Valuation Introduction and Techniques

Q. NEED AND PURPOSE

Valuation is essential for

(i) strategic partnerships,
(ii) mergers or acquisitions of shares of a company and/or acquisition of a business.
(iii) Valuation is also necessary for introducing employee stock option plans (ESOPs).
(iv) joint ventures.

The main objective in carrying out a valuation is to **conclude a transaction** in a reasonable manner without any room for any doubt or controversy about the value obtained by any party to the transaction.

Q. When is Valuation required?

- When issuing shares to public either through an initial public offer or by offer for sale of shares of promoters or for further issue of shares to public.
- When promoters want to invite strategic investors or for pricing a first issue or a further issue, whether a preferential allotment or rights issue.
- In making investment in a joint venture by subscription or acquisition of shares or other securities convertible into shares.
- For making an ‘open offer for acquisition of shares’.
- When company intends to introduce a ‘buy back’ or ‘delisting of share’.
- If the scheme of merger or demerger involve issue of shares.
- On directions of Tribunal or Authority.
- For determining fair price for effecting sale or transfer of shares as per Articles of Association of the company.
- To value the interest of dissenting shareholders under a scheme of amalgamation merger or reconstruction.
- Conversion of debt instruments into shares.

Valuation/Acquisition Motives

The method of valuation of business, however, depends to a grant extent on the acquisition motives.
The acquisition activity is usually guided by strategic or behavioural motives.

The reasons could be:-

- Either purely financial (taxation, asset-stripping, financial restructuring involving an attempt to augment the resources base and portfolio-investment) or
- Business related (expansion or diversification).
- The behavioural reasons have more to do with the personal ambitions or objectives (desire to grow big) of the top management.

Q.FACTORS INFLUENCING VALUATION

Valuing a business requires the determination of its future earnings potential, the risks inherent to those future earnings.

The question that then arises is "How do buyers and sellers arrive at this value?"

The process of arriving at this value should include a detailed, comprehensive analysis which takes into account a range of **factors including :-**

- the past, present, and most importantly, the future earnings and prospects of the company,
- an analysis of its mix of physical and intangible assets, and
- The general economic and industry conditions.

The other salient factors include:

- The stock exchange price of the shares of the two companies before the commencement of negotiations or the announcement of the bid.
- Dividends paid on the shares.
- Relative growth prospects of the two companies.
- Net assets of the two companies.
- Past history of the prices of shares of the two companies.

Q. The following key principles should be kept in mind during valuation:-

- There is no method of valuation which is absolutely correct. Hence a combination of all or some may be adopted.
- If possible, the seller should evaluate his company before contacting potential buyers. In fact, it would be wiser for companies to evaluate their business on regular basis to keep them aware of its standing in the corresponding industry.
- Go for a third party valuation if desirable to avoid over-valuation of the company which is a common tendency on the seller's part.
- Merger and amalgamation deals can take a number of months to complete during which time valuations can fluctuate substantially. Hence provisions must be made to protect against such swings.

Q. General Principles of Business valuation

- Value is determined at a specific point in time.
- Value is prospective. It is equivalent to the present value, or economic worth, of all future Benefits anticipated to accrue from ownership.
- The market determines the required rate of return.
- Value is influenced by liquidity.
- The higher the underlying net tangible asset value base, the higher the going concern value.

Q. Preliminary Steps in Valuation

The preliminary study to valuation involves the following aspects:

1. Analysis of Business History
2. Profit trends
3. Goodwill/Brand name in the market
4. Identifying economic factors directly affecting business
5. Study of Exchange risk involved
6. Study of Employee morale
7. Study of market capitalization aspects
8. Identification of hidden liabilities through analysis of material contracts.

METHODS OF VALUATION (VALUATION TECHNIQUES)

1. Asset based valuation
2. Earnings based valuation
3. Market based valuation.

Valuation based on assets

This valuation method is based on the simple assumption that adding the value of all the assets of the company and subtracting the liabilities, leaving a net asset valuation, can best determine the value of a business.

If this method is employed, the fixed assets of all the amalgamating companies should preferably be valued by the same professional valuer on a going concern basis.

The term '**going concern'** means that a business is being operated at not less than normal or reasonable profit and valuer will assume that the business is earning reasonable profits when appraising the assets.
If it is found when all the assets of the business, both fixed and current, have been valued that the profits represent more than a fair commercial return upon the capital employed in the business as shown by such valuation, the capitalised value of the excess (or super profits) will be the value of the goodwill, which must be added to the values of the other assets in arriving at the consideration to be paid for the business.

However, although a balance sheet usually gives an accurate indication of short-term assets and liabilities. This is not the case of long-term ones as they may be hidden by techniques such as "off balance sheet financing". Moreover, a balance sheet is a historical record of previous expenditure and existing liabilities. As a valuation is a forward looking exercise, acquisition purchase prices generally do not bear any relation to published balance sheet.

Valuation of **a listed and quoted** company has to be done on a different footing as compared to an unlisted company. The real value of the assets may or may not reflect the

market price of the shares; however, in unlisted companies, only the information relating to the profitability of the company as reflected in the accounts is available and there is no indication of the market price. Using existing public companies as a benchmark to value similar private companies is a viable valuation methodology.

An asset-based valuation can be further separated into four approaches:

1.Book value

The tangible book value of a company is obtained from the balance sheet by taking the adjusted historical cost of the company's assets and subtracting the liabilities; intangible assets (like goodwill) are excluded in the calculation.

Statutes like the Gift Tax Act etc., have in fact adopted *book value* method for valuation of unquoted equity shares for companies other than an investment company.

