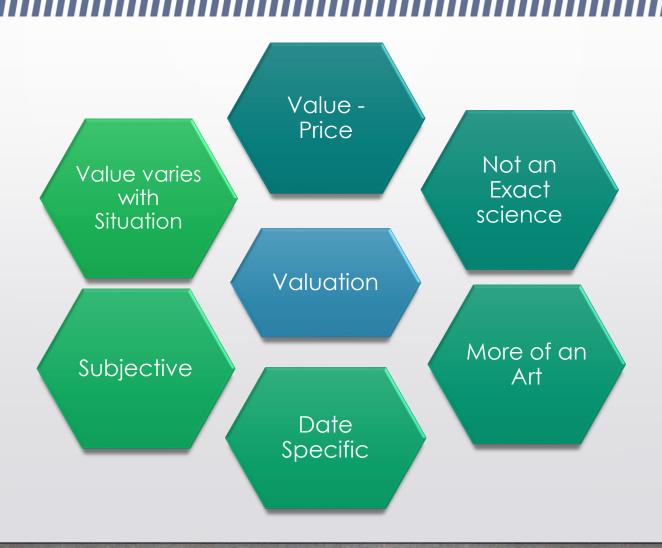
Valuation – Overview & Methodologies

CA Sujal Shah & CA Bhakti Shah 18th November 2017

ICAI - Mumbai

Seminar on Valuation

VALUATION CONCEPTS



PURPOSE OF VALUATION

Financial Intangibles **Business Valuation** Regulatory Reporting Purchase Price Restructuring FEMA Purchase / Sale Allocation Private Equity/ Purchase / Sale of Income Tax Act Venture Capital Hypothecation shares / business **Funds** Accounting for Financial Litigation / Family **SEBI** Regulations Settlements purchase Instruments Ind AS reporting – Fund raising Impairment Companies Act Fair Value / Impairment

VALUATION PROCESS

STEPS IN VALUATION

 $\begin{array}{c} 1 \\ \hline 1 \\ \hline \end{array}$

Information

- Obtaining information
- BusinessUnderstanding

Analysis

- Data Analysis and review
- Discussion with the Management

Valuation Methodologies

- Selection of method
- Conducting sensitivity analysis

Recommendation

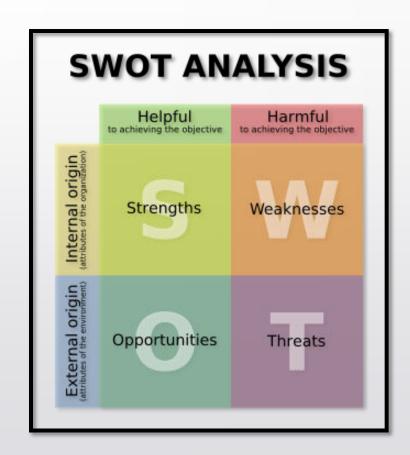
- Assigning Weights
- Recommendation
- Reporting

SOURCES OF INFORMATION

- Historical data such as audited results of the Company
- Industry & Company overview
- Future projections
- Management Discussion
- Stock market quotations / announcements
- Publicly available data on comparable companies
- Market surveys, news paper reports
- Representation by Management

ANALYSIS OF THE COMPANY

- Understanding of the Business
- Industry Analysis
- Existing policy/ legal framework
- SWOT Analysis
- Profitability Analysis
- Financial Ratio Analysis
- Projection analysis
 - Installed capacity
 - Revenue and Expenses ratio analysis
 - Capital expenditure increasing capacities
 - Working capital requirements
 - Alternate scenarios / sensitivities



VALUATION METHODOLOGIES

VALUATION METHODOLOGIES

INCOME APPROACH

Discounted Cash Flow Method

MARKET APPROACH

Market Price Method

Comparable
Companies Multiple
Method

Comparable
Transactions Multiple
Method

ASSET APPROACH

Net Assets Value Method

Replacement Value/ Realizable Value Method

INCOME APPROACH

DISCOUNTED CASH FLOW ('DCF') METHOD

Values a business based on the expected cash flows over a period of time 2

Considers cash flows and not accounting profit

3

Value of business is aggregate of discounted value of the cash flows for the explicit period and perpetuity 4

