of the firm/company.

### Discounted Cash Flow to equity

This method uses the Free Cash Flows to Equity (FCFE) and values the benefits that accrue to the equity shareholders of the company. The value of the equity is arrived at by estimating the FCFE and discounting it at the cost of equity (Ke).

This methodology is considered to be the most appropriate basis for

determining the earning capability of a business. It expresses the value of a business as a function of expected future cash earnings in present value terms.

$$\text{FCFE} = \text{Net Income} - \text{Net Capital Expenditure} - \text{Change in Non Cash Working Capital} + \text{New Debt} - \text{Debt Repayment}$$

### Discounted Cash Flow to firm

Discounted Free Cash Flow to Firm (FCFF) measures the enterprise value of a company i.e. (Value of Equity + Value of Debt), no adjustment is separately needed for debt (inflows and outflows) for arriving at the FCFF. Here the discounting of free cash flow to firm is made by weighted average cost of capital ('WACC') to arrive at the enterprise value.

$$\text{FCFF} = \text{EBITDA} - \text{Taxes} - \text{Change in Non Cash Working Capital} - \text{Capital Expenditure}$$

### Key Issues and challenges in Discounted Cash Flow Methodology

- Cost of equity calculation
- Weighted average cost of capital calculation
- What should be the terminal growth rate

### How is cost of equity (Ke) calculated?

Cost of equity (Ke) is the required rate of return of a shareholder who invests in the equity of a company. Cost of equity is generally calculated using the Capital Asset Pricing Model (CAPM)

### According to CAPM

$$\text{Cost of equity} = \text{Risk free rate} + \text{Beta} * (\text{Market return} - \text{Risk free rate})$$

## Where,

Beta of a stock is the relation of its returns with those of the capital market (BSE/NSE) as a whole. However there are certain risk like small company risk (SCR) and specific company risk (CSR) which affect the cost of equity so it is recommendatory to add these risk premiums and factor these in CAPM, which is detailed below

### Modified CAPM

**Cost of Equity = Risk Free Rate + Beta\*(Market Return – Risk Free rate) + SCR+ CSR**

### Issues while computing Ke through CAPM

- How is Risk free rate calculated
- How to calculate Beta of an unlisted company whose shares are not traded.
- How to account for small company risk & company specific risk

### What is risk free rate

It is the theoretical rate of return of an investment with zero risk. The risk-free rate represents the interest an investor would expect from an absolutely risk-free investment over a specified period of time.

### What should be taken as risk free rate

The 10 Year Yield on Indian Government Bond is currently taken as the risk free rate by most analysts but since the India Government

Bond is a coupon/interest paying bond, it also carries some risk called the Reinvestment Risk (i.e. the risk that coupons/interest paid by the bonds might not be able to be re-invested at the same rate as off today)

Since there are no Zero Coupon bonds of the Indian government, the National Stock Exchange of India has developed a 'Zero Coupon Yield Curve' (ZCYC) that helps in valuation of sovereign securities across all maturities. With the help of this ZCYC, an estimate rate of return on 10 year Indian Government Zero Coupon Bond can be calculated. The rate calculated through ZCYC i.e. Yield of a Zero Coupon Bond should be taken as the risk free rate since it does not have any reinvestment risk as there is no payment before the bond matures. As of December 2016, Zero Coupon Yield is around 6.51%

### How to calculate Beta of an unlisted company

Beta which measures the systematic risk is calculated by finding the correlation of the return of a company with those of the financial market i.e. Sensex in Indian context. Since unlisted companies do not have any trading price, thus it is difficult to calculate the beta of an unlisted company.

The beta of an unlisted company can however be calculated on a relative basis by adjusting the average beta of its comparable companies for differences in Capital Structure of the unlisted company with the listed peers.

### Adjustment to Beta

The beta of an unlisted company taken from the average of its comparable listed companies must be adjusted for difference in the debt

structure of the company & its peers but un-levering the average beta values of its listed peers and then levering the average calculated beta of listed peers with the unlisted companies Debt Structure.

### How to un-Lever Beta and then Lever it again?

**Unlevered Beta** = levered beta / [1+ (1- tax rate)\* comparable company's avg. debt/equity ratio]

Therefore to Un-lever the beta, we have take into account the average tax rate of the comparable companies and their average debt-equity ratio.

**Levered Beta** = Unlevered beta \* [1+ (1- tax rate)\*company debt/equity ratio]

To Lever the beta again we use the actual tax rate & debt equity Structure of the Unlisted Company whose beta we had to estimate.

### Why to account for Small Company Risk & Company Specific

#### Risk

Small Companies are generally more risky than big companies. CAPM model does not take into consideration the size risk and specific company risk (management quality, forex risk etc.) as Beta measures only systematic risk and Market Risk Premium. These risks should also be taken into account while computing the cost of equity.

Therefore instead of CAPM, modified CAPM should preferably be used for calculating the Cost of Equity.

### How is weighted average cost of capital calculated?

Weighted average cost of capital is the cost of capital of the firm i.e. the providers of finance of a firm including equity share holders, preference share holders & providers of long term debt.

### Calculation of WACC

WACC is calculated using the Proportionate cost of Equity & Cost of Debt (after tax)

**The formula for WACC is:-**

$$WACC = \frac{MV_e}{MV_d + MV_e} \cdot R_e + \frac{MV_d}{MV_d + MV_e} \cdot R_d \cdot (1 - t)$$

**MVe** = Total market value of equity,

**Re** = cost of equity,

**MVd** = The Total market value of debt,

**Rd** = cost of debt,

**T** = tax rate

### Issue 1:- Market Value or book value of equity

The important point to note in the calculation of WACC is it **requires the market value of equity**, rather than its book value. Taking the book value might result in heavy overestimation of the value derived through DCF since book value of equity might lead to a lower WACC and in turn a low discounting rate. Here Market value of equity can be estimated through Comparable Company Analysis



## **Issue 2:- Does change in Debt have any Impact on calculation of DCF to Firm?**

A big misconception while computing Discounted Cash Flow to Firm is that it does not get affected due to change in debt in the projected years.

Yes, it is true that change in debt does not change the cash flow for a firm. But a change in capital structure due to increase or decrease in debt in projected years changes the WACC in the projected years. Therefore a major change in capital structure of a company in future projections must be taken into account by changing the WACC for the projected years.

## **What should be the terminal growth rate?**

The terminal growth rate is long term average growth rate of a company which estimates the rate at which a company would perpetually grow when its business stabilizes. Since it is tough to estimate the perpetual growth rate of a company, it is preferred to take the perpetuity growth rate factoring in long term estimated GDP of the country, which assumes that the company would grow at pace with economy. The terminal growth rate should also factor in the type of industry as well as the number of years for which discount period has been considered.

## **Concluding thoughts**

Discounted Cash Flow (DCF) method is one of the most important finance tools to derive value of a company based on the future cash flows of business. However it needs to be used with great care as it's a very sensitive model where the values get affected significantly with a small change in assumption like beta value, terminal growth rate, risk free rate of return and market return. It is strongly recommended to do sanity check with the market approach to valuation like CCM and asset approach i.e. net asset value before concluding the DCF value.

---



# ESOP Valuation

ESOP valuation (both for accounting of “compensation expense” by company and for perquisite tax payable by the employees) plays a significant role in the success of any ESOP scheme.

The compensation expense reduces the EPS of the company and the possibility of excess tax payout by employees may turn the ESOP scheme unattractive. Thus proper planning of ESOP is inevitable.

## What is ESOP

Employee Stock Option Plan (ESOP) is a plan through which a company awards stock options to the employees based on their performance. An employee stock option is a call option meaning that under an ESOP the employees have the right and not an obligation to buy the shares of the company on a predetermined date at a predetermined price. The objective of ESOP is to motivate the employees to perform better and improve shareholders' value. Apart from giving financial gains to the employees, ESOP also creates a sense of belonging and ownership amongst the employees.

## How is ESOP Valuation done

### A) Accounting valuation

The Accounting valuation is needed for working out the employee compensation cost at the time of ESOP grants itself which is apportioned over the vesting period of ESOP.

There are two methods of doing ESOP valuations- Intrinsic value method & Fair value method.

- **Intrinsic value method**

"Intrinsic Value" is the excess of the market price of the share under ESOP over the exercise price of the option (including upfront payment, if any)  
Example: - A company grants an ESOP to its employees whose current market price (CMP) of the share is Rs 100 which can be exercised after 2 years for Rs 70. In this case the intrinsic value of options shall be Rs 30/- (100 – 70).

However if the CMP was Rs.50 instead, there would be no intrinsic value of the option since the exercise price is more than CMP and in this case options could not be explained and instead stand lapsed.