In all cases of valuation on assets basis, except book value basis, it is important to arrive at current replacement and realization value. It is more so in case of assets like patents, trademarks, know-how, etc. which may posses value, substantially more or less than those shown in the books.

Using book value does not provide a true indication of a company's value, nor does it take into account the cash flow that can be generated by the company's assets.

2. Replacement cost
Replacement cost reflects the expenditures required to replicate the operations of the company. Estimating replacement cost is essentially a make or buy decision.

3. Appraised value
The difference between the appraised value of assets, and the appraised value of liabilities is the net appraised value of the firm.
This approach is most commonly used in a liquidation analysis because it reflects the divestiture of the underlying assets rather than the ongoing operations of the firm.

4. Excess earnings
In order to obtain a value of the business using the excess earnings method, a premium is added to the appraised value of net assets. This premium is calculated by comparing the earnings of a business before a sale and the earnings after the sale, with the difference referred to as excess earnings.
In this approach, it is assumed that the business is run more efficiently after a sale; the total amount of excess earnings is capitalized (e.g., the difference in earnings is divided by some expected rate of return) and this result is then added to the appraised value of net assets to derive the value of the business.

Valuation based on earnings

Valuation based on earnings based on the rate of return on capital employed is a more modern method. From the last earnings declared by a company, items such as tax, preference dividend, if any, are deducted and net earnings are taken.

An alternate to this method is the use of the price-earning (P/E) ratio instead of the rate of return.

The P/E ratio of a listed company can be calculated by dividing the current price of the share by earning per share (EPS). Therefore, the reciprocal of P/E ratio is called earnings - price ratio or earning yield.

Thus P/E =P/EPS

Where P is the current price of the shares

The share price can thus be determined as

P = EPS x P/E ratio.

MARKET BASED APPROACH TO VALUATION

Market based methods help the strategic buyer estimate the subject business value by comparison to similar businesses. Where the company is listed, market price method helps in evaluating on the price on the secondary market.

Average of quoted price is considered as indicative of the value perception of the company by investors operating under free market conditions.
To avoid chances of speculative pressures, it is suggested to adopt the average quotations of sufficiently longer period.
The valuer will have to consider the effect of issue of bonus shares or rights shares during the period chosen for average.

(i) Market Price Method is not relevant in the following cases:

- Valuation of a division of a company
- Where the share are not listed or are thinly traded
- In the case of a merger, where the shares of one of the companies under consideration are not listed on any stock exchange
- In case of companies, where there is an intention to liquidate it and to realise the assets and distribute the net proceeds.

(ii) In case of significant and unusual fluctuations in market price the market price may not be indicative of the true value of the share. At times, the valuer may also want to ignore this value,if according to the valuer, the market price is not a fair reflection of the company's underlying assets or profitability status.
The Market Price Method may also be used as a backup for supporting the value arrived at by using the other methods.

(iii) It is important to note that regulatory bodies have often considered market value as one of the very important basis for preferential allotment, buyback, open offer price calculation under the Takeover Code.

MARKET COMPARABLES

This method is generally, applied in case of unlisted entities. This method estimates value by relating the same to underlying elements of similar companies for past years. It is based on market multiples of 'comparable companies'. For example

- Earnings/Revenue Multiples (Valuation of Pharmaceutical Brands)
- Book Value Multiples (Valuation of Financial Institution or Banks)
- Industry Specific Multiples (Valuation of cement companies based on Production capacities)

Other aspects as to the methods of valuation

Valuation based on super profits

This approach is based on the concept of the company as a going concern. The value of the net tangible assets is taken into consideration and it is assumed that the business, if sold, will in addition to the net asset value, fetch a premium.
The super profits are calculated as the difference between maintainable future profits and the return on net assets.

Discounted cash flow valuation method

Discounted cash flow valuation is based upon expected future cash flows and discount rates. This approach is easiest to use for assets and firms whose cash flows are currently positive and can be estimated with some reliability for future periods.

Discounted cash flow valuation, relates the value of an asset to the present value of expected future cash flows on that asset. In this approach, the cash flows are discounted at a risk-adjusted discount rate to arrive at an estimate of value. The discount rate will be a function of the riskiness of the estimated cash flows, with lower rates for safe projects and higher rate for riskier assets.

The discounted cash flow (DCF) model is applied in the following steps:

- Estimate the future cash flows of the target based on the assumption for its post-acquisition management by the bidder over the forecast horizon.
- Estimate the terminal value of the target at forecast horizon.
- Estimate the cost of capital appropriate for the target.
- Discount the estimated cash flows to give a value of the target.
- Add other cash inflows from sources such as asset disposals or business divestments.
- Subtract debt and other expenses, such as tax on gains from disposals and divestments, and acquisition costs, to give a value for the equity of the target.
- Compare the estimated equity value for the target with its pre-acquisition stand-alone value to determine the added value from the acquisition.
- Decide how much of this added value should be given away to target shareholders as control premium.

Valuation by team of experts

Valuation is an important aspect in merger and acquisition and it should be done by a team of experts keeping into consideration the basic objectives of acquisition. Team should comprise of financial experts, accounting specialists technical and legal experts who should look into aspects, of valuation from different angles.

Nevertheless, the experts must take following into consideration for determining exchange ratio.

A. Market Price of Shares
If the offeree and offeror are both listed companies, the stock exchange prices of the shares of both the companies should be taken into consideration which existed before commencement of negotiations to avoid distortions in the market price which are likely to be created by interested parties in pushing up the price of the shares of the offeror to get better deal and vice versa.

