

Dynamics of Business Valuation

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Value creation

- 1 Take glass of milk or equivalent milk powder
- 2 Add sugar
- 3 Add malt (dry cereal or grain)
- 4 Selling price of this very simple product? – Rs 10? Rs 20? Rs 50?
- 5 Add manufacturing facility, dealer network / distribution chain
- 6 Add Kapil Dev/ Sachin Tendulkar's photo and give a brand name
- 7 Selling price – Rs 35,000 cr?

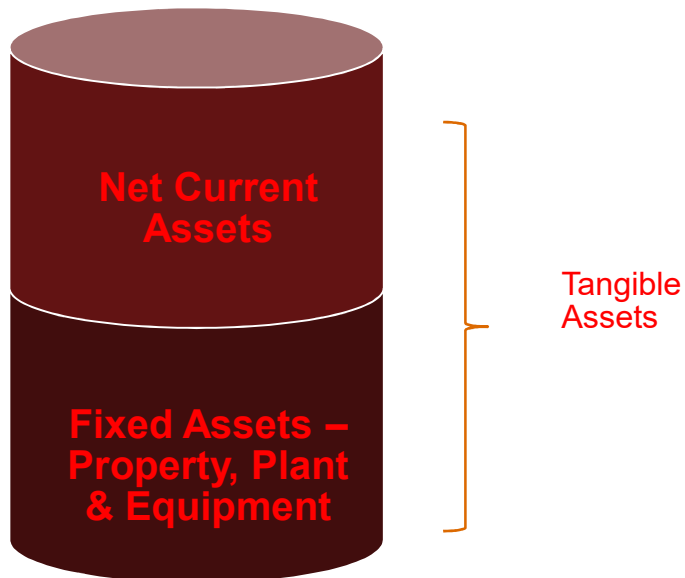
Why did a company pay \$5Bn. for a simple milk + malt + sugar product?

- In 2019, X Co. agreed to acquire Y Co.'s Z business for a consideration of about \$5 bn.
- While X and Y are both MNCs, Z's business is mostly based in South Asia, with India accounting for more than 90% of sales.
- Z business is 'low-tech', essentially involving the sale of milk powder +malt+sugar.
- The product has essentially remained the same for decades

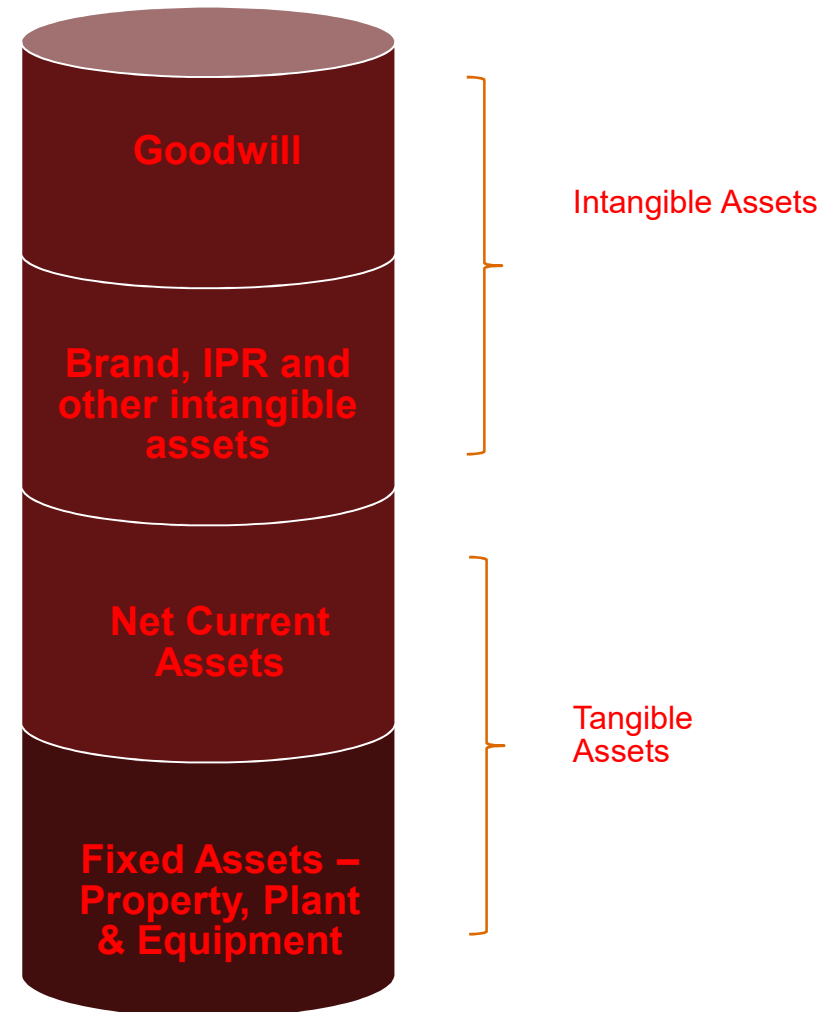
X - Hindustan Unilever
Y – GlaxoSmithkline
Z – Consumer Business – Horlicks Boost etc