- **Fair Value Method**

The fair value of an ESOP is estimated using an option-pricing model like, the Black-Scholes or a binomial model. For undertaking fair valuation of ESOPs, the Fair value method considered more appropriate as it takes into account the various other factors like time value, interest rate, volatility, dividend yield etc. These factors are not considered under Intrinsic Value method which may lead to under estimation of employee compensation cost.

The black scholes model considers various external factors that affect the value of the ESOP whereas the intrinsic value method considers only factors internal to the option offered. To compute the value of ESOP options through black- scholes the following variables have to be considered:-

- Expected life of the option
- Exercise price
- Fair value per share
- Expected volatility of share price
- Expected dividend yield
- Risk-free interest rate

## Key issues in valuation of ESOPs through black-scholes model

### Issue 1: - Expected life or total life of the option

For the purpose of valuations we need to consider the likely life of option and not the total life of the option. For calculation of expected life it is recommended to use the Average of the maximum life of option and the minimum life of option for each vesting of a particular grant.

## **Issue 2: - Volatility of unlisted companies**

For listed companies historical volatility in their own share prices is taken, the problem arises on how to compute volatility of unlisted companies.

Indian accounting guidance norms recommends unlisted companies to consider volatility as zero since there is no market price of the unlisted companies. This may however lead to incorrect value of the ESOPs.

An alternative for computation of the Fair Value of an ESOP option of unlisted company is to consider historical volatility in the share prices of other similar listed comparable companies should be considered and taken as the expected volatility for the unlisted company.

## **Issue 3: - Dividend Yield**

Payment of dividend reduces the price of a share. Dividend paid during the ESOP period is not cumulated for ESOP holders; therefore dividend paid before the ESOP is exercised may be reduced while computing ESOP value.

Thus companies are required to estimate the future dividend yield rate (i.e. dividend per share divided by value per share). The company's historical dividend yield rate can be used to estimate its expected future dividend yield.

## **Issue 4: - Risk-free interest rate**

The Risk free rate being considered for the calculation is the interest rate applicable for a maturity equal to the expected life of the options based on the zero-coupon yield curve for Government Securities or 10 years Government bonds.

## **Tax Valuation**

This valuation is required for determination of value of perquisite taxable in hands of employees, to comply with applicable provisions of Indian Income Tax Act, 1961 and notification issued by CBDT in this respect.

Notification no. 94/2009 dated 18.12.2009 issued by CBDT, provides that for the purpose of clause (vi) of sub-section (2) of section 17, the fair market value of any specified security or sweat equity share, being an equity share in the company not listed at any recognized stock exchange, shall be such value of the share in the company as determined by a merchant banker on the specified date. No method has been prescribed for undertaking such valuation. This also includes shares of companies listed on overseas stock exchange as the Overseas Exchanges do not qualify as the Recognized stock exchanges in India.

## **Concluding thoughts**

ESOP valuation (both for accounting of "compensation expense" by company and for perquisite tax payable by the employees) plays a significant role in the success of any ESOP scheme.

The compensation expense reduces the EPS of the company and the possibility of excess tax payout by employees may turn the ESOP scheme unattractive. Thus proper planning of ESOP is inevitable.

---



# Relative valuation

A key benefit of relative valuation analysis is that the methodology is based on the current market stock price. The current stock price is generally viewed as one of the best valuation metrics because markets are considered somewhat efficient. But applying multiples is not a straight forward technique and many considerations have to be kept in mind when valuing a company. Sanity check is advised by using other valuation methods as well.

## What is relative valuation?

Relative valuation uses the valuation ratios of comparable publicly traded companies and applies that ratio to the company being valued subject to necessary adjustments. The valuation ratio typically expresses the valuation as a function of a measure of financial performance or book value multiples (e.g. Revenue, EBITDA, EBIT, earnings per share or book value).

This technique hinges upon the efficient market theory which indicates that the price of exchanged securities in the market reflects all readily available information, as well as the supply and demand effects of educated and rational buyers and sellers. In other words, the market is continuously evaluating each company and expressing that valuation in bids and offers for its stock.

## Advantages of using relative multiples

- **Usefulness:** Valuation is about judgment, and multiples provide a framework for making value judgments. When used properly, multiples are robust tools that can provide useful information about how similar assets are placed in the market.
- **Simplicity:** Their very simplicity and ease of calculation makes multiples an appealing and user-friendly method of assessing value.
- **Relevance:** Multiples focus on the key statistics that other investors use. Since investors in aggregate move markets, the most commonly used statistics and multiples will have the most impact. These factors, and the existence of wide-ranging comparables, help explain the enduring use of multiples by investors despite the rise of other methods. Most valuations in stock markets are done through this method.

## Disadvantages of using relative multiples

- **Simplistic:** A multiple has a great deal of information into a single number. By combining many value drivers into a point estimate, multiples may make it difficult to disaggregate the effect of different drivers, such as growth, on value. The danger is that this encourages simplistic – and possibly erroneous – interpretation.
- **Static:** A multiple represents a snapshot of where a firm is at a point in time, but fails to capture the dynamic and ever-evolving nature of business and competition.
- **Difficult to compare:** Multiples are primarily used to make comparisons of relative value. But comparing multiples always challenging, because there are so many reasons that multiples can differ, not all of which relate to true differences in value. For example, different accounting policies can result in diverging multiples for otherwise identical operating businesses.

## Key issues in relative valuation

- Peer selection
- Current multiples or forward multiples
- Adjustments to the value

## Issue 1 - Peer selection

For relative valuations, identification of appropriate peers is a prerequisite. Peers taken should be as close as possible to the company being valued. It is preferred that the peer companies should have a similar:-

- Business model,
- Accounting practices,
- Growth pattern
- Return on capital invested
- Financial and operational risk.

In case peers in the domestic country are not available, then global peers can also be taken but subject to certain adjustments which are discussed in Issue 3.

Therefore, to select the peer group of a company, it is important to understand the business of the company being valued. Normally the peer group will be based on companies from the same industry. Selecting the most appropriate peer group is thus not easy task.

## Issue 2 - Current or forward multiples

Generally to the latest financials of the company a prevailing market multiple of the comparable companies is applied to arrive at the value of the company being valued. However while valuing early stage companies whose values of financials in future years provide a much better picture of the true value potential of the firm, forward financials may be more appropriate to consider.

- **Current multiple of peer companies** – In case the peer companies are mature as on the valuation date, their prevailing valuation multiple may be applied to the forward stabilized financials of the company being valued.

This will yield value of the company for the year for which earnings are taken. Therefore this value has to be discounted back to get the forward present value of the company.

*(Discounting can be done using the cost of capital of the company or the cost of equity for the time period for which forward earnings are taken.)*

- **Forward multiple of peer companies**-Forward multiple of peer companies is applied when the entire industry is in evolving stage and no comparable mature company exist on the valuation date. In this case there is no need for discounting. Forward looking Earnings are generally preferred for valuation purposes. Valuation is generally done with a forward looking view and the value of a company depends more upon how much in the future could the company/business earn than how much it has earned till date. Therefore forward multiples are preferred more than current multiples.

## Issue 3 - Adjustments to the value

Valuation derived from relative valuation method is based on a certain multiples like EBITDA/Sales or Profit etc. It does not take into consideration other factors which are not reflected by the earnings such as:-



- **Surplus/Non operating assets**

Surplus assets/ Non operating assets does not reflect its value in the operating earnings of the company. Therefore the fair market value of such Assets should be separately added to the value derived through other valuation methodologies to arrive at the value of the company.

However it is pertinent to mention herein that the investors may not be willing to pay for these surplus/ non operating assets which may call for reorganization of the company.

- **Adjustments for global peers**

If the valuation of a company is based on comparison with the global peers, then it should be adjusted for some differences such as:-

- Difference of tax rate in the 2 countries.
- Difference in growth & Inflation rate of the 2 countries
- Difference between the levels of competition in the 2 countries.
- Difference in the country risk of the 2 companies
- Difference of accounting treatment in the 2 companies

Thus there are many changes that are required to be made when choosing global peers & therefore domestic peers are always preferred for relative valuations since they are more comparable.

## Concluding thoughts

A key benefit of relative valuation analysis is that the methodology is based on the current market stock price. The current stock price is generally viewed as one of the best valuation metrics because markets are considered somewhat efficient. But applying multiples is not a straight forward technique and many considerations have to be kept in mind when valuing a company. Sanity check is advised by using other valuation methods as well.