B. Dividend Payout Ratio (DPR)
The dividend paid in immediate past by the two companies is important as the shareholders want continuity of dividend income. In case offeree company was not paying dividend or its DPR was lower than the offeror's, then it's shareholders would opt for share exchange for the growth company by sacrificing the current dividend income for prospects of future growth in income and capital appreciation.

C. Price Earnings Ratio (PER)
Price earnings ratios of both the offeror and offeree companies be compared to judge relative growth prospects. Company with lower PER show a record of low growth in earning per share which depresses market price of shares in comparison to high growth potential company. Future growth rate of combined company should also be calculated.

D. Debt Equity Ratio

Company with low gearing offers positive factor to investors for security and stability rather than growth potential with a geared company having capacity to expand equity base.

E. Net Assets Value (NAV)
Net assets value of the two companies be compared as the company with lower NAV has greater chances of being pushed into liquidation.

So, the exchange ratio of shares in the case of scheme of amalgamation, when supported by an opinion of accounting, technicians & legal experts and approved by a very large number of shareholders concerned, is prima facie to be accepted as fair, unless proved otherwise by the objectors.

It is also well settled by the Supreme Court in

Hindustan Lever Employees' Union **v.** ***Hindustan Lever Ltd.,***

Thus, now, the law has been well settled by the Supreme Court in

Miheer H. Mafatlal case

transferee company to be allotted to the holders of the transferor company has been worked out by a recognised firm of chartered accountants who are experts in the field of valuation, and if no mistake can be pointed out in the said valuation, it is not for the court to substitute its exchange ratio, especially when the same has been accepted without demur by the overwhelming majority of the shareholders of the two companies.

Fair value of shares

Valuation can be done on the basis of fair value also. However, resort to valuation by fair value is appropriate when market value of a company is independent of its profitability.

The fair value of shares is arrived at after consideration of different modes of valuation and diverse factors. There is no mathematically accurate formula of valuation.
An element of guesswork or arbitrariness is involved in valuation. The following four factors have to be kept in mind in the valuation of shares. **These are:**

(1) Capital cover,
(2) Yield,
(3) Earning capacity, and
(4) Marketability.

The average of book value and yield-based value incorporates the advantages of both the methods and minimizes the demerits of both the methods. Hence, such average is called the fair value of share or sometimes also called the dual method of share valuation.

The fair value of shares can be calculated by using the formula:

Fair value of shares = Value by net assets method + Value by yield method/2.

Free cash-flows (FCF)

FCF is a financial tool mainly used in valuation of a business. It will be close to the profits after tax without taking into account depreciation. Depreciation is neither a source of money nor an application of the funds available at the disposal of a company. FCF of a company is determined by the after tax operating cash flow minus interest paid/payable duly taking into account the savings arising out of tax paid/ payable on interest and after providing for certain fixed commitments such as preference shares dividends, redemption commitments and investments in plant and machinery required to maintain cash flows.

Valuation Standards

Valuation Standards aims to provide uniformity in valuation of various tangible and intangible classes of assets that provides consistent delivery of standards.

The International Valuation Standards Council

The ***International Valuation Standards Council*** is the established international standard setter for valuation. Through the International Valuation Standards Board, the IVSC develops and maintains standards on how to undertake and report valuations, especially those that will be relied upon by investors and other third party stakeholders. The IVSC also supports the need to develop a framework of guidance on best practice for valuations of the various classes of assets and liabilities and for the consistent delivery of the standards by properly trained professionals around the globe.

The IVSC has published International Valuation Standards (IVS) since 1985.

Practice question and answer

Q.1 D.C.F. method of valuation ?

Ans. It is a valuation method used to estimate the attractiveness of an investment opportunity.

Discounted cash flow (DCF) analysis uses future free cash flow projections and discounts them (most often using the weighted average cost of capital) to arrive at a present value, which is used to evaluate the potential for investment. If the value arrived at through DCF analysis is higher than the current cost of the investment, the opportunity may be a good one.

DCF is calculated as under:

$DCF = CF_1/(1+r)^2 \; + \; CF_2/(1+r)^2 \; + ... + CF/ (1+r)^n$

CF = Cash Flow

r = discount rate (WACC)

Advantages – useful method when use of multiples to compare stocks makes no sense (if the whole sector or industry is under – or overvalued for example).

The method is based on free cash flow (FCF), which is a trustworthy measure compared to some other figures and ratios calculated out of income statement or balance sheet.

Disadvantages – the FCF method is only as good as its assumptions are. The result can fluctuate widely with just a small change in your estimations about free cash flows, discount rate or growth rates. Use conservative scenario next to realistic one. The method is not so useful when analysts have problems with visibility of the company's trends (sales, costs, prices, etc.). DCF model is not suitable for short-term trading.

Q.2 "Valuation of company's shares is a highly technical and complex matter." Discuss this statement in the light of various methods of share valuation. ?

Ans. Valuation of company's shares is a highly technical and complex matter. In case of scheme of amalgamation, valuation of shares is vital as the exchange ratio is determined and the wealth of the companies are ascertained. The following are the methods for valuation of shares.

(a) **Market value Method** – Under this method average stock market value of the shares are considered as under:

(i) High and low price for last two years

(ii) High and low for each month for preceding 12 month.

(b) **Price Earnings Ratio Method**– The PE Ratio is to be calculated by dividing the current market price with earning per share.

(c) **Asset value method** – net asset value as per the latest audited balance sheet is calculated by deducting from the total assets, all debts, borrowings, dues and liabilities and preference share capital.

(d) **DCF Method** – under this method present value of the business is determined with discounting factors for future cash flow

(e) **Earning based method** – under this method valuation is made on earning based on rate of return on capital employed .