Involves determination of discount factor and growth rate for perpetuity

DCF - Parameters

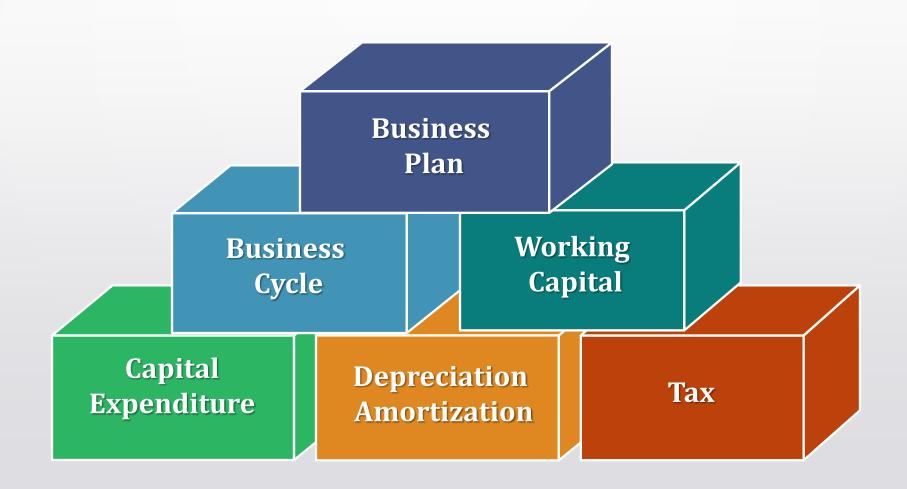
Cash Flows

- Projections
- FCF to Firm or FCF to Equity
- Horizon (Explicit) period
- Growth rate for perpetuity