---





## **Sum of the parts (SOTP) Valuation and Value Creation**

The sum of parts valuation (SOTP) technique is used to find the embedded value in different parts of businesses. Strategic change and operational excellence creates investor curiosity and lead to value creation. However it is observed that the market is unwilling and unable to unlock value on its own and that's reflective of market disconnect between fair value and value being paid by the market. While doing SOTP Valuation, assessment of any strategic or operational management activity is essential to understand the structure modifications before concluding value. While valuing any Company having diversified business interest, it also makes sense to analyze the upside potential rather than downside risk.

## Sum Of The Parts Valuation (SOTP)

“Company A is doing sugar Business with Value of Say Rs 100 and company B is doing Cement Business with Value of say again Rs. 100 then what should be the value of company C doing both the above business by itself, On unitary basis it should be Rs 200 i.e.

**Value of C company = Value of A company + Value of B company**

It seems so simple; however it is not the way how valuation actually happens in the real life scenarios. That’s where the role of a valuer becomes significantly important. A corporate valuer always focus on the risk involved while undertaking any SOTP valuation and gives appropriate discounts accordingly. In the transaction history and the empirical research carried by various researchers it being well laid that the market gives discount to the sum of parts value of businesses not complimenting each other which is known as diversification discount or portfolio discount or conglomerate discount.

In real life scenario there are companies which are engaged in diversified business, and each business has different product line, profit margin etc, so to value diversified companies on a consolidated level, like consolidated sales and consolidated profit may not able to give a true value of the company as some business segment may fetch a high comparable companies multiple and some low Multiple. Similarly the cash flow generating components of each Biz would also be different.

## What is Sum of the Parts Valuation?

It is the Value of a company by determining what its divisions would be worth if it was broken up and spun off or acquired by another company.

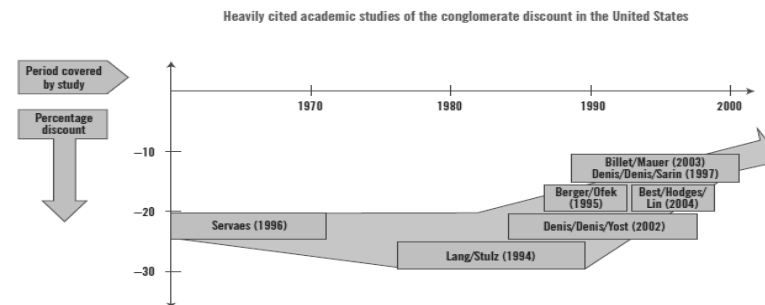
## Why is SOTP Valuations done?

SOTP method is used to value a company with business segments in different industries that have different valuation characteristics. SOTP analysis is useful for:-

- Computing the fair value of a company that is trading at a discount to the sum of its parts.
- Restructuring a company’s value through a spin-off, or reorganization to unlock the value of business segments to their potential.

## Diversification Discount

Diversification discount arises from sum of part valuation, due to multiple businesses, non clarity of business specifics and lack of management focus, market tends to give discount to the SOTP. This is known as diversification discount or portfolio discount. Global Studies over the years on diversified companies has shown that these companies trade at a discount in the range of 10% to 30%. In the Indian context, sometimes this discount is even higher around 50%.



Source: - BCG analysis

Diversified business discounts results in sub optimal businesswise valuation and also there remains difficulty in raising funds for a particular business. Due to such issues and value creation potential, India has also seen demerger of companies in diversified businesses resulting in value unlocking which has resulted in gain in shareholders' wealth. Different business groups over the years have segregated unrelated businesses for value unlocking. There are number of companies which have unlocked their value through demerger in Indian context like Reliance Industries Ltd, NIIT Ltd, JK Lakshmi Cement Ltd, SRF LTD, Siemens Ltd, Larsen & Toubro Ltd etc.

### Can SOTP valuation be realized?

Value realization for diversified companies can be achieved primarily by the management action research has shown that If the management wants to realize the true value of the whole company, then a break-up is the most obvious way to realize the company's sum of the parts valuation.

#### Two facts and challenges have been noted in this respect-

- There has been observed a direct nexus in the "Size of Company" and "management remuneration" and this may be one of the reason why not much of the spin off happens.
- It is also observed that very big companies attract more discounts as there is difficult to reorganize them due to mega complex structures. However mid level companies can reduce this discount significantly through Management action and reorganization.

### Concluding thoughts

The sum of parts valuation (SOTP) technique is used to find the embedded value in different parts of businesses. Strategic change and operational excellence creates investor curiosity and lead to value creation. However it is observed that the market is unwilling and unable to unlock value on its own and that's reflective of market disconnect between fair value and value being paid by the market. Thus while doing SOTP Valuation, assessment of any strategic or operational management activity is essential to understand the structure modifications before concluding value. While valuing any Company having diversified business interest, it also makes sense to analyze the upside potential rather than downside risk.

-----



# Enterprise Valuation

**Enterprise Valuation (EV) is the total value of any business which represents all stakeholders and often looked at while acquiring/ selling any business or making any strategic decision and is dependent on the standalone value of the company, its subsidiaries and the Value of surplus assets. All the above issues are relevant for working out EV.**

## Enterprise Valuation : The market value of the whole business?

Enterprise valuation (EV) is an economic measure which reflects the market value of the whole business. It is a sum of claims of all the security-holders: common equity holders, debt holders, preference shareholders, minority shareholders etc. Enterprise valuation is one of the fundamental metrics used in business valuation, financial modeling, accounting, portfolio analysis, etc.

**EV**= market value of equity + market value of debt + minority interest at market value + preference capital at market value – cash & cash equivalent + market Value of non Operating Assets.

Enterprise valuation is the present value of the claims of all stakeholders against an enterprise where an enterprise is financed with debt and equity. If the company has no non-operating assets, firm value can be valued by estimating future free cash flows and discounting those cash flows with an appropriate rate of return (which may vary from year to year) that embodies the returns required by creditors and shareholders of the firm.

Since this is essentially the value of operations of the firm, if there is any non-operating assets, the value of such non-operating assets should be added separately to arrive at the firm value or enterprise value.

In short enterprise value is the value shared by all investors, unlike debt value or equity value, which are shared only by creditors or by equity-holders respectively.

## Key issues and challenges while calculating EV

- Should only cash or excess cash be deducted?  
Should only cash be deducted or even cash and cash equivalents?
- Should debt be taken at market value?
- Treatment of debt if taken at year end or for setting up a new business?
- Treatment of loans & advances given to subsidiary company?

### Issue 1 - Should only cash or excess cash be deducted?

The 1st question is - why cash is deducted? - Think of enterprise valuation as the theoretical takeover price. In the event of a buyout, an acquirer would have to take on the company's debt, but would pocket its cash which could be used to pay off debt or be treated as surplus funds for the acquirer.

What is excess cash & Why should it be deducted instead of total cash  
excess cash is defined as 'total cash (in balance sheet) – operating cash (i.e. minimum required cash) This is because, operating cash is required to sustain operations (working capital) and manage contingencies. If total cash is used to pay down debt, the company will have nothing left for working capital requirements and contingencies!

Practical problem – It is very difficult to estimate excess cash in a company. One of the solutions is to estimate average cash/sales or total balance sheet size of the company's relevant Industry and then estimate if the company being valued has cash in excess of the industry's average.

### **Issue 2 - Should only cash be deducted or even cash equivalents?**

Yes, cash equivalents should also be deducted since most companies invest their excess cash in short term money instruments or investments. Therefore it is important to deduct these small term investments considering they are not used for operation of the company.

**What are cash equivalents?** 'near cash' items that include investments that are actively traded, available for sale and held to maturity are called cash equivalents.

### **Issue 3 - Should debt be taken at market value or book value?**

To arrive at fair valuation, all the values should be taken at the market value. Thus debt should also be taken at market value.

In the present economic conditions the depreciation in rupee has increased the fair value of principal repayment in terms of Rupees. Therefore it is important to take the market value of debts since its market value can be significantly higher from the book value in such cases.

### **Issue 4 - Treatment of debt taken at the yearend or for setting up a new business?**

Practically debt which has not had an impact on the sales should not be included in the enterprise valuation since it has had no contribution in sales. Therefore debt taken near end of year should be added at a weighted rate & debt used for setting a new plant (which is not yet operational) should not be included at all.