Q.3– Sanjay holds 12000 equity shares in Healthy foods Ltd., the nominal and paid up share capital of which consists of –

(i) 40000 Equity shares of rs. 1 each; and

(ii) 10000 8% preference shares (non-participating) of rs. 1 each. It is ascertained that –

- **The normal annual profit of such a company is rs. 12000.**
- **The normal rate of transfer to general reserve is 10%.**
- **The normal return by way of dividend on the paid up value of equity share capital for the type of business carried on by the company is 15%.**
- **Prepare a share valuation report for Sanjay showing value of his shareholding in Healthy Food Ltd. Based on the above parameters.**

Ans. Given below the computation of share value of Sanjay:

Net profit	₹ 12000
Less: Transferred to reserve	₹ 1200
	₹ 10800
Less: Pref. Dividend	₹ 800
Net profit	₹ 10000

Rate of earning rs. 10000/40000 = rs. 0.25 or 25%

Normal rate of return = 15%

Value of share = rate of earning/normal rate of return × paid up value per share = 25/15×Re1 = rs. 1067

Therefore, the value of holding = 12,000 × 1.67 = rs. 20,000

Q.4 Jupitor Ltd. wishes to take-over Tally Ltd. the financial details of both the companies are as under:

Liabilities	Jupitor Ltd. (₹ in '000)	Tally Ltd. (₹ in '000)
Equity share (rs 10 per share)	100000	50000
Share premium account	--	2000
Profit and loss account	38000	4000
Preference shares	20000	---
10% debentures	15000	5000
Assets		
Fixed assets	122000	35000
Net current assets	51000	26000
	173000	61000
Maintainable annual profit (after tax) for equity shareholders (₹ in '000)	24000	15000
Market price per equity share (₹)	24	27
Price-earnings ratio	10	9

You are required to answer the following:

What offer do you think Jupitor Ltd. could make to Tally Ltd. in terms or exchange ratio based on:

(i) Net asset value;

(ii) Earnings per share; and

(iii) Market price per share?

Ans.

(i)

	Jupitor Ltd.	Tally Ltd.
Based on asset value:		
Fixed assets	122000	35000
Net current assets	51000	26000
	173000	61000
Preference shares	20000	---
10 % debentures	15000	5000
	35000	5000
Net assets (a)	138000	56000
No. of shares (b)	10000	5000
Exchange ratio (a)/(b)	13.80	11.20
Exchange ratio = 11.20/13.80 = 0.812		

(ii)

Based on EPS	Jupitor Ltd.	tally Ltd.
Profit after tax (₹)	24000	15000
No. of shares	10000	5000
EPS	2.40	3.00

Exchange ratio = 3.000/2.40 = 1.25

(iii)

Based on market price per share	Jupitor Ltd.	tally ltd.
Market price per equity share (₹)	24	27

Exchange ratio = 27/24 = 1.125

Q.5 New Ltd. the transferee company having paid- up share capital of 1,00,000 equity shares of rs 10 each, fully paid up at rs100000 and old ltd., the transferor company having paid up capital of 50000 equity shares of rs 10 each, fully paid up, at rs. 500000 out of which, 10000 equity were held by New ltd. (the transferee company).

The Hon'ble High court passed the scheme of amalgamation with swap ratio of 1:1. How many new shares of New ltd. are to be issued to the public shareholders of Old ltd.? Show calculations.

Ans.

New ltd.

No. of shares 100000

Share capital rs. 1000000

Old ltd.

No. of shares 50000

Share capital rs. 500000

Swap ratio 1:1

Shareholder holding 1 share will get 1 share of New ltd.

Total shares to be issued by New ltd to the shareholders of New ltd. 50000 shares

Old ltd holds 10000 shares held by New ltd

Therefore, 50000 – 10000 = 40000 shares of new ltd. will be issued to public.

Q.6 Anay infrastructure ltd. (AIL) wants to acquire business of Pranay Land ltd. (PLL). All has 600000 equity shares and PLL has 400000 equity shares with market value of rs. 60 and rs.40 respectively.

Their respective EPS is rs. 8 per share and rs. 4.50 per share. It is proposed to give me one share of AIL to the shareholders of PLL in the ratio of two shares held in PLL.

Based on the above, you are required to—

(i) Calculate the EPS after the acquisition of the company; and
(ii) Show the impact on EPS for the shareholders of both the companies. (5 marks)

Ans.

(i) Determination of post-merger earnings

Company	**original number of shares**	**EPS(?)**	**total earnings after taxes(?)**
AIL	6,00,000	8.00	48,00,000
PLL	4,00,000	4.5	18,00,000
	Total post-merger earnings		66,00,000

Post-merger EPS when share exchange ratio is 1:2

Total post-merger earnings rs. 66,00,000

Divided by total number of shares after the merger

(6,00,000 + 2,00,000 i.e., 4,00,000 ×0.5) ?8,00,000

Combined EPS after merger (₹6600000/800000 shares) ₹8.25

(ii) Impact of EPS on the shareholders of companies AIL and PLL when share exchange ratio is 1:2
Shareholders of company AIL:
EPS after the merger (₹6600000/800000 shares) ₹8.25

EPS before the merger 8

Accretion in EPS ₹0.25

Shareholders of company PLL:

EPS before the merger ₹4.50

Equivalent EPS after the merger (₹ 8.25×0.5) ₹4.125

Dilution in EPS (₹0.375)

While the shareholders of company AIL gain, the shareholders of company PLL lose.