Business Value covers sum of value of business assets

Typical Accounting Assets



Business Assets



What is a Brand

“A brand is a name, term, design, symbol or any other feature that identifies one seller's good or service as distinct from those of other sellers”

Wikipedia



“Your brand is the only thing that stands between you and commodity pricing”

John Sculley



An interesting case study of a Business Acquisition

Rolls Royce Ltd was a British engineering company. Among its key products were aircraft engines, motor cars etc.

Rolls Royce was nationalised by the UK. The automobile business was then demerged as Rolls Royce Motors and sold to Vickers plc.

The remaining company was later de-nationalised and became Rolls Royce plc. and is now one of the largest manufacturers of aircraft engines

In 1998, Vickers plc. decided to sell the Company:

- BMW was the leading contender. It anyway supplied engines to Rolls Royce and Bentley. Their final offer was UKP 340 MN.
- Volkswagen upped the offer to UKP 430 MN. They won the bid. They got the right to the factory and the “Spirit of Ecstasy” mascot and shape of radiator grille.

However, it later emerged that Rolls Royce trademark and logo are controlled by Rolls Royce plc.

BMW paid UKP 40 mn to acquire the brand and the logo. Many commentators called it the biggest bargain purchase of a brand.

Post Script – VW sold the Spirit of Ecstasy mascot also to BMW.

Top Brands in the World (current)

Ranking	Brand	2020 Brand Value	YoY % Change	Market Capitalization	Country	Sector	Brand value as % of Market Cap
#1	Amazon	\$220B	17.5%	\$1550B	United States	Retail	14%
#2	Google	\$160B	11.9%	\$981B	United States	Tech	16%
#3	Apple	\$140B	-8.5%	\$1950B	United States	Tech	Apple ~7%; Product IPR is bulk value
#4	Microsoft	\$117B	-2.1%	\$1570B	United States	Tech	
#5	Samsung	\$94B	3.5%	\$330B	South Korea	Tech	30%
#6	ICBC	\$80B	1.2%	\$240B	China	Banking	30%
#7	Facebook	\$79B	-4.1%	\$726B	United States	Media	
#8	Walmart	\$77B	14.2%	\$389B	United States	Retail	20%
#9	Ping An	\$69B	19.8%	\$200B	China	Insurance	35%
#10	Huawei	\$65B	4.5%	-	China	Tech	

Source: Brand Finance and Google Finance

Top Brands in the World 2000 (and their values in 2020)

Ranking	Brand	2000 Brand Value	Country	Sector	2020 Brand Value
#1	Coca Cola	\$72B	United States	F&B	\$38B
#2	Microsoft	\$70B	United States	Tech	\$117B
#3	IBM	\$53B	United States	Tech	\$33B
#4	Intel	\$39B	United States	Tech	\$27B
#5	Nokia	\$38B	Finland	Telecom	-
#6	GE	\$38B	United States	Diversified	\$24B
#7	Ford	\$36B	United States	Automotive	\$18B
#8	Disney	\$33B	United States	Media	\$56B
#9	McDonalds	\$28B	United States	Restaurants	\$27B
#10	AT&T	\$25B	United States	Telecom	-

Source: Interbrand

Top Brands in India

Ranking	Brand	2019 Brand Value	YoY % Change	Sector
#1	Tata	\$19.5B	37.4%	Diversified
#2	LIC	\$7.3B	22.8%	Insurance
#3	Infosys	\$6.5B	7.7%	Tech
#4	SBI	\$5.9B	34.4%	Banking
#5	Mahindra	\$5.2B	35.5%	Automotive
#6	HDFC Bank	\$4.8B	19.0%	Banking
#7	Airtel	\$4.8B	-28.1%	Telecom
#8	HCL	\$4.6B	1.7%	Tech
#9	Reliance	\$4.5B	12.4%	Diversified
#10	Wipro	\$4.0B	25%	Tech