Practical difficulty: -Some portion of debt taken at the yearend may be a part of cash & cash equivalents or other non-operating assets which we subtract from the enterprise valuation

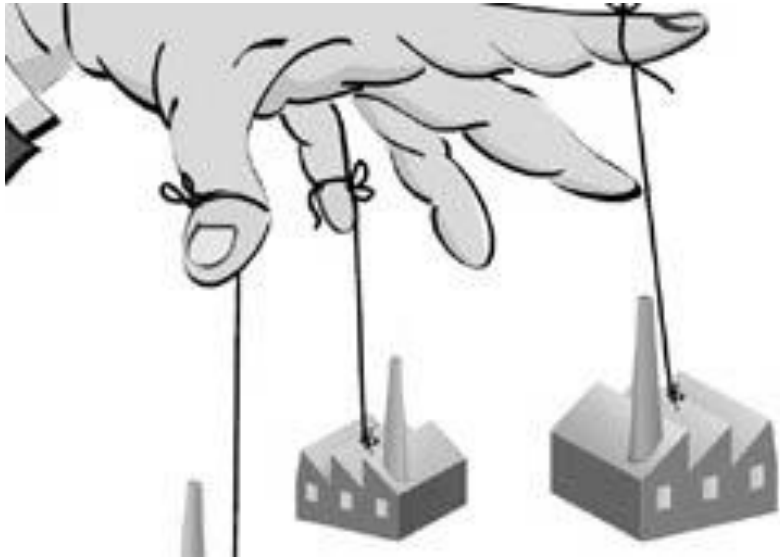
### **Issue 5 - Treatment of loan & advances given to other companies?**

If you are valuing Company on standalone basis & applying Comparable companies Multiples Method, then in that case If the company has given loan and advances to other companies not forming part of its business, then you should add back the loan & advances given to them, because in that case loan & advances are not captured in the company's standalone business value, as it is a form of surplus asset.

### **Concluding thoughts**

Enterprise Valuation (EV) is the total value of any business which represents all stakeholders and often looked at while acquiring/ selling any business or making any strategic decision and is dependent on the standalone value of the company, its subsidiaries and the Value of surplus assets. All the above issues are relevant for working out EV.

---



# Valuation Discount Applicable to Holding Companies

It's been observed that valuers apply holding company discount in the range of 40 to 60% on the value of holding companies. But adjustments should be made to the discount depending on the dividends paid and received by the holding company and also expected future scenario of the company. The type of investments the holding company holds also has an impact on the discount that should be applicable for holding company in question. It may also be stated that reorganization of holding company may also result in reduction of this discount and thereby value creation.

## Holding company

Where a company is holding a large chunk of investments in other companies and it's not having any material business operations of its own, is called a "holding company" A holding company typically does not have its own business operations other than the retention and management of assets in anticipation of future sale or trade or may be as a tool of corporate restructuring. The holding company thus derives its income primarily through the return on the assets held for investment purpose. To be particular, Income of holding co. is only the dividends received by it's from the investments made in other companies.

## Valuation of holding companies

There are two ways to look at value of a holding company-

- **Value based on income**

As the income of a holding company (dividends) may be negligible when compared to the Value of its underlining Assets i.e. investments, it may not make sense to Value it based on Income alone.

- **Value based on assets**

The value of a holding company should be essentially based on the underlining assets it holds i.e. based on the value of its subsidiary / associate companies. Therefore a valuer should evaluate the company based on the value of its assets than on the value of its operating income.

## Valuation discounts applicable to holding companies

When valuing holding companies valuer should consider three types of discounts as the value of a holding company does not follow the sum of parts rule, and generally it's seen that the value of a holding company is significantly less than the sum value of all its subsidiaries / associates. The value of holding company thus suffers from three types of discounts majorly.

- **Liquidation discount**

As such the value of holding company is based on the sum values of its subsidiaries. However liquidation discount is generally provided for built in or embedded capital gains even when no liquidation is planned, more so as far as the value if assets of the subsidiary have to pass to the holding company, it must pay taxes. Holding period, rate of tax etc determine this discount.

- **Discount for lack of control**

The holding company value also gets discounted on account of lack of control, for example a holding company holds 100% stake in a subsidiary and a holding company holds 15% stake in a company both have different values preposition i.e. the one in which 100% stake is held have a controlling value and the one in which 15% is held shall not command that much proportionate value. Often discount for lack of control on associates is applied. The less% of holding, the more the discount & vice versa.

- **Discount for lack of marketability**

Due to separate legal entity often more restrictions exist upon transfer of assets of subsidiary company by holding company which



leads to discount for lack of marketability in the hands of the holding company.

Under any investment, the buyer is concerned with the holding period, the risk exposure and the cash return. The longer the term to liquidity, greater the risk of sale and lower the dividend yield, the higher the marketability discount.

### Empirical research for holding company discount

Under few of the research on holding company discount carried in Indian context it is observed that the holding company trades at a value significantly less than its net asset value, sometimes as high as 50%.

- **Can such discounts be mitigated?**

As discussed above, the value of a pure holding company with no operating assets of their own trade at a heavy discount to their NAV. But this discount can in certain cases be mitigated and in some cases trade at a premium depending upon:-

- **Future Expectation from the Company**

In cases where markets expect some M&A- consolidation of the holding company, in such cases the holding company is generally valued near to its NAV or its discounts set on the lower side if it holds controlling stake subsidiary companies. This is because due to the M&A reorganization, there may exist only single entity having direct control on all assets.

Also a holding company that is expected to sell its stake in other companies/ other investments also tend to trade at a lower discount since the value of the holding company's investments are realized and expectation of dividend by the shareholder increases.

- **Dividend paid by subsidiaries**

It is generally seen that holding companies which receive dividends from their subsidiaries trade at a lower discount as compared to other holding companies which do not receive a dividend.

This is because the only income of a pure holding company is dividends received from its subsidiaries. Also holding companies are expected to pay out dividends received from its subsidiaries to its own shareholders since dividend distribution tax is exempt for the holding company if it distributes dividend in the year it receives dividend from its subsidiary.

- **Type of investment made:-**

If a holding company's investments include holding a controlling stake in other companies then it generally trades at a lower discount than a company holding a non controlling stake in other companies. This is because of the level of control the holding company has on its subsidiary and also Sales of its subsidiary are reflected in the consolidated financial statements of the holding company.

### Concluding thoughts

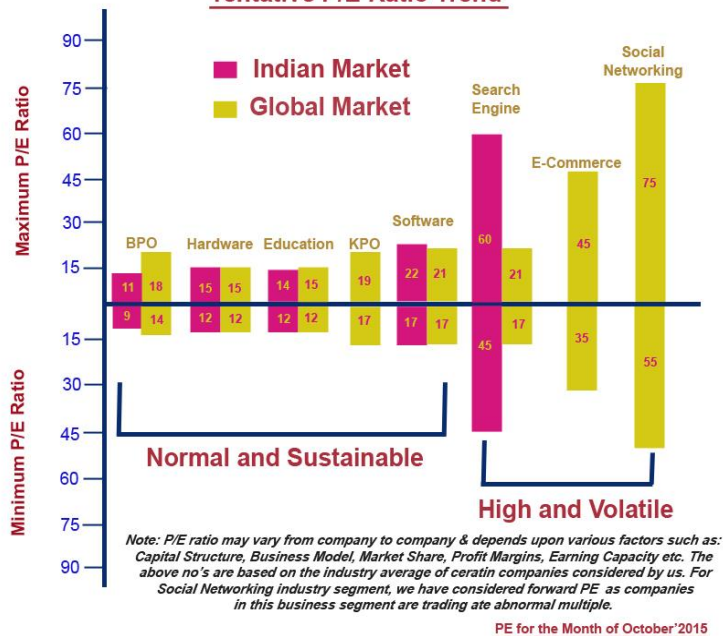
It's been observed that valuers apply holding company discount in the range of 40 to 60% on the value of holding companies. But adjustments should be made to the discount depending on the dividends paid and received by the holding company and also expected future scenario of the company. The type of investments the holding company holds also has an impact on the discount that should be applicable for holding company in question. It may also be stated that reorganization of holding company may also result in reduction of this discount and thereby value creation.

-----



# Valuation in Information Technology Sector

Tentative P/E Ratio Trend



It is observed that there is a difference in valuing a company which invest in IT to increase the efficiency of its business and the Company whose survival is totally dependent on IT. The valuation trend in the high growth segment of IT industry (Search Engine, E-Commerce & Social Networking) is on an upswing and though there exist limited public listed companies in this segment, majorly all trade at very high valuation multiples with corresponding high volatility owing to their sensitive business models prone to competition with new technology and recent developments. Where would their valuations be stabilized would be decided in times to come.

In India, the only e-Commerce company, Infibeam has been listed since July 2015 but till July 2016, it is not having significant Net Profits and is commanding a Sales Multiple of 10 x.

## Valuation in IT ( Information Technology) sector

It has been believed in the market that “Technology has the shelf life of a banana.” If that happens then what factors drives the value of information technology based companies whose survival is totally dependent on that. The answer of this question is not so easy as it appears to be, As whatever the size of organizations large or small face the same dilemma: scare resources, choosing and deploying the right resources at right time & at right place to maximize the organization performance.