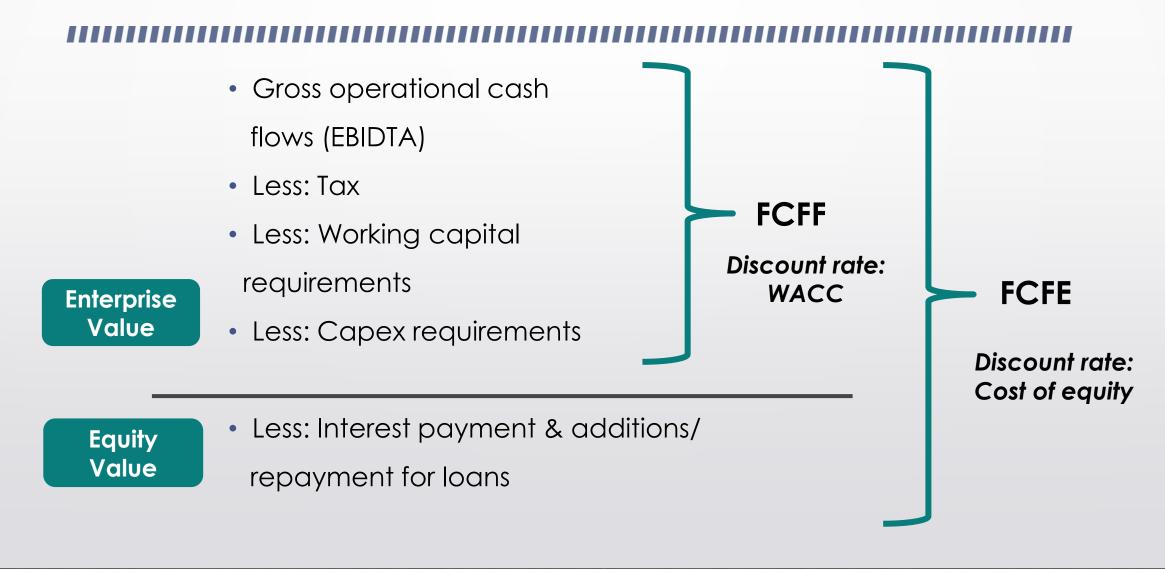
Discounting rate

- Cost of Equity
- Cost of Debt
- Debt Equity ratio

CASH FLOWS



CASH FLOWS



COST OF EQUITY

CAPITAL ASSET PRICING MODEL



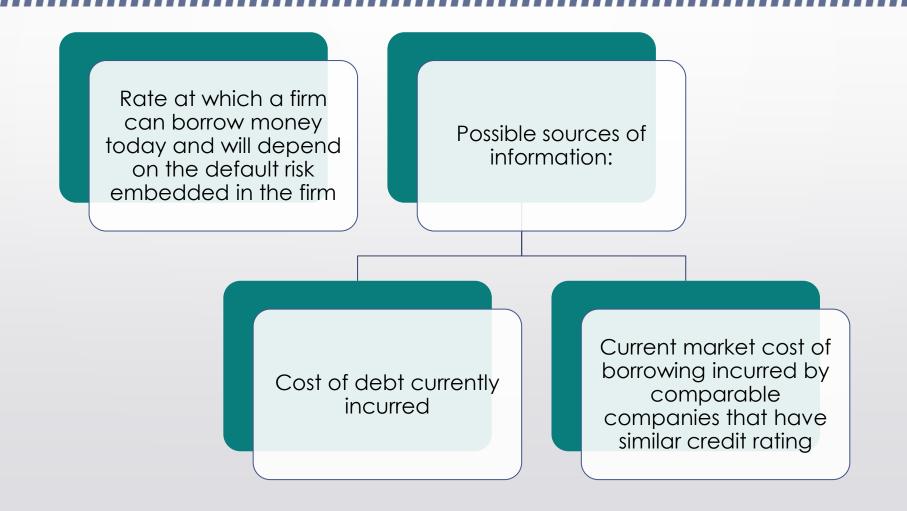
Risk Free Rate Equity Market Risk Premium

Beta (β)

Specific Company Risk Premium (SCRP)

*Rm: Market Return

COST OF DEBT



DISCOUNTING FACTOR

Weighted Average Cost of Capital (WACC) =

$$\left\{ \begin{array}{c} D \\ (D+E) \end{array} \right. \times \left. \begin{array}{c} Kd \end{array} \right\} + \left\{ \begin{array}{c} E \\ (D+E) \end{array} \right. \times \left. \begin{array}{c} Ke \end{array} \right\}$$

D = Debt

E = Equity

Kd = Post tax cost of debt

Ke = Cost of equity

CALCULATION OF WACC

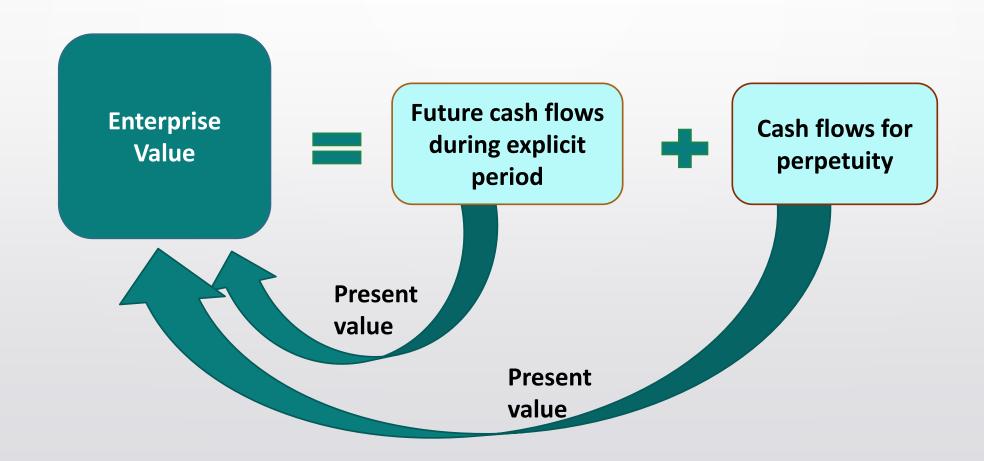
CALCULATION OF WACC

Cost of Equity			
	Risk Free Return	Beta	Equity Risk Premium
Cost of Equity	7.00% 11.80%	0.60	8.00%
SCRP	1.00%		
Adjusted Cost of Equity	12.80%		