Source: Brand Finance

Fair Value of Business

Fair Value

Price that would
be received



Orderly
Transaction



Market
Participants



Measurement
Date

Quoted Investments

Available market prices

Unquoted Investments

Valuer to assume the investment is realized or sold



Market Participant Perspective

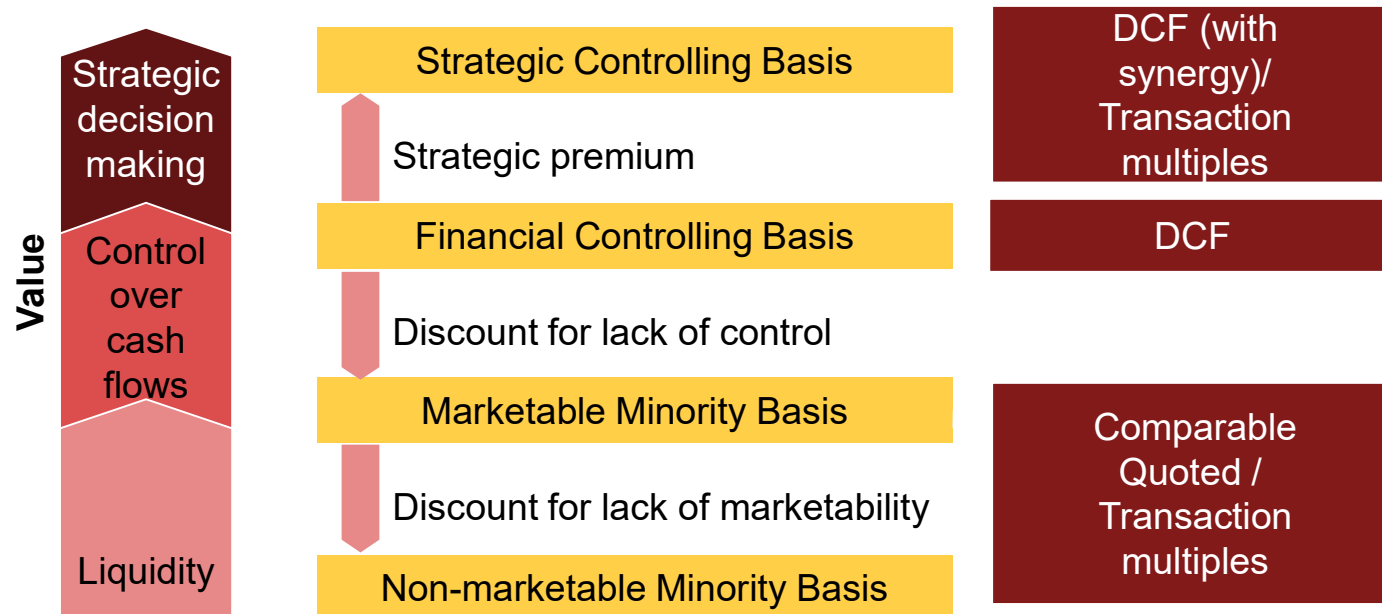
Does not include distress sale

Measured at each measurement date

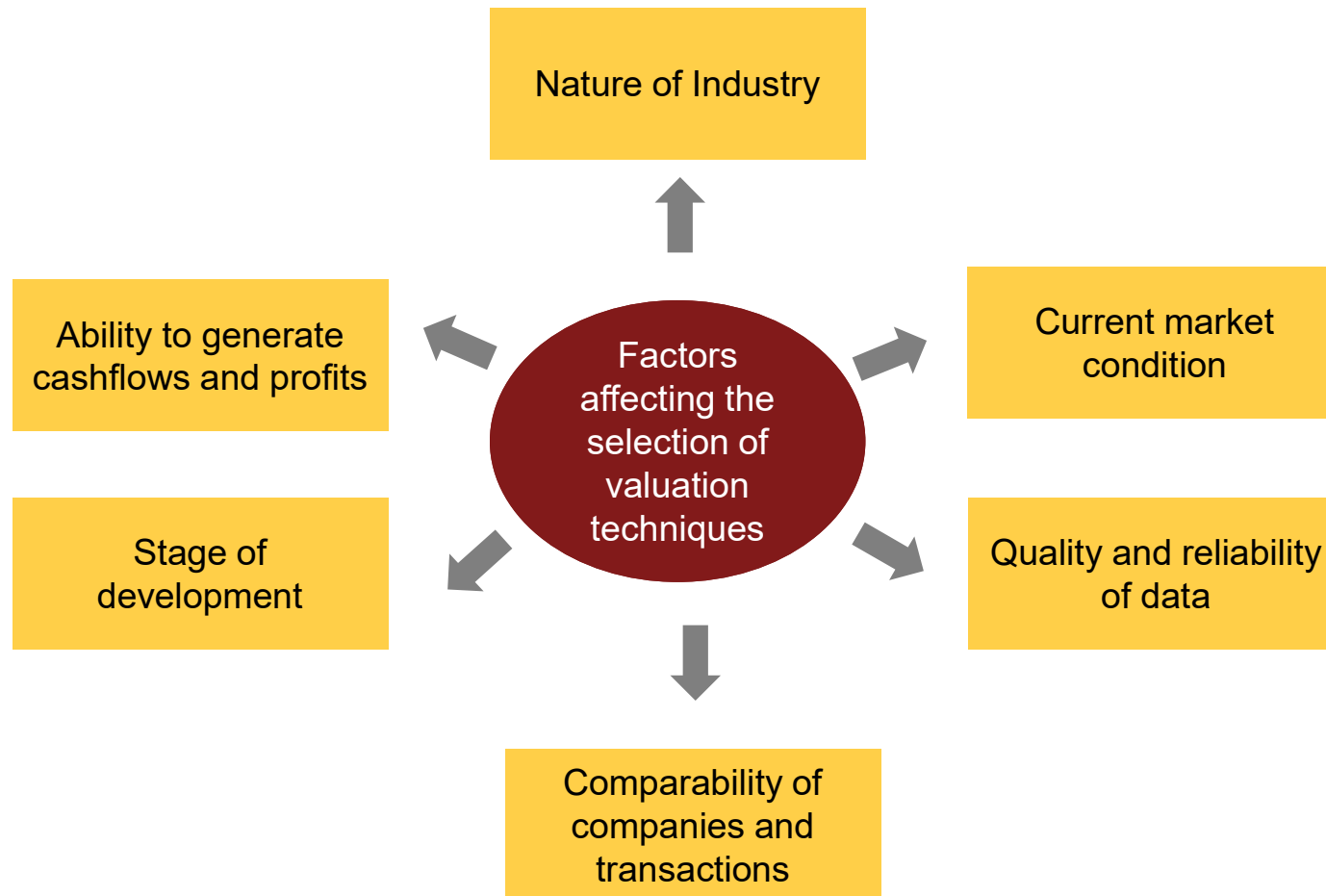
Illiquidity Discount should be considered

Consistent use of valuation techniques

Levels of Value



Selection of Valuation Methods



Valuation Methods

Valuation techniques

Market Approach

- Comparable Multiples
- Industry Valuation Benchmarks
- Available Market Price

Income Approach

- Discounted Cash Flows

Replacement Cost Approach

- Net Assets

1

Draw on **observable market-based measures**

2

Multiple Valuation Techniques → **range of values** → Fair Value → Point within that range

3

Observable market data may require **adjustment by the Valuer**

4

Corroborate with one or more other techniques

5

Consistency from period to period

Valuation Techniques: Discounted Cash Flows

Discounted Cash Flows



ADV
Flexible as can be applied to any stream of cash flows

Dis-ADV
Require substantial subjective judgements

Terminal Value

Gordon Growth Model

Exit multiple

1

Suitable for valuing non-equity Investments in instruments such as debt

2

Discount rate at initial investment is adjusted to take into account changes in the Investee Company and the market