Q.7 Zen ltd. has earned a profit of rs. 40,00,000 before tax for the year ended 31st march, 2014. Tax amounts to rs. 11,40,000. The share capital of the company is rs. 60,00,000 (4,00,000 equity share of rs. 10 each and 2,00,000, 7% preference shares of rs. 10 each). Compute earnings per share (EPS) of Zen Ltd.

Ans.

Profit: ₹4000000

Less: tax ₹1140000

Profit after tax ₹28,60,000

Less: pref dividend ₹1,40,000

Net earnings: ₹26,20,000

No. of equity shares 4,00,000

EPS = ₹26,20,000/4,00,000 = 6.55

Q.8– Blue ltd. and Moon ltd. have agreed to amalgamate to form a new company Blue Moon ltd. After negotiation, the two companies have decided on the balance sheets as given below:

(₹ in '000)

EQUITY AND LIABILITIES	**Blue ltd.**	**Moon ltd.**
(1) Shareholders' funds		
(a) Share capital		
Equity shares of rs 10 each	500000	1000000
(b) Reserve and surplus		
Reserve fund	20000	--
Surplus	**40000**	**40000**
(2) Current liabilities		
Trade payables	**40000**	**60000**
Total	**600000**	**1100000**

(₹ in '000)

Assets	Blue ltd.	Moon ltd
(1) Non-current assets		
(i) Tangible assets		
(a) Land and building	200000	425000
(b) Plant and machinery	170000	275000
(ii) Intangible assets (goodwill)	50000	100000
(2) Current assets		
(a) Inventories	80000	120000
(b) Trade receivables	30000	100000
(c) Cash and cash equivalents	70000	80000
	600000	1100000

The assets and liabilities are taken over by Blue Moon ltd. compute the total number of shares of the Blue Moon ltd. having a value of rs. 10 each to be issued to the shareholders of Blue ltd. and Moon ltd. using net asset value method.

Ans. Computation of net assets

Particulars	Blue ltd	Moon ltd
Land & buildings	200000	425000
Plant & machinery	170000	275000
Goodwill	50000	100000
Inventories	80000	120000
Trade receivables	30000	100000
Cash &cash equivalents	70000	80000
	600000	1100000
Less: trade payables	40000	60000
Net assets	560000	1040000
No. of shares to be issued by Blue and Moon ltd.	56000	104000

Q.9 the share capital of Suraj ltd. is ₹ 10000000 (60000 equity shares ₹100 each and 400000 12.5% preference shares of ₹10 each). The company has earned a profit of ₹ 6500000 after payment of 35% income-tax amounting to ₹3500000.

Calculate earnings per share (EPS) of Suraj ltd.

Ans. EPS = net profit after tax – preference dividend/ no. of outstanding Equity shares

= 6500000 – 500000/60000 = ₹ 100

Q.10 the wind Urja ltd. (WUL) is a closely held unlisted company with financial details as under:

	Market value on 31.03.2015
Assets	**(₹ in lakh)**
Land and building	**6500**
Plant and machinery	**2000**
Furniture and fixtures	**20**
Trade receivables	**1000**
Cash and cash equivalents	**30**
Spares	**10**
Outside liabilities	
Trade payables	**20**
Long-term loans	**2000**
Outstanding expenses	**5**

Worldwide wind energy ltd. (WWEL) is ready to take over WUL by paying 35% premium over the market value of assets and liabilities as goodwill. Calculate the price which WWEL is ready is ready to pay to shareholders of WUL.

Ans. **Calculation of market price of assets over liabilities**

Assets	**Amount (₹ in lakhs)**
Land and building	6500
Plant and machinery	2000
Furniture and fixtures	20
Trade receivable	1000
Cash and cash equivalents	30
Spares	10
Total (A)	9560
Outside liabilities:	

Trade payables	20
Long term loans	2000
Outstanding expenses	5
Total (B)	2025
Assets over liabilities (A-B)	7535
Add: Goodwill (35%)	2637.25
Value to be paid to shareholders of WUL	10172.25

Q.11. New ltd., the transferee company having paid-up share capital of 1Lac. ES @ 10/- each (Fully paid up) and Old ltd. the transfer company having paid-up capital of 50000/- ES @10/- each (Full paid-up), out of which 10,000 ES were held by New ltd. share exchange ratio = 1:1.

How many new shares of New ltd are to be issued to the shareholder of Old ltd?

Ans.

Total paid up capital of New ltd (transferee company) = 10 lac.

(1 lac ES@10/-each)

Total paid up capital of old ltd (transferor company) = 5 lac.

(50000 ES @10/- each)

Holding by New ltd in old ltd = 1 lac.

(10000 ES @10/-each)

Number of shares to be issued by new ltd to old ltd

Total share of old ltd	= 50000
Less:- share held by new ltd	= 10000
	40000

Swap ratio 1:1 therefore 40000 new ES to be issued to shareholder of old ltd.

Q.12. wide ltd. prepared a scheme of amalgamation and arrangement with Narrow Ltd. and the same was duly approved by the High Court concerned. In the approve scheme, the swap ratio was as under Narrow ltd : wide ltd will issue 1 ES of 1/- each in exchange of 3 ES of Narrow ltd.

Small ltd : Wide ltd will issue 1 ES of 1/- each in exchange of 2 ES of small ltd.