## Why sub sector categorization is necessary

There is a difference in valuing a company which invest in IT to increase the efficiency of its business and the Company whose survival is totally dependent on IT because Companies with a view to increase the efficiency might Invest in IT and often viewed as a cost center, and when a department is viewed solely as a cost center, budgets get squeezed year over year, but that would not be in the case of IT co's, as their view of investment might be different.

Therefore, to make the proper judgment on the parameters that derives the value of companies in IT sector. We have divided the IT sector into various sub- sectors.

## Overview of IT sector

**The IT sector can be broadly classified into following sub-sectors:**

**ITES (BPO)** – Major corporations across the world outsource their back-office operations to some companies. E.g. employee payroll for a US company's global workforce is maintained by an Indian BPO. Slowly the definition is expanding to Human resources, accounting, logistics, legal processes etc.

**IT- Hardware** - The stuff you can actually see and touch is hardware. This would include laptops, desktops, storage devices, networking devices, LCD, printers etc.

**IT- Education** - This segment provides training for employment in the other segments. This would include companies providing various certification courses, like Java, Oracle etc. These companies also provide training for employees in corporate sector.

**ITES (KPO)** - It refers to the outsourcing of knowledge intensive tasks and functions to outside experts.

**IT- Software** – These companies help in developing and implementation of different software for their clients worldwide, which could be use for documentation, security services, banking software's etc.

**IT - Search Engines** - Search engines are the programs that search documents for specified keywords and return a list of the documents where the keywords were found.

**IT – E-Commerce** - Leverage the unique qualities of internet and web uses internet technology to create markets that bring buyers and sellers together.

**IT- Social Networking** - It is an online service, platform, or site that focuses on facilitating the building of social networks or social relations among people.

## Key valuation drivers in IT sector

### ITES - BPO

#### Factors need to be consider

1. **Service Level%:** *The % of calls answered with a certain amount of time.*
2. **Average Handle Time:** *(Total talk time + Wrap time)/ Total Calls.*
3. **Longest Wait Time:** *The time a caller has to wait before the call is answered.*

#### 4. Book Order

#### Preferable Valuation Multiples

1. EV/EBIDTA
2. PE Ratio
3. EV/No. of Seats
4. EV/FCF
5. EV/Sales

### IT-Hardware

#### Factors need to be consider

1. **% of Market Share covered.**
2. **Durability of a Product.**
3. **Customer Retention Ratio.**
4. **Govt. Regulations**
5. **After Sales Services.**

#### Preferable Valuation Multiples

1. EV/EBIDTA
2. PE Ratio
3. Price/Book Value
4. EV/FCF
5. EV/Sales

### IT-Education

#### Factors need to be consider

1. Level of Education.
2. Use of Innovative tool for Dissemination of Education.
3. No. of Students/No. of Users.

#### Preferable Valuation Multiples

1. EV/EBIDTA
2. PE Ratio
3. EV/FCF
4. EV/Sales

### ITES - KPO

#### Factors need to be consider

1. Employee Attrition Rate.
2. Organization recruitment rate.
3. Service Level %.
4. Customer Retention Rate.

#### Preferable Valuation Multiples

1. EV/EBIDTA
2. PE Ratio
3. EV/Work Force
4. EV/FCF
5. EV/Sales

### IT-Software

#### Factors need to be consider

1. Customer Satisfaction Level.
2. Future Growth %.
3. Customer Retention Ratio.
4. Market Recognition.
5. Employee Attrition Ratio.

#### Preferable Valuation Multiples

1. EV/EBIDTA
2. PE Ratio
3. EV/Work Force
4. EV/FCF
5. EV/Sales
6. PEG Ratio

### IT-Search Engines

#### Factors need to be consider

1. Document inception.
2. Website Content.
3. Website linking to search engine.
4. Content updation Rate.

#### Preferable Valuation Multiples

1. EV/EBIDTA
2. PE Ratio
3. EV/No. of hits
4. EV/FCF
5. EV/Sales

### IT-E-Commerce

#### Factors need to be consider

1. **Conversion Rate:** Rate at which viewers get converted into active customers.
2. **Average Order Value.**
3. **Visitors Loyalty and Visitors Recency.**
4. **Depthness of Search.**
5. **Product Line.**

#### Preferable Valuation Multiples

1. EV/EBIDTA
2. PE Ratio
3. EV/No. of Subscribers
4. EV/FCF
5. EV/Sales

### IT-Social Networking

#### Factors need to be consider

1. Traffic: Number of users.
2. Profile of social networking site in Niche.
3. Unique features offered.
4. User Retention Rate.
5. Current earning & Potential earning.
6. Dependence upon Number of advertisement Co's. for business.

#### Preferable Valuation Multiples

1. EV/EBIDTA
2. PE Ratio
3. EV/No. of users
4. EV/FCF
5. EV/Sales

## Key valuation parameters used in IT sector

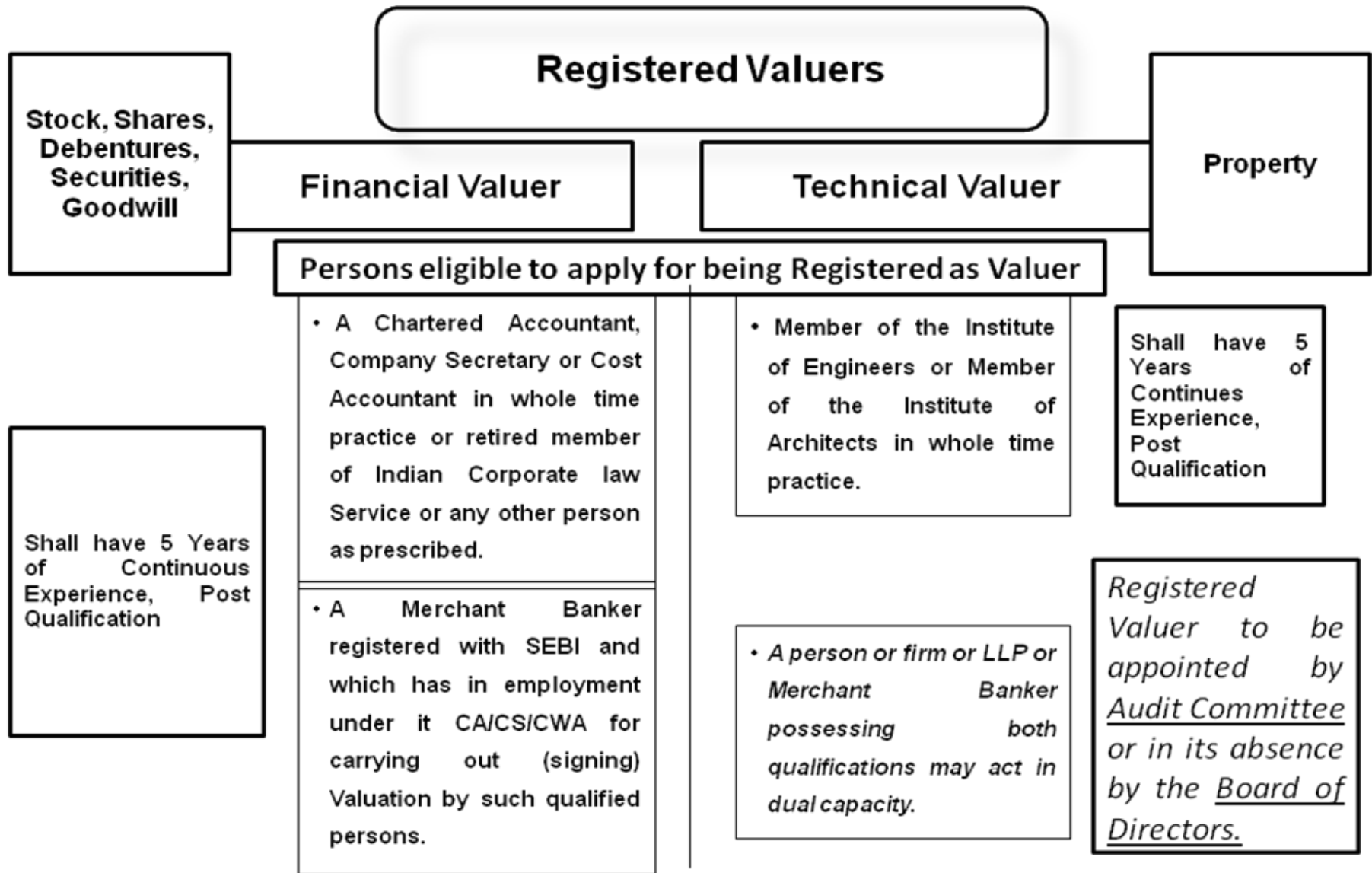
Valuation Parameters	Rationale
<b>Valuation Multiples</b>	
<b>Price to Book value</b>	As IT Software companies do not have significant fixed assets. Therefore, Price to Book value ratio will not provide the clear picture for IT software sector. However this may not be in case of IT hardware company as it involves huge investment in plant and machinery.
<b>Price to Earning</b>	This ratio can be used to evaluate the share price of IT sector co's.
<b>Price to sales</b>	Generally, this ratio is not accepted due to the high gestation period involves in the IT sector projects. As the project which may not be profitable now may generate revenue after some period of time.
<b>EV/Sales</b>	This ratio is commonly used in the valuation of companies whose operating costs exceed revenues, even for startups valuer can also rely on this ratio.
<b>Price/Earnings to Growth Ratio</b>	As the software industry has largely dependent on future potential, therefore this ratio can be use as rule of thumb for valuation purpose.
<b>EV/EBITDA</b>	If the company has cash-generating power, then EV/EBITDA can be used as valuation tool. But this tool does not take into account whether that EBITDA has been financed from equity or debt source.
<b>EV/Free Cash Flows</b>	Companies which have strong cash flows, for them EV/FCF can depict the clear picture.
<b>Rule of Thumb</b>	
<b>EV/ No. of seats</b>	This ratio can be used as validation ratio for Co's involved in BPO sector as for them human intellectual factor is not that much important in comparison for other IT sector co's. But concern is required to be put on the area upon which the respective BPO is operating, as we cannot say that the value of two BPO's are same on the basis of No. of seats ignoring the fact that one BPO is operating at small area in comparison to other.
<b>EV/No. of subscribers</b>	This parameter is most widely used in valuing the Co's in E-commerce sector.
<b>EV/No. of Users</b>	This parameter work as rule of thumb mainly for valuing social networking sites.
<b>EV/No. of Hits</b>	More the number of visitors, more the number of page views helps in gauge the traffic and popularity trends of search engines.
<b>EV/Work Force</b>	As the main assets in IT sector co's are their employees or technical staffs which can be evaluated by considering the hiring cost and training cost that co's bear for their employees. But this methodology does not consider intangibles values associated with specific employees such as personal reputation, relationship and know-how.