DCF - Parameters

Cash Flows

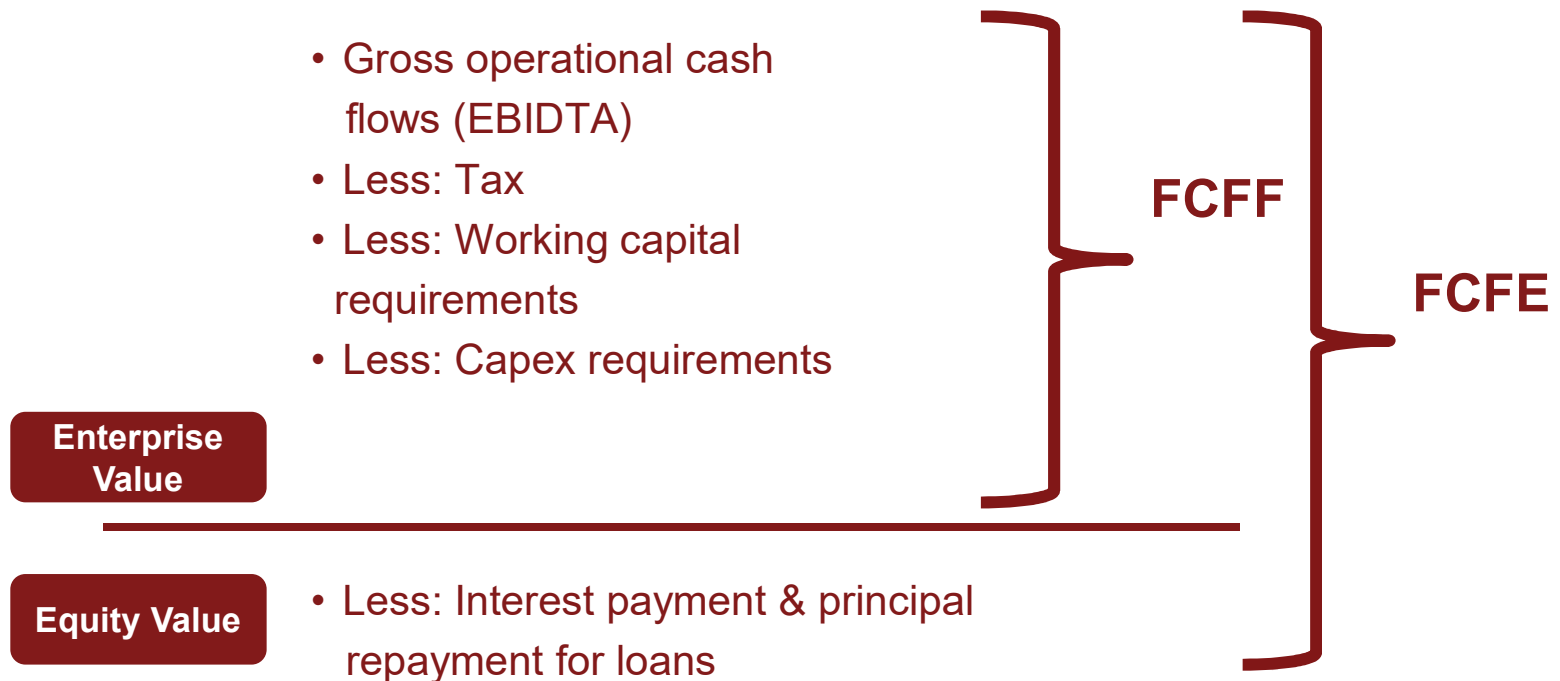
- Projections
 - FCF to Firm or FCF to Equity
- Horizon (Explicit) period
- Growth rate for perpetuity