Cost of Debt		
	Interest Rate	Tax
	10.50%	34.61%
Cost of Debt	6.87%	

Debt - Equity		
	Debt	Equity
	25%	75%

DCF VALUE



ADJUSTMENTS

- Market value of the investments
- Other non-operating surplus assets
- Surplus cash
- Contingent liabilities / assets
- Loan Funds
- Preference Share Capital



EXAMPLE FREE CASH FLOW TO FIRM

(INR Lacs)

Particulars		2016-17	2017-18	2018-19	Perpetuity
Operating PBT		430	518	596	,
Add:					
Interest		56	44	46	
Depreciation		70	80	86	
EBITDA		556	642	728	
Less:					
Capital Expenditure		45	45	45	
Incremental Working Capital		20	30	40	
Tax		158	182	208	
Total Outflows		223	257	293	
Free Cash Flow (FCF)		333	385	435	
Growth Rate					5%
Cash Flow for 2019-20					457
Capitalised Value for Perpetuity					5,709
Discounting Factor	13%	0.88	0.78	0.69	0.69
Net Present Value of Cash Flows		295	302	301	3,957
Enterprise Value					4,855
Less: Loan Funds					(930)
Less: Preference Share Capital					(150)
Add: Surplus Cash					150
Less: Contingent Liabilities					(20)
Add: Value of Investments					850
Adjusted Value For Equity Shareholders					4,755
No. of Equity Shares (FV - INR 10 each)					9,00,000
Value per share (INR)					528

MARKET APPROACH

MARKET PRICE METHOD

- Evaluates the value on the basis of prices quoted on the stock exchange
- It is prudent to take weighted average of quoted price over a reasonable period
 - Significant and Unusual fluctuations in the Market Price
- Thinly traded / Dormant Scrip Low Floating Stock
- Regulatory bodies often consider market value as important basis – Preferential allotment, Takeover code



EXAMPLE - MARKET PRICE METHOD

Month	Volume	Turnover (INR)
April 2017	3,07,47,812	4,60,99,75,753
May 2017	1,20,40,227	2,69,78,68,740
June 2017	1,96,03,244	3,97,62,64,011
July 2017	1,61,08,953	3,57,32,16,654
August 2017	1,81,15,567	4,93,70,62,216
September 2017	2,99,08,604	6,73,54,15,743
Total	12,65,24,407	26,52,98,03,117
Value per share (INR)		210

COMPARABLE COMPANIES MULTIPLE METHOD

Earnings Based

EBITDA Multiple (EV / EBITDA)

Revenue multiple (EV / Revenue)

PE Multiple

Enterprise Value

Equity Value

Asset Based

Book Value Multiple

Equity Value

MARKET MULTIPLES

- Generally applied in case of unlisted entities
- Estimates value by relating an element with underlying element of similar listed companies
- Based on market multiples of Listed Comparable Companies
 - PE Multiple
 - EV/EBITDA Multiple
 - Revenue Multiple
 - Book Value Multiple
 - Industry Specific Multiple
 - EV/ Tonne Cement Manufacturing Companies
 - EV/ Bed Hospital Business
 - EV/ Room Keys Hotel Business
 - EV/ Tower Telecom Tower Companies
 - % of AUM Asset Management Companies

MAINTAINABLE PROFITS

Based on past performance and / or estimates

Elimination of material non-recurring/ non operational items

Adjustment for capacity recently added

Profits of various years averaged (simple or weighted)

MULTIPLE

1.

 Historical multiples enjoyed on the Stock Exchange by the listed comparable companies

2.

Past and Expected Growth of the Earnings

3.

• Performance vis-à-vis Peers

4.