# Registered Valuer

The introduction of concept of Registered Valuer in the Companies Act - 2013 is a welcome step in the direction of regulating the Valuation as a code as it is expected that this could help in setting up the Indian Valuation Standards and eventually lead to transparency and better corporate governance, however it remains to be a challenge for a valuer to perform a due diligence exercise while doing any valuation as specified under the Act. It is clarified that so far provisions of Registered valuer are only draft and are yet to be notified.





To be valued by a Merchant Banker or CA with 10 year of experience till Registered Valuer provisions are notified (as per MCA clarification)

**Registered Valuers  
(Financial Valuation)**

Value

**Responsibilities**

- Valuer to make impartial, true and fair valuation
- Not undertake valuation if directly or indirectly interested
- Exercise due diligence
- Valuation to be done as per rules

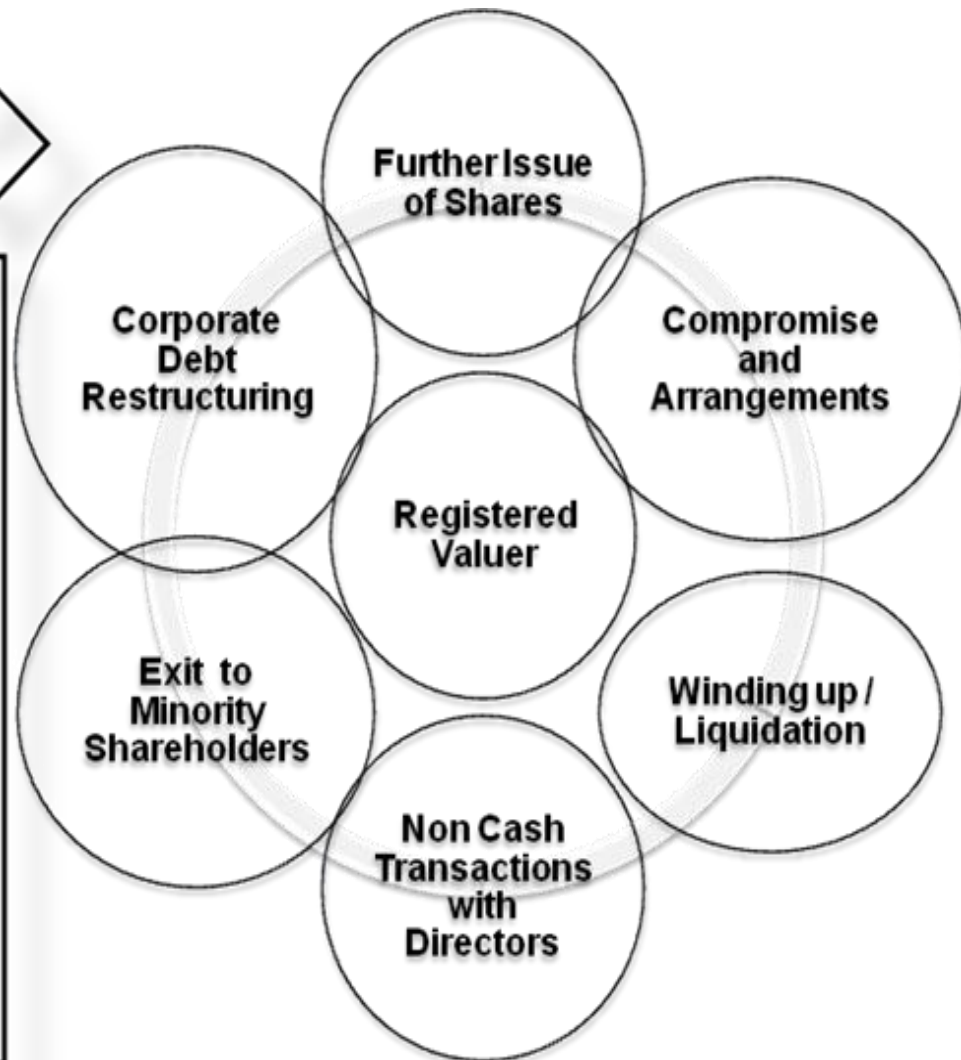
**Upon contravention**

- Fine – 25,000 to 100,000

**With intention to defraud**

- Imprisonment upto 1 year and
- Fine- 1,00,000 to 5,00,000

Additionally upon contravention, to refund remuneration received and also liable for damages.





Section 62(1)(c) – For Valuing **further Issue of Shares**

Section 192(2) – For Valuing **Assets involved in Arrangement of Non Cash transactions involving Directors**

Section 230(2)(c)(v) – For Valuing **Shares, Property and Assets of the company under a Scheme of Corporate Debt Restructuring**

Section 230(3) and 232(2)(d) – For Valuation including Share swap ratio under a **Scheme of Compromise/Arrangement**, a copy of Valuation Report by Expert, if any shall be accompanied

Section 232(3)(h) - **Where under a Scheme of Compromise/Arrangement** the transferor company is a listed company and the transferee company is an unlisted company, **for exit opportunity to the shareholders of transferor company**, valuation may be required to be made by the Tribunal

Section 236(2) – For Valuing **Equity Shares held by Minority Shareholders**

Section 260(2)(c) – For preparing Valuation report in respect of **Shares and Assets to arrive at the Reserve Price or Lease rent or Share Exchange Ratio for Company Administrator**

Section 281(1)(a) – For Valuing **Assets for submission of report by Company Liquidator**

**I. Before adopting methods, decide Valuation Approach-**

- Asset Approach
- Income Approach
- Market Approach

**II. Valuer to consider following points while undertaking Valuation-**

- **Nature of the Business and the History** of the Enterprise from its inception
- **Economic outlook** in general and outlook of the specific industry in particular
- **Book Value** of the stock and the **Financial condition** of the business
- **Earning Capacity** of the company
- **Dividend-Paying** Capacity of the company.
- **Goodwill** or other **Intangible value**
- **Sales** of the stock and the **Size of the block of stock** to be valued
- **Market prices** of stock of corporations engaged in the same or a similar line of business
- **Contingent Liabilities** or **substantial legal issues, within India and Abroad, impacting business**
- **Nature of Instrument proposed to be issued, and nature of transaction contemplated by parties**

**III. Registered Valuer shall make valuation of any asset in accordance with any one or more of the following methods-**