Discounting rate

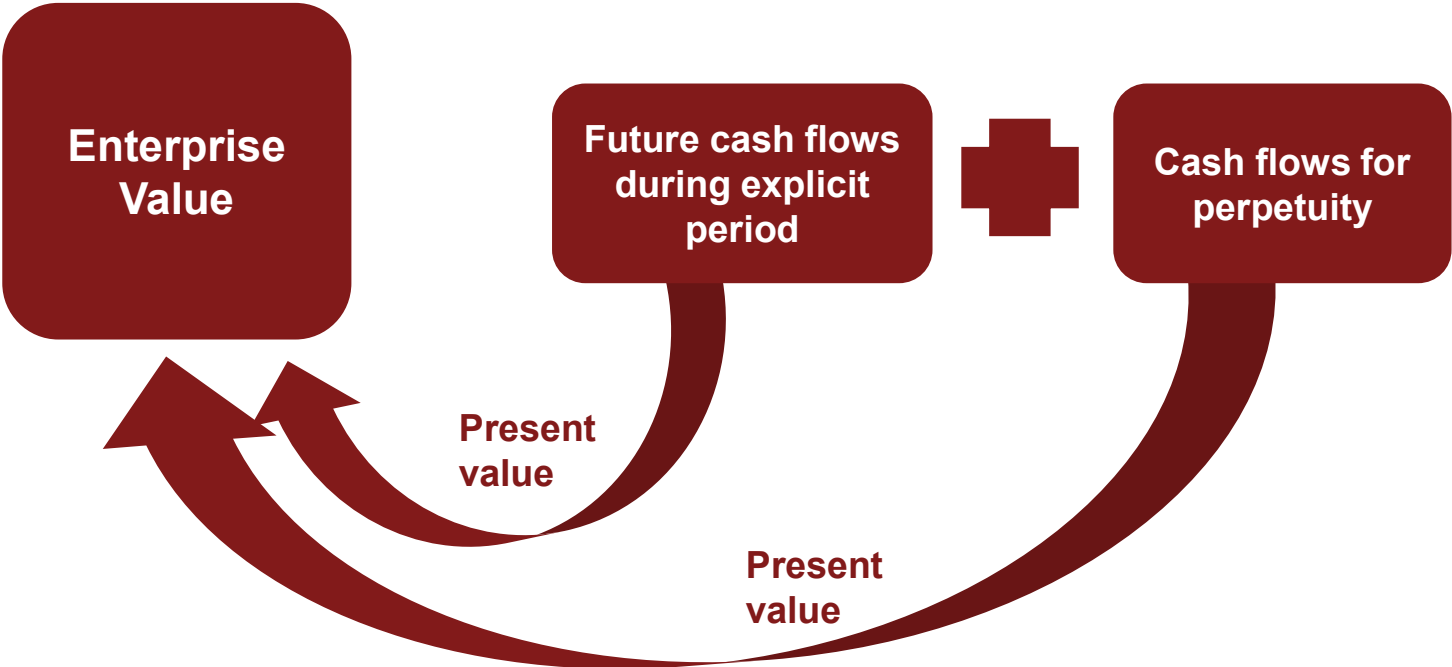
- Cost of Equity
- Cost of Debt
- Debt Equity ratio