• Size, Location & Market Share

EXAMPLE - EV / EBITDA MULTIPLE

XYZ LTD

CALCULATION OF ADJUSTED PBT & EBITDA

(INR Lacs)

	2014-15	2015-16	2016-17
Particulars	Audited	Audited	Budget
Reported Profit before tax	540	780	910
Less:Non recuring income			
Dividend Income	340	300	300
Profit on sale of Fixed Assets	10	-	120
Profit on sale of Investments	50	100	-
Interest on Income tax refund	-	40	50
Interest Income	10	18	30
Total Non recurring Income	410	458	500
Add:Non recuring expenses			
Loss on sale of Fixed Assets	-	10	-
VRS Paid	10	15	20
Total Non recurring Expenditure	10	25	20
Adjusted PBT	140	347	430
Add: Interest	165	113	56
Add: Depreciation	79	75	70
Adjusted EBITDA	384	535	556

EXAMPLE - EV / EBITDA MULTIPLE

(INR Lacs)

Particulars	XYZ Ltd			
	Adj.EBITDA	Weight	Product	
2014-15	384	0	-	
2015-16	535	1	535	
2016-17	556	1	556	
TOTAL		2	1,091	
Maintable EBITDA			546	
EV/EBITDA Multiple	е		9	
ENTERPRISE VALU	ENTERPRISE VALUE			
Adjustments				
Add: Value of Investments			850	
Less: Contingent Liabilities			(20)	
Add: Surplus Cash			150	
Less: Loan Funds			(930)	
Less:Preference Share Capital			(150)	
Adjusted Equity Value			4,810	
No. of Equity Shares (FV - INR 10 each)			9,00,000	
Value per share (II	NR)		534	

COMPARABLE TRANSACTION MULTIPLE METHOD

- Determines the value based on any recent transaction in the Comparable Companies
- Multiples derived from recent M&A transactions are considered
 - EV/EBITDA
 - EV/Sales
 - Book Value Multiple
 - Industry Specific Multiple
- Generally, used as a cross check

ASSET APPROACH

NET ASSETS VALUE ('NAV') METHOD

Total Assets

(excluding Miscellaneous Expenditure and debit balance in Profit & Loss Account)

Less: Total Liabilities

NET ASSET VALUE

OR

Share Capital

Add: Reserves

Less: Miscellaneous Expenditure

Less: Debit Balance in Profit & Loss Account

NET ASSET VALUE

REPLACEMENT / REALISABLE VALUE METHOD

Replacement value of assets

- Cost of new asset
- Similar condition
- Equivalent utility
- Depreciation for obsolescence

Realisable value of assets

- Cost of disposal
- Tax on sale (STCG, LTCG etc.)
- Time required

EXAMPLE - NAV METHOD

(INR Lacs)

		(IIVIX Lacs)
Particulars	XYZ	Ltd
Net Fixed Assets		1,000
Current Assets	2,450	
Current Liabilities	(1,565)	
Net Current Assets		885
Investments		500
Deferred Tax Liabilities		(100)
Loan Funds		(930)
Net Assets Value		1,355
Adjustments:		
Add: Appreciation in the value of investments		350
Less: Preference Share Capital		(150)
Less: Contingent Liabilities		(20)
Adjusted Net Assets		1,535
No. of Equity Shares (FV - INR 10 each)		9,00,000
Value per share (INR)		171

VALUATION – OTHER ASPECTS

COMMON ADJUSTMENTS

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



SELECTION OF METHODS

Situation	Approach
Knowledge based companies	Income/Market
Manufacturing Companies	Income/ Market/ Asset
Brand Driven companies	Income/Market
Start up companies	Income/Market
Limited life projects	Income
Investment/Property companies	Asset
Company going for liquidation	Asset

REACHING A RECOMMENDATION

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

ISSUES IN VALUATION

- Availability of information
- Sustainability & Scalability of business model.
- Thinly traded/ Dormant script
- Start-up companies
- Loss making companies
- International companies
- Selection of methods
- Difficulty in obtaining comparable companies
- Discount rate Hurdle rate
- Illiquidity discount & control premium
- Due Diligence issues



JUDICIAL PRONOUNCEMENTS

JUDICIAL PRONOUNCEMENTS

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

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

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

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

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

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

JUDICIAL PRONOUNCEMENT

"It is not possible for a Court to go into the exercise of carrying out a valuation itself. Courts do not have the expertise, the time or the means to do this. I do not believe that they are expected to do it. What the Court's approach must be to examine whether or not a valuation report is demonstrated to be so unjust, so unreasonable and so unfair that it could result and result only in a manifest and demonstrable, inequity or injustice. This injustice must be shown to apply to a class."