The pre-amalgamation share capital were as follows:

Particulars	wide ltd	Narrow ltd	small ltd
FV OF ES	1	1	1
NO. of fully paid up ES	10 lac	5lac	4lac
Paid- up value	10lac	5lac	4lac
Reserves & surplus	5lac	5lac	4lac
Total	15lac	10lac	8lac

In wide ltd

ES of Narrow ltd 1lac

ES of small ltd 1lac

In Narrow ltd

ES wide ltd 1lac

ES of Narrow ltd 1 lac

As the CS of wide ltd, you are required to advise the CEO

(i) The quantum new share of wide ltd to be issued to the shareholders of transferor company
(a) Narrow ltd (b) small ltd and

(ii) What will be the post-issue share capital of wide ltd. after cancellation of cross holding of equity share of all companies?

Ans.

Narrow ltd. + small ltd = wide ltd.

(i) Quantum of shares to be issued to the shareholders of :-

(a) Narrow ltd		(b) small ltd	
No.of ES	5lac	no. of ES.	4lac
(-)shares held by wide ltd -	1 lac	(-) shares held by wide ltd -	1lac
(-) shares held by small ltd -	1lac	(-) shares held by narrow ltd-	1lac
	3lac		2lac

Share exchange ratio 1:3 | share exchange ratio 1:2

(i.e wide ltd will issue 1 lac ES to the shareholders of Narrow ltd.) | (i.e wide ltd will issue 1 lac ES to the shareholders of small ltd.)

(ii) post issue capital of wide ltd after cancellation of cross holding:

pre-issue capital	10 lac
(-) shares by small ltd.	-1 lac
(-) shares by Narrow ltd	-1 lac
	8lac
(+) issue of new shares to the shareholders of Narrow ltd	+ 1 lac
(+) issue of new shares to the shareholders of small ltd	+ 1lac
post issue capital	10 lac

Q.13. XYZ is intending to acquire ABC Ltd by merger and the following information is available in respect of both the companies:

	XYZ Ltd	**ABC Ltd**
No of equity shares	**10,00,000**	**6,00,000**
Profit after tax (Rs.)	**40,00,000**	**18,00,000**
MPS (Rs.)	**28**	**14**

a) **Calculate the present EPS of both the companies**

b) **If the proposed merger takes place, what would be the new EPS for XYZ ltd? Assume that the merger takes place by exchange of equity shares and the exchange ratio is based on the MPS.**

c) **Will you recommend the merger of both the companies? Justify your answer.**

Ans.

(a) EPS (XYZ) =40Lacs/10lacs = 4/- per shares
EPS(ABC) = 18Lacs/6lacs = 3/- per shares

(b) Share exchange ratio:

	XYZ	ABC
MPS	28	14
	2	1
	1 share	2 shares

EPS (XYZ) = 5800000/1300000 = 4.46/- Per share

Q.14. Divya ltd is intending to acquire Aisha Ltd by merger and the following information is available in respect of both the companies:

	Divya Ltd	**Aisha Ltd**
No of equity shares	**7,00,000**	**3,00,000**
Profit after tax (Rs.)	**15,00,000**	**5,00,000**
MPS (Rs.)	**12**	**14**

a) **Calculate the present EPS of both the companies**

b) **If the proposed merger takes place, what would be the new EPS for Divya ltd? Assume that the merger takes place by exchange of equity shares and the exchange ratio is based on the MPS.**

c) **What will be the exchange ratio based on EPS. If the proposed merger takes place, what would be the new EPS for Divya ltd.**

ANS.

(a) ESP (divya ltd) = 15 lacs/7lacs = 2.14/-, EPS (aisha ltd) = 5lacs/3lacs = 1.67/-

(b) D A

12 14 EPS (Divya ltd) = 2000000/1050000

6 7 =1.90/-

7 shares 6shares

(c) D A EPS (divya ltd) = 2000000/934112

2.14 1.67 = 2.14/-

214 167

167 Shares 214 shares

Q.15. X Ltd is considering the proposal to acquire Y Ltd and the financial information is given below:

	X Ltd	Y Ltd
No of equity shares	**10,00,000**	**6,00,000**
MPS (Rs.)	**30**	**18**
Market Capitalization (Rs.)	**3,00,00,000**	**1,08,00,000**

a) **X Ltd intends to pay Rs. 1,40,00,000 in cash for Y Ltd. If Y Ltd's market price reflects only its value as a separate entity, calculate the cost of merger when merger is financed by cash.**
b) **If it is stock-to-stock merger then how many shares X Ltd will issue to the shareholders of Y Ltd. Assume that share exchange ratio is based on the MPS**

Ans.

(a) Cost of merger = 14000000 – 10800000
= 3200000

(b) X y
30 18
5 3 new shares = 360000

3 shares 5shares

Q.16. X Ltd is considering the proposal to acquire Y Ltd and the financial information is given below:

	X Ltd	Y Ltd
No of equity shares	**5,00,000**	**2,00,000**
MPS (Rs.)	**27**	**33**
PAT	**25,00,000**	**14,00,000**
Total Assets	**75,00,000**	**30,00,000**
Outstanding liabilities	**35,00,000**	**12,00,000**

a) If it is stock-to-stock merger then how many shares X Ltd will issue to the shareholders of Y Ltd. Assume that share exchange ratio is based on the MPS

b) If it is stock-to-stock merger then how many shares X Ltd will issue to the shareholders of Y Ltd. Assume that share exchange ratio is based on the EPS

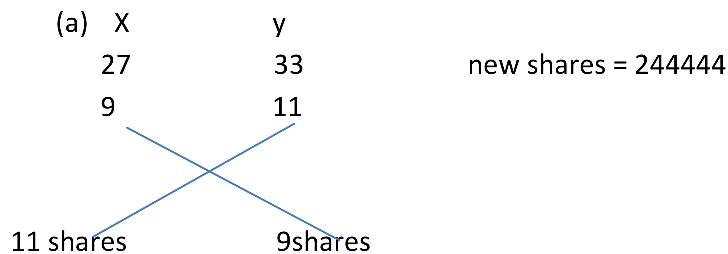
c) If it is stock-to-stock merger then how many shares X Ltd will issue to the shareholders of Y Ltd. Assume that share exchange ratio is based on the book value.