DCF - Parameters

Cash Flows



DCF - Value



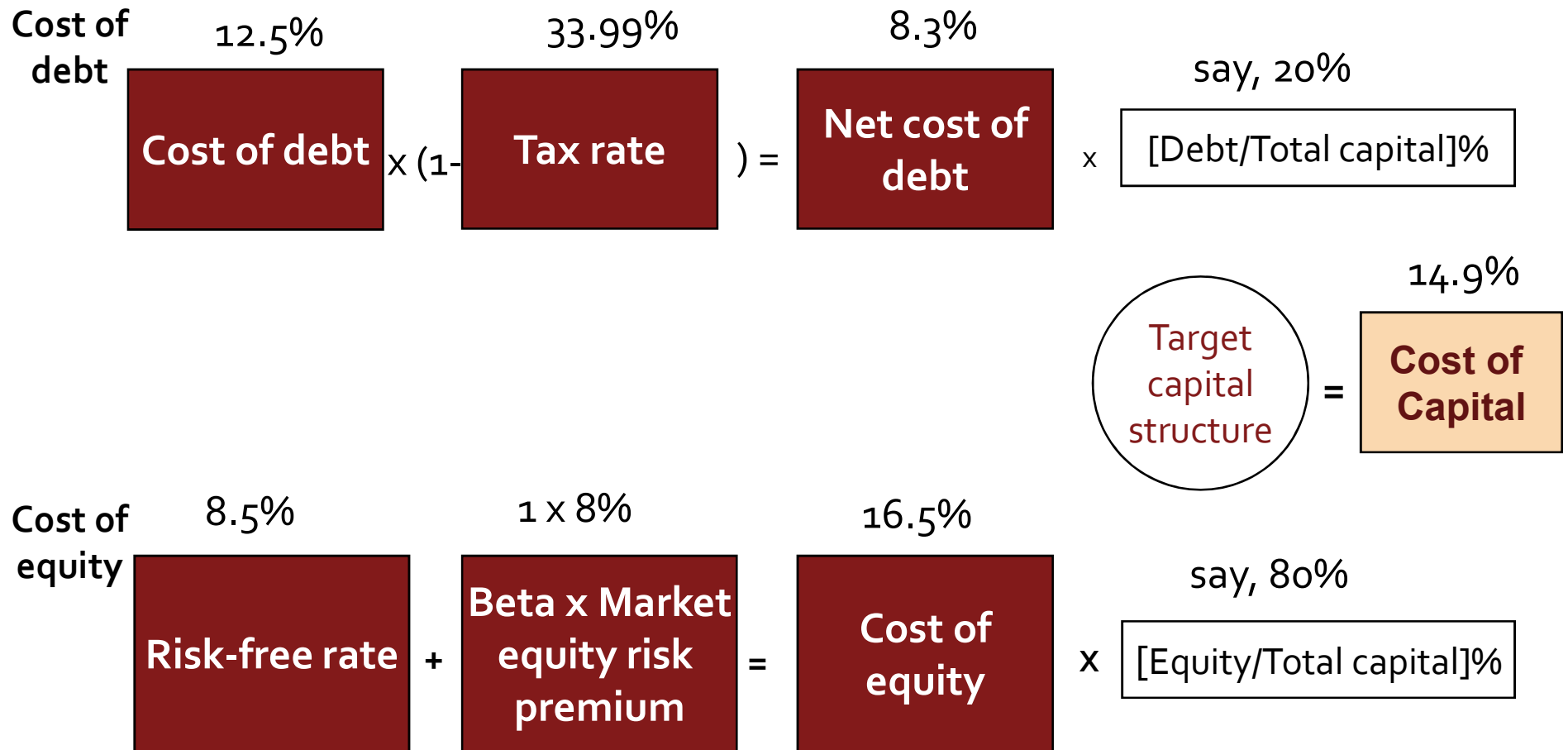
Steps – Computation of WACC

Cost of Equity (Ke): Capital Asset Pricing Model (CAPM)

$$\text{Return on equity} = R_f + \beta (R_m - R_f) + \alpha$$

- R_f = Risk free rate of return
- R_m = Market rate of return
- β = Beta of the stock
- α = Alpha (specific risk premium or discount)

DCF - WACC Computation



Covid-19 impact

Covid-19 impact

Income Approach / DCF method

Impact of government subsidies or initiatives

Crystalized

Consider the impact on cash flows

Adjust the Cash Flows

Q1

Q2

Beyond

Cash flows adjusted ✓

Discount Rate

Cash Flow adjusted ×

Discount Rate

Scenario Analysis

Crisis

3 months

6 months

12 months

Beyond

Covid-19 impact

Market Approach

Uncertainty



Risk and Return



Multiple



Performance metrics
adjusted for lower
expected performance

Comparable Company
Multiple

comparable companies
results should also be
adjusted

Percentage change in
market capitalization of
comparable public
companies

Good proxy

Magnitude of the change
to be expected in the
multiple

Market participant
perspectives

Maintainable earnings or
maintainable revenue

One-time impacts would
be excluded from the
metric

Covid-19 impact

Other Key Points

1

No longer be appropriate for recent transaction prices, especially those from before the expansion of the pandemic

2

Impact of the crisis on the portfolio company's revenue/customers, supply chain, and operations (including availability of employees and the leadership team to work remotely) must be rigorously considered

3

Expected adverse performance in Q1 and Q2 2020 and beyond, if deemed one-time, would still impact cash balances and would be reflected as a deduction from enterprise value in estimating fair value

4

Liquidity needs must be evaluated → likelihood of a debt covenant breach → impact of reduced cash flow → Source of working capital required to “restart” the business

5

Scenario analysis – crisis extending 3 months, 6 months, 12 months, 18 months or longer

Thank You

Annexures

Basis and Premises of Valuation

Valuation Basis

Fair Value

Participant Specific Value

Liquidation Value

Relative Values considered for Mergers, Demergers, etc.

Valuation Premises

Highest and best use

Going concern

As is where is

Forced Liquidation

Orderly Liquidation

Valuation Techniques: Multiples

Multiples

Comparable Quoted
Companies' Multiple

Comparable
Transactions' Multiple

Similarities (Comparable Company and Investee Company)

Risk Attributes

Business
activities

Geography

Size

Earnings Growth Prospects

Management
Quality

Capital
Structure

Markets served

1

Multiple of comparable company is adjusted for points of difference with the Investee Company

2

Differences between the acquisition multiple and the comparable companies multiples should be used to calibrate investee company multiple

Valuation Techniques: Multiples

Multiples

Enterprise Value / EBITDA

- Where possible, EBITDA multiples should be used
- Ignores depreciation & amortization (non cash charge)
- Fail to recognize significant capex spend, if any

Enterprise Value / Revenue

- Used where companies do not have profitability
- Profit considered in line with market participant expectations

Equity Value / PE

- For a P/E multiple to be comparable, the two entities should have similar financing structures, levels of borrowing and tax rates