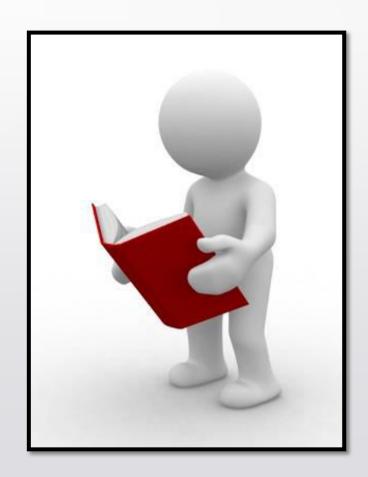
"No valuation is to be disregarded merely because it has used one or the other of various methods. It <u>must be shown</u> that the chosen <u>method of valuation</u> is such as <u>has resulted in an artificially depressed or contrived valuation</u> well below what a fair-minded person may consider reasonable."

• Cadbury India Limited Vs. Mrs Malati Samant and Mr Alok C. Churiwala (Samant Group and Churiwala Group) (2014) (Bom HC)

GEARING UP FOR VALUATIONS

COMPETENCE FOR VALUATION

- What we are taught in CA course is more than sufficient
- Books on valuation E.g. Hand book on Valuation by The Chamber of Tax Consultants, Damodaran, Mckinsey, etc.
- Broad knowledge of economy and industries
- Training with a valuation firm
- Use of Database E.g. Capitaline, Bloomberg etc.
- Newspapers, Business Magazines
- Understanding of Financial Statements



PROFESSIONAL CONDUCT

CODE OF CONDUCT

Internal code of conduct at office

- ✓ Confidentiality
- ✓ Restriction of trading in stocks
- ✓ Data secrecy

Internal peer review

Adherence to code of conduct of the Institute



REGISTERED VALUER RULES



VALUATION BY REGISTERED VALUERS

Section 247(1) of the Companies Act, 2013 ('Co. Act'):

- Valuation of property, stocks, shares, debentures, securities, goodwill or other assets/liabilities/networth
- To be done by a Registered Valuer
- Appointed by Audit Committee or in its absence, the Board of Directors

COMPANIES ACT PROVISIONS

Section	Valuation Requirement
54(1)(d)	Issue of Sweat Equity Shares in case of unlisted companies
62(1)(c)	Issue of shares / convertible securities on preferential basis by unlisted company for cash or for consideration other than cash
67(3)(b)	Provision of money by company for purchase of its own shares by employees or by trustees for the benefit of employees
192(2)	Transactions involving transfer of assets for non-cash consideration to / from directors
230 & 232	Scheme of Compromise/Arrangement or Scheme of Corporate Debt Restructuring
234	Cross border merger of an Indian Co. into Foreign Co. or vice versa
236	Purchase of minority share holding
281	Winding up of a company

REGISTERED VALUER RULES

On 18 October 2017, the MCA issued Companies (Registered Valuers and Valuation) Rules, 201

Insolvency and Bankruptcy Board of India ('IBBI')

Registered Valuer Organization ('RVO')

Registered Valuer ('RV')

Specified by the Central Government as the authority to administer & perform the functions under these Rules Organization that meets specified requirements