Ans.

(a) X y

27 33 new shares = 244444

9 11

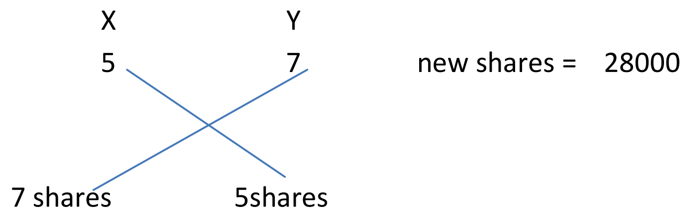


11 shares 9shares

(b) EPS (x) = 25/5 = 5 , EPS (y) = 14/2 =7/-

X Y

5 7 new shares = 28000



7 shares 5shares

(c) BV per share (x) = 40/5 = 8 , BV per shares(y) = 18/2 =9

X Y

8 9 new shares = 225000

Q.18. Kangan Ltd is considering merger with Payal Ltd. KanganLtd's shares are currently traded at Rs. 25 per share. It has 2,00,000 shares outstanding and its earnings after taxes amount to Rs. 4,00,000. Payal Ltd has 1,00,000 shares outstanding; its current market price is Rs. 12.50 per share and its EAT is Rs. 1,00,000. The merger will be effected by means of a stock-swap. Payal Ltd has agreed to plan under which Kangan Ltd will offer the current market value of PayalLtd's shares.

A. What are the pre-merger earnings per share and P/E ratio of both the companies?

B. What must the exchange ratio be for KanganLtd's pre-merger and post-merger EPS to be the same?

C. If PayalLtd's P/E ratio is 8, what will be its current market price? What will be the exchange ratio? What will be KanganLtd's post-merger EPS be?

Ans.

(a) EPS (K) =4/2 = 2/- , EPS(P) = 1/-

PE(K) = 25/2 = 12.5 ; PE (P) = 12.5/1 = 12.5

(b) Post merger EPS (K) = 500000/(200000 + x) = 2

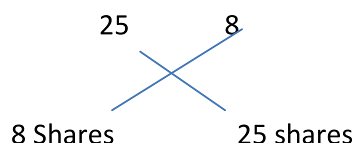
X = 50000

(c) MPS (P) = 8/-

K P EPS(k) = 500000/200000+32000

= 2.15/-

25 8



8 Shares 25 shares

Q.21 XYZ Ltd wishes to take-over PQR Ltd. The financial details of both the companies are as under:

Liabilities	XYZ ('000)	PQR ('000)
Equity Share (Rs. 10 per share)	1,00,000	50,000
Shares premium account	--	2,000
P/L Account	38,000	4,000
Preference capital	20,000	---
10% Debentures	15,000	5,000
Total	1,73,000	61,000
Assets		
Fixed Assets	1,22,000	35,000
Net Current Assets	51,000	26,000
Total	1,73,000	61,000
PAT	24,000	15,000
MPS (Rs.)	24	27

P/E Ratio	**10**	**9**

What offer do you think XYZ Ltd could make to PQR Ltd in terms of exchange ratio based on-

A. Net Assets Value
B. Earnings per share
C. Market price per share

Ans.

(a) Net asset per shares (xyz) =(173000 – 15000- 20000)/10000
= 13.8/-

Net asset per shares (PQR) = (61000 – 5000)/5000
= 11.2

XYZ PQR
13.8 11.2
138 112
69 56

56 shares 69 shares

(b) Xyz PQR
2.4 3
24 30
4 5

5shares 4shares

(c) XYZ PQR
24 27
8 9

9 shares 8shares

Regulatory aspects of valuation with reference to corporate strategies

Introduction:-

The Ministry of Corporate Affairs has constituted an Expert Group in 2002 under the Chairmanship of Mr. Shardul S. Shroff to suggest **guidelines on valuation** of shares in connection with amalgamation, merger, de-merger, acquisition, buy-back, etc.

The Expert Group is of the view that there are **two circumstances** under which the prescribed valuation guidelines may apply to the companies.

These are:

(i) Circumstances under which a valuation from the Registered Valuer(s) is mandatory and

(ii) Circumstances under which a valuation from the Registered Valuer(s) is recommended but not mandatory.

The Expert Group has adopted **two basic principles** for identifying the circumstances under which the **mandatory valuation** is required. These circumstances include:

(i) Whenever a shareholder's resolution, ordinary or special, is required to authorize the Transaction,

(ii) All Related Party transactions described herein.

Some of the specific circumstances under which the Expert Group opines that the company/Board of Directors should seek a mandatory valuation from a Registered Valuer(s) are:

(i) All Schemes of Compromise and Arrangement)

(ii) Sale of a business, including investment business and disposal of a controlling interest in an Undertaking,

(iii) All equity and equity linked investments where shareholders approval is required

(iv) All preferential allotments made to Related Parties and persons controlling the company;

(v) Specified recapitalization situations - whether effected through a buyback of shares under the SEBI (Buy-back of Securities) Regulations, 1998

The Expert Group is of the view that under the following circumstances, a valuation opinion **may not be prescribed as a company activity** requiring disclosure to shareholders. These circumstances includes :

(i) Capital reduction

(ii) Issue of shares to public through a public offering;

(iii) Rights issue under the Companies Act;

(iv) Disinvestment of Central and State Public Sector Undertaking; and

(v) Family settlements.