- a. Net Asset Value Method (NAV)
- b. Market Price Method
- c. Yield Method / PECV Method
- d. Discounted Cash Flow Method (DCF)
- e. Comparable Companies Multiples Method (CCM)
- f. Comparable Transaction Multiples Method (CTM)
- g. Price of Recent Investment Method (PORI)
- h. Sum of the parts Valuation Method (SOTP)
- i. Liquidation Value
- j. Weighted Average Method
- k. Any other method accepted or notified by RBI, SEBI or Income Tax Authorities
- l. Any other method that valuer may deem fit provided adequate justification for use of such method (and not any of the above methods) is provided

**IV. Registered Valuer shall make valuation of any asset as on the Valuation date and in accordance with applicable standards, if any stipulated for this purpose.**

**V. Contents of Valuation report shall contain information as contained in Form 17.3**

**1) Description of valuation engagement**

- (a) Name of the client:
- (b) Other intended users:
- (c) Purpose for valuation:

**(2) Description of business/ asset / liability being valued**

- (a) Nature of business or asset / liability
- (b) Legal background
- (c) Financial aspects
- (d) Tax matters

**(3) Description of the information underlying the valuation**

- (a) Analysis of past results
- (b) Budgets, with underlying assumptions
- (c) Availability and quality of underlying data
- (d) Review of budgets for plausibility
- (e) Statement of responsibility for information received

**(4) Description of specific valuation of assets used in the business:**

- (a) Basis or bases of value
- (b) Valuation Date
- (c) Description of the procedures carried out
- (d) Principles used in the valuation
- (e) The valuation method used and reasoning
- (f) Nature, scope and quality of underlying data and
- (g) The extent of estimates and assumptions together with considerations underlying them

**(5) Confirmation that the valuation has been undertaken in accordance with these Rules**

**(6)** Further it is certified that valuation has been undertaken after taking into account relevant conditions/regulations/rules/notifications, if any, issued by the Central/State Government(s) from time to time.

- (i) The valuation report must clearly state the **significant assumptions** upon which the value is based. When reporting there may be instances, **where there are confidential figures, these must be summarized in a separate exhibit**
- (ii) In his valuation report, the registered valuer **must set out a clear value or range of values along with the reasoning**
- (iii) In case **the valuer has been involved in valuing any part of the subject matter of valuation in the past, the past valuation report(s) should be attached and referred to herein. In case a different basis has been adopted for valuation (than adopted in the past), the valuer should justify the reason for such differences**



# Preferred shares valuation

Common Shares cannot command the same Value as Preferred Shares and rather gets a significantly lower valuation per share. It should be noted that this also impacts the overall equity value of the company and simple extrapolation of recent round of Preferred Investment would result in over valuation of the company and is not recommended.

To conclude, the analysis of complex capital structure has thus become increasingly important when a company has been financed by several rounds of funding with different classes of preferred and equity securities as well as warrants, options, employee stock options etc. with each having its own rights and preferences. The value of each of such instruments could be different and requires application of complex valuation techniques, judgement and expertise of Business Valuers.

Not all investors are same - the stronger the preferences assigned to any investor, the lower would be the value of the common equity shareholders. For Example: if the company has raised INR 10 cr. funds by issuing Cumulative Convertible Preference shares (Preferred Shares) which gives investor 20% shareholding in the company on fully dilutive basis, it would not be reasonable to assume that all the shares of the Company have equal rights and hence the equity value of the company is INR 50 cr. In practice, the value of such preferred share is significantly higher than each of the remaining common equity shares. The resultant impact is that the equity value of the company would be significantly lower say at INR 40 cr. and so would be the value per common equity share.

Investors often invest in equity shares of a company with certain preferences as compared to the common equity shareholders. These preferences can be of various types like preference in distribution of company's value over other investors in the event of a sale or liquidation of the company besides participation in Profits of the Company. These preferences assigned to investors can offer them significant downside protection in the event company value declines and also let them share in the upside of the Company.

**This articles aims at understanding practical application of an Internationally used valuation approach “Backsolve” to derive the implied overall equity value of company and resultant value of different series of equity instruments from an Investment transaction involving company’s own shares, typically – Preferred Shares as such shares**

**indicates the equity value consistent with the return expectations of the independent investors at arm’s length price considering their special preferences at that time.**

**There are three methods to apply Backsolve approach -**

**a. Current Value Method (CVM)**

In the CVM, the value for equity shares is whatever is left after paying the Preferred Stock. The same could be different depending on whether there is any Preference and/or Participation in Profits.

**The CVM is not much useful** when the enterprise is at such an early stage of Development or Dissolution of the eminent is imminent and/or no significant common equity value has been created above the liquidation preference of a company's preferred shares.

**b. Probability Weighted Expected Return Method (PWERM)**

The PWERM estimates the value of equity securities based on an analysis of various discrete future outcomes, such as an IPO, merger or sale, dissolution, or continued operation as a private enterprise until a later exit date. The equity value today is based on the probability-weighted present values of expected future investment returns, considering each of the possible outcomes available to the enterprise, as well as the rights of each security class.

PWERM is seldom applied as it requires significant and detailed assumptions regarding potential future outcomes. Estimating and supporting discrete event probabilities, and their associate timing, is inherently difficult and prone to optimism or conservatism.

**c. Option Pricing Model (OPM)**

This method is generally most commonly applied in Backsolve approach as it captures speculative nature of common stock.

**Two types of Breakpoints are created in Backsolve OPM model:**

- Breakpoints in accordance to liquidation preference
- Breakpoints as per payoff (Allocation of incremental value of the Company)

The OPM values each class of securities at each breakpoint as a call option on the value of the company. In this method, each share class only has value if the funds available for distribution to shareholders exceed the value of the liquidation preferences at the time of a liquidity event for each of the prior share classes in a company's capital structure. Incremental call option at each breakpoint is then allocated based on total no of outstanding participative securities.

**Let's have a practical example of valuation of Company X through BackSolve Methodology to arrive at the Implied Equity Value and value for each Series (A-C) and Common Equity Shares:**

**Facts of the case:**

**Capital Structure of Company X:**

**All Amount INR**

<b>Class of shares</b>	<b>No. of shares outstanding</b>	<b>Conversion Price</b>	<b>Investment Amount</b>	<b>Liquidation Preference</b>
<b>Series A CCPS</b>	<b>80</b>	<b>15</b>	<b>1,200</b>	<b>3</b>
<b>Series B CCPS</b>	<b>150</b>	<b>30</b>	<b>4,500</b>	<b>2</b>
<b>Series C CCPS</b>	<b>220</b>	<b>80</b>	<b>17,600</b>	<b>1</b>
<b>Common Equity shares</b>	<b>650</b>			

- Conversion ratio presumed as 1:1 for all Series
- Series C CCPS is the latest funding round in which Rs. 17,600 has been invested against 20% stake of the company.



## Creation of Breakpoints

a. First based on the liquidation preferences which would be as follows:

All Amount INR

Class of shares	Break Point 2	Break Point 3	Break Point 4
Series A CCPS			1,200
Series B CCPS		4,500	
Series C CCPS	17,600		
<b>Exercise Value (Threshold)</b>	<b>17,600</b>	<b>22,100</b>	<b>23,300</b>

Note- Breakpoint 1 will be at 0

b. Then based on the Payoff preferences among various class of securities [considering their respective conversion price per share i.e. LCFP (Low Conversion price per share is First Paid)].

Particulars	Breakpoint 5	Breakpoint 6	Breakpoint 7	Breakpoint 8
	Equity Shares	Equity Shares	Equity Shares	Equity Shares
Security participation		Series A CCPS	Series A CCPS	Series A CCPS
			Series B CCPS	Series B CCPS
				Series C CCPS
<b>Total No. of shares</b>	<b>650</b>	<b>730</b>	<b>880</b>	<b>1,100</b>
<b>Incremental Multiplier</b>	<b>15</b>	<b>15</b>	<b>50</b>	<b>-</b>
<b>Exercise Value (Threshold)</b>	<b>33,050</b>	<b>44,000</b>	<b>88,000</b>	<b>-</b>

The OPM then values each class of securities as a call option on the value of the company.

### OPM Inputs

The OPM relies on following inputs:

- the total equity value of the enterprise<sup>^</sup>
- expected time to exit
- expected risk-free interest rate as of the valuation date
- expected volatility derived from similar publicly traded companies
- expected dividend yield

<sup>^</sup>The Equity value of company is computed (by trial and error) such that the value of recent preferred stock investment equals the price paid for such investment as per the backsolve method. In our case the value per share – Series C has come at 80/- which is the investment price, so the equity value of company is fixed accordingly.