Valuation Techniques: Multiples

Multiples

1 Correlate to the same period and should be applied to **maintainable earnings or revenue**

2 Accounting basis for the relevant **denominator** should be **consistent**

3 **Trade-off between the reliability and relevance** while using **Forward and Historical financial information**

4 Techniques should be applied **consistently from period to period**,

5 **Discount for lack of liquidity and control** should be evaluated

6 Applied to **maintainable earnings or revenue**

Valuation Techniques: Multiples

Adjustments to arrive at maintainable earnings

Reported EBITDA	XX
Add/Less: Adjustments	
Exceptional items	XX
Non-recurring items	XX
Impact of discontinued activities and acquisitions	XX
Forecast material changes in earnings	XX
Non-cash items	XX
Adjusted EBITDA	XX

Valuation Techniques: Multiples

Adjustments to comparable companies' multiples

1 Size of business (small vs large)

2 Growth rate (earnings / revenue)

3 Customer concentration risk

4 Reliance on few employees

5 Product ranges

Valuation Techniques: Multiples

Key considerations while using comparable company transaction multiples

- 1 Obtain forward looking financial data
 - 2 Reliable pricing information for the transaction itself
 - 3 Points of difference to be identified and adjusted
 - 4 Reliable reported earnings figures of private companies
 - 5 Impact of reputational issues, such as ESG (environmental, social, and governance) and other factors
 - 6 Amount of time that has passed since the transaction was negotiated/consummated
-

Valuation Techniques: Industry Valuation Benchmarks

Industry Valuation Benchmarks

1

Used in limited situations and is more likely to be useful as a sanity check

2

For example 'price per bed', 'price per subscriber', price per screen, price per room

3

The assumption here is that normal profitability of businesses in the industry does not vary much;
Investors willing to pay for capacity or market share

Valuation Techniques: Net Assets

Net Assets

- 1 Appropriate for a business whose value derives mainly from the underlying Fair Value of its assets rather than its earnings
 - 2 Appropriate for a business that is not making an adequate return on assets and for which a greater value can be realised by liquidating the business
 - 3 Appropriate for valuing Investments in loss-making companies and companies making only marginal levels of profits
-

Valuation adjustments

- Discount for Lack of Marketability (DLOM), Control Premium or Discount for Lack of Control (DLOC)
- Contingent Liabilities/Assets
- Surplus Assets
- ESOPs / Warrants
- Tax concessions
- Auditors Qualification
- Findings of Due Diligence Reviews



Issues in Business Valuation

- Issues in forecasting
- Selection of methods
- Difficulty in obtaining comparable multiples
- Thinly traded/ Dormant Scrip - Low Floating Stock, Unusual fluctuations in Market Price
- Loss making companies
- Illiquidity discount & control premium
- Transaction Structure
- Procedural and Regulatory Issues

Valuing seed, start-up, and early stage investments

Start-up Valuation

Seed, start-up or early-stage Investments

No current earnings or positive cash flows

Milestone approach and scenario analysis

Scenario Based Method

DCF (long term)

Valuation Techniques

Recent Funding Rounds

Back Solve method

Future Multiples based value x probability

Valuing seed, start-up, and early stage investments

Scenario Based Method: Probability Weighted Expected Return Method (PWERM)

PWERM

Different enterprise values based on different outcomes



Present Value of Equity based on different time frames



Adjusted present value based on probability of outcome

Illustration (USD Million)

	IPO	Strategic Sale	Liquidation
Enterprise Value	150	120	60
Less: Net Debt	20	20	10
Equity value at exit	130	100	50
Less: Preference Shares	45	45	45
Distribution to common shares	85	55	5
Present Value of Distribution to Preference Shares			
Timing	6	5	7
PV Factor at 10%	0.56	0.62	0.51
Present Value of Distribution to Preference Shares	25.4	27.9	23.0
Probability	50%	40%	10%
Probability adjusted present value	12.7	11.2	2.3
Present Value of Distribution to Equity Shares			
Timing	6	5	7
PV Factor at 15%	0.43	0.50	0.38
Present Value of Distribution to Preference Shares	36.75	27.34	1.88
Probability	50%	40%	10%
Probability adjusted present value	18.4	10.9	0.2

Probability determined based on milestone assessment

Present value of preference shares = USD 26.2 million

Present value of equity shares = USD 29.5 million

Valuing seed, start-up, and early stage investments

Assessment of Milestones

Milestones help in determining probability