RVO shall be granted a 'certificate of recognition' by IBBI

RV can be an Individual, Firm, LLP or Company

RV should be a member of a RVO

RV shall be a person registered with IBBI

RV shall be granted a 'certificate of registration' by IBBI

TO BE A REGISTERED VALUER

3

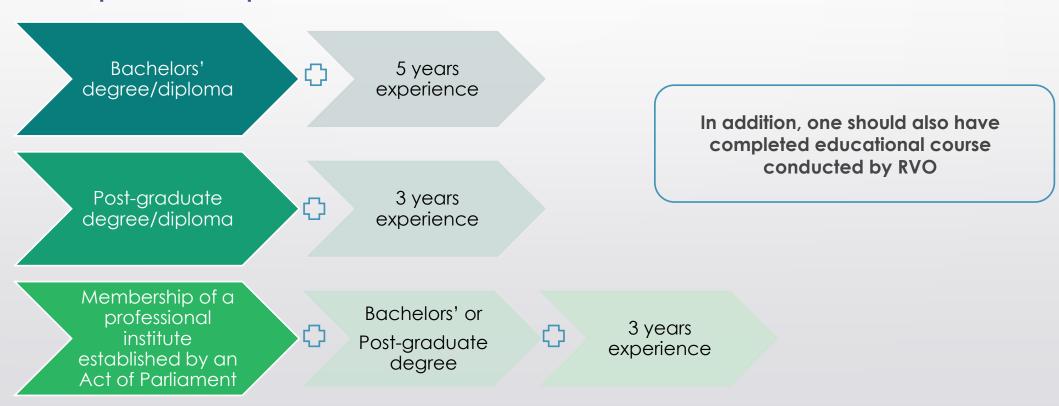
1 Obtain Educational Qualifications and Experience

Appear for Valuation Examination

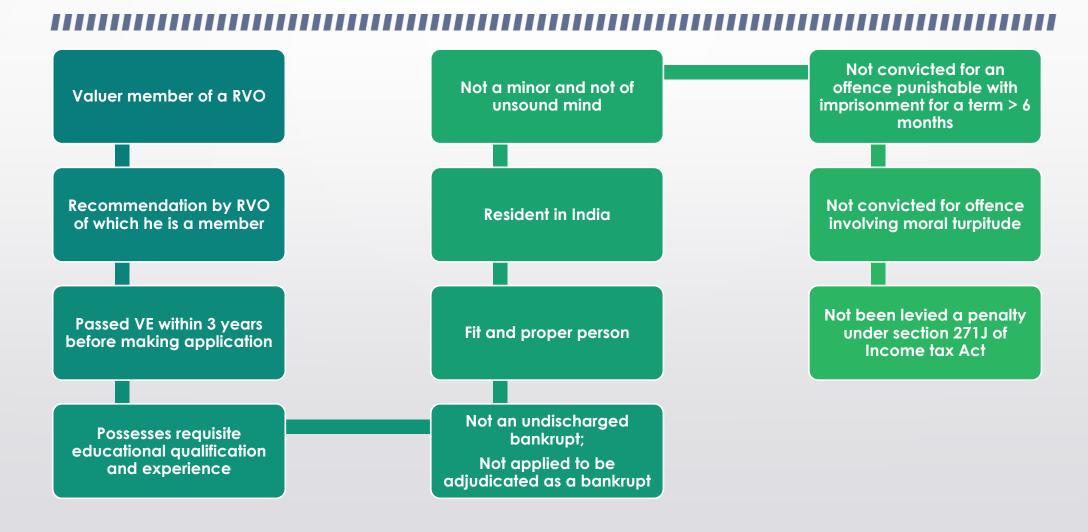
Satisfy other Specified Eligibility Criteria

EDUCATIONAL QUALIFICATIONS AND EXPERIENCE

To be a RV, an individual must have the following educational qualifications and experience in the specified discipline:



ELIGIBILITY CRITERIA - INDIVIDUAL



ELIGIBILITY CRITERIA – OTHERS

Atleast 1 None of the Set up for Co not a Not an partner is RV of partners rendering subsidiary / JV undischarged Atleast 3 asset class for possess disqualification / Associate of professional / bankrupt; or partners are which financial another undergoing **RVs** as specified for valuation is services company insolvency Individual carried out **PRACTICALLY DIFFICULT**

Thank You