In our case working of Call Value, Incremental Call Value and division in different series of shares is as under:

Breakpoints	Exercise Value	Call Value calculated through OPM	Incremental Call Value	% Participation in Value of Company^				Amount Participation INR			
				Common Equity Stock	Series A	Series B	Series C	Common Equity Stock	Series A	Series B	Series C
Breakpoint 1	0	68,720	11,395				100%				11,395
Breakpoint 2	17600	57,325	2,554			100%				2,554	
Breakpoint 3	22100	54,771	654		100%				654		
Breakpoint 4	23300	54,117	4,910	100%				4,910			
Breakpoint 5	33050	49,208	4,752	89.04%	10.96%			4,231	521		
Breakpoint 6	44000	44,456	13,430	73.86%	9.09%	17.05%		9,920	1,221	2,289	
Breakpoint 7	88000	31,026	31,026	59.09%	7.27%	13.64%	20.00%	18,333	2,256	4,231	6,205
<b>Equity Value per Class (INR)</b>								<b>37,394.20</b>	<b>4,652.79</b>	<b>9,074.70</b>	<b>17,600.32</b>
<b>No. of shares Outstanding</b>								<b>650</b>	<b>80</b>	<b>150</b>	<b>220</b>
<b>Value per share (INR)</b>								<b>57.53</b>	<b>58.15</b>	<b>60.49</b>	<b>80.00</b>

^Incremental call option at each breakpoint is allocated based on total no of outstanding participative securities.

**Result Comparison between Normal and Backsolve Valuation Methodology:**

Particulars	Not Adjusting Equity Value for Preferences	Adjusting and allocating Equity Value for Preferences
<b>Basis</b>	<b>Simple Capitalization of Recent Investment</b>	<b>As per Backsolve model</b>
<b>Equity Value of Company</b>	<b>INR 88,000.00</b>	<b>INR 68,720.00</b>
<b>Equity Value of Common Shares</b>	<b>INR 52,000.00</b>	<b>INR 37,394.20</b>
<b>Value per Common Share</b>	<b>INR 80.00</b>	<b>INR 57.53</b>

The above concludes that Common Shares cannot command the same Value as Preferred Shares and rather gets a significantly lower valuation per share. It should be noted that this also impacts the overall equity value of the company and simple extrapolation of recent round of Preferred Investment would result in over valuation of the company and is not recommended.

To conclude, the analysis of complex capital structure has thus become increasingly important when a company has been financed by several rounds of funding with different classes of preferred and equity securities as well as warrants, options, employee stock options etc. with each having its own rights and preferences. The value of each of such instruments could be different and requires application of complex valuation techniques, judgement and expertise of Business Valuers.



# Ind AS Valuation

**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

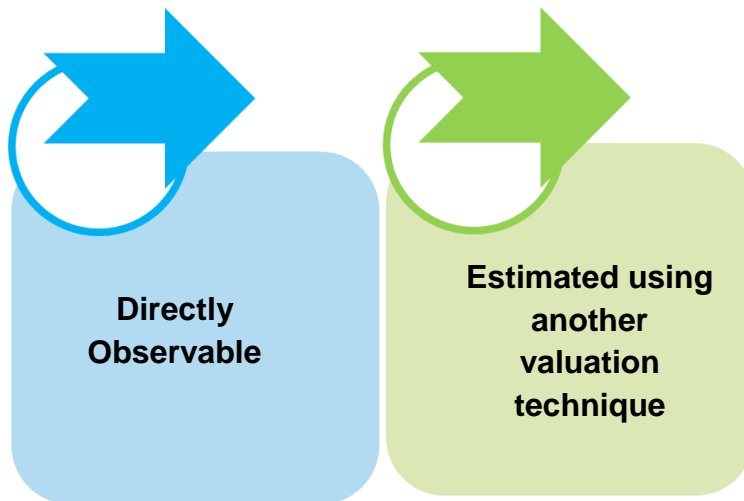
## Ind AS using Fair Value as their guiding principle

- Ind AS 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 Instruments
- Ind AS 40 – Investment Property

## Fair Value

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



### Level -1

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

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

### Level -2

If there is principal market for asset or liability but quoted price is not available

Quoted Price for Comparable Companies (CCM Method)  
Adjustments to Level-2 Inputs are permitted 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



### **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)

*Corporate Professionals Capital Pvt. Ltd. is a SEBI Registered (Cat-I) Merchant Banker and has a successful track record of providing a broad range of M&A and Transaction Advisory Services. Our Dedicated Valuation Team with intensive experience and research focus has created a niche in Valuation Services by executing Corporate Valuations (uncoding tangibles & intangibles) of clients of International Repute across different Context, Industries and Boundaries and delivering well-reasoned and defensive Valuation Reports.*

## About Corporate Professionals



## Valuation & Business Modelling

### Unexplored Inorganic Strengths



## Partnering your Growth

#### Our Valuation Services include-

- ☑ Business Valuation
- ☑ Acquisition & Investment Valuation
- ☑ M&A Valuation and Swap Ratio
- ☑ Fairness Opinion
- ☑ ESOP Valuation
- ☑ Tax Valuation
- ☑ Non Resident Valuation (FDI & ODI)
- ☑ Intangible / Brand Valuation
- ☑ IND AS Valuation
- ☑ Valuation of Convertible Instruments/ Preferred Stock
- ☑ Business Modelling & Preparation of Investment Documentation
- ☑ Deal Advisory

**CorporateValuations.in** is a venture promoted by Corporate Professionals Capital Pvt. Ltd., SEBI Registered (Cat-I) Merchant Banker. By virtue of our Dedicated Valuation Team, In-house Research wing and proven expertise in Corporate Transaction Advisory, we have attained leading edge, technical knowledge and in-depth Industry experience that allow us to provide Independent Valuations & Fairness Opinions across different Context, Industries and Boundaries.

#### Industries Served

- E-Commerce
- Logistics & Automotive
- Pharma & Healthcare
- Telecommunications
- Financial Services
- FMCG
- Power & Utilities
- Agro Chemicals
- Hospitality
- Education
- Infrastructure & Real Estate
- Microfinance
- Information Technology
- Media & Entertainment
- Mining & Metals & more

#### Our Key Valuation Clients



Our Gamut of Services: Investment Banking | Corporate Deals | Transaction Advisory | Mergers & Acquisitions | ESOP | Valuation & Biz Modelling | Capital Markets & Stock Exchange Services | Corporate & Securities Law |



SEBI Registered Merchant Banker - Cat I (INM000011435)

Visit our dedicated Valuation portal @ [corporatevaluations.in](http://corporatevaluations.in)

#### Delhi Office:

D-28, South Ex-Part-I,  
New Delhi - 110 049

#### Mumbai Office:

301, Mastermind-1, Royal  
Palms Estate, Aarey  
Colony, Goregaon, East  
Mumbai - 400065

#### London Office:

Suite 4, Vijay House, 1  
Stephenson Court, Fraser road,  
Priory Business Park, Bedford  
Bedfordshire. MK44 3WJ, UK

#### For Professional Consultation, contact :

CA Chander Sawhney  
Partner & Head - Valuation & Deals  
Corporate Professionals Capital Pvt. Ltd.  
M: +91 9810557353  
D: +91 11 40622252  
Email : [chander@indiacp.com](mailto:chander@indiacp.com)



**Mr. Chander Sawhney**  
Partner & Head – Valuation & Deals  
M: +91 9810557353  
D: +91 11 40622252  
E: [chander@indiacp.com](mailto:chander@indiacp.com)



**Mr. Maneesh Srivastava**  
AVP – Valuation & Biz Modelling  
M: +91 9871026040  
D: +91 11 40622255  
E: [maneesh@indiacp.com](mailto:maneesh@indiacp.com)



**Mr. Sameer Verma**  
Deputy Manager – Valuation and Biz Modelling  
M: +91 9911945607  
D: +91 11 40622216  
E: [sameer@indiacp.com](mailto:sameer@indiacp.com)



**Ms. Shruti Vijay**  
Associate – Valuation and Biz Modelling  
M: +91 9871929949  
D: +91 11 40622241  
E: [shruti@indiacp.com](mailto:shruti@indiacp.com)



**Mr. Deevanshu Malhotra**  
Associate – Valuation and Biz Modelling  
M: +91 9711466810  
D: +91 11 40622241  
E: [deevanshu@indiacp.com](mailto:deevanshu@indiacp.com)



**Mr. Rahul Soni**  
Analyst – Valuation and Biz Modelling  
M: +91 9540670095  
D: +91 11 40622260  
E: [rahul@indiacp.com](mailto:rahul@indiacp.com)