VALUATION DOCUMENTATION

Valuation exercise is based on observation, inspection, analysis and calculation. During this process, the valuer goes through various documents.

Objectives of Documentation in Valuation Exercise

Valuation documentation must clearly demonstrate that the Valuation exercise was in fact performed in compliance with generally accepted valuation principles and applicable standards.

The following are the more **specific purposes of documentation** in Valuation exercise:

- Assisting Valuer to plan and perform the Valuation Exercise
- Assisting those responsible to direct, supervise, and review the work performed;
- Providing and demonstrating the accountability of those performing the work
- Assisting successor Valuer.

LIST OF DOCUMENTS

During the course of Valuation exercise, a valuation expert collects/prepares various documents. The documents so obtained or prepared may be different from assignment to assignment but an **indicative list** of documents to be maintained is as given:-

1. Documents pertaining to Basic information of client entity i.e. Details about Company Promoters, Key Management professional of the Company,
2. Copy of valuation engagement with the Client
3. Copy of Previous valuation report of the subject matter of valuation exercise if any.
4. Any restriction or limitation on the scope of the Valuer's work or the data available for analysis
5. Basis for using any valuation assumption during the valuation engagement

DOCUMENTATION RETENTION

Documentation pertaining to Valuation exercise needs to maintained at

1. Valuer's End
2. Client Party End in form of valuation report along with annexure and exhibits.

Period for Retention of Documents at Valuers' end

No legislation has been framed yet which specifies the period for documentation retention at valuer's end.

Standard on Auditing (SA) 230 on Audit documentation, an Auditor should retain the documentation pertaining to an Audit assignment for a period of 7 years.

Period for Retention of Documents at Clients' end

Retention period of Valuation document at Clients' party end would depend on the purpose of valuation exercise.
If valuation has got carried on for the purpose of Companies Act, Companies (Preservation and Disposal of Records) Rules, 1966 will apply.
Similarly If valuation has got carried on for the purpose of Income tax Act, provision relating to Income Tax Act, 1961 and Income Tax Rules, 1962 will apply.

Judicial Pronouncement on Valuation Principles/Valuation Reports

<u>In *Hindustan Lever Employees Union v. Hindustan Lever Limited*</u>
"The valuation of shares is a technical matter. It requires considerable skill and experience. There are test of fairness of this valuation is not whether the offer is fair to a particular shareholder.

The Hindustan Lever case also repelled the case that valuation particulars needed a proper disclosure as material facts in the Explanatory Statement.

"In the absence of it being shown to be vitiated by fraud and malafide, the mere fact that the determination done by slightly different method might have resulted in different conclusion would not justify interference of Court."

Regulatory aspects as to valuation

SEBI Regulations

1. Pricing under SEBI (ICDR) Regulations, 2009
2. Determination of offer price under SEBI (Delisting of Equity Shares) Regulations, 2009
3. Offer Price under SEBI (SAST) Regulations,2011
4. Price of sweat equity shares under SEBI(Issue of sweat equity) Regulations 2002
5. Valuation under SEBI (Share Based Employee Benefits) Regulations, 2014

Consolidated FDI policy 2016

Pricing in Public Issue as per SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009

Pricing

(1) An issuer may determine the price of specified securities in consultation with the lead merchant banker or through the book building process.
(2) An issuer may determine the coupon rate and conversion price of convertible debt instruments in consultation with the lead merchant banker or through the book building process.

<u>Differential pricing</u>

An issuer may offer specified securities at different prices, subject to the following:

(a) retail individual investors or retail individual shareholders [or employees entitled for reservation making an application for specified securities of value not more than two lakhs rupees, may be offered specified securities at a price lower than the price at which net offer is made to other categories of applicants:

Provided that such difference shall not be more than ten per cent. of the price at which specified securities are offered to other categories of applicants;

(b) in case of a book built issue, the price of the specified securities offered to an anchor investor shall not be lower than the price offered to other applicants;

(c) in case of a composite issue, the price of the specified securities offered in the public issue may be different from the price offered in rights issue and justification for such price difference shall be given in the offer document.

Price and price band

(1) The issuer may mention a price or price band in the draft prospectus (in case of a fixed price issue) and floor price or price band in the red herring prospectus (in case of a book built issue) and determine the price at a later date before registering the prospectus with the Registrar of Companies:

    Provided that the prospectus registered with the Registrar of Companies shall contain only one price or the specific coupon rate, as the case may be.

(2) The issuer shall announce the floor price or price band at least five working days before the opening of the bid (in case of an initial public offer) and at least one working day before the opening of the bid (in case of a further public offer), in all the newspapers in which the pre issue advertisement was released

(3) The cap on the price band shall be less than or equal to one hundred and twenty per cent. of the floor price.

(4) The floor price or the final price shall not be less than the face value of the specified securities.

Regulation 31 - Face value of equity shares

(1) an issuer making an initial public offer may determine the face value of equity shares in the following manner:
    (a) if the issue price per equity share is five hundred rupees or more, the issuer shall have the option to determine the face value at less than ten rupees per equity share;
        Provided that the face value shall not be less than one rupee per equity share;
    (b) if the issuer price per equity share is less than five hundred rupees, the face value of the equity shares shall be ten rupees per equity share:
        The above mention criteria shall not apply to initial public offer made by any government company, statutory authority or corporation

(2) The disclosure about the face value of equity shares (including the statement about the issue price being "X" times of the face value) shall be made in the advertisements.

Pricing of equity shares - Frequently traded shares

(a) If listed for more than 26 weeks

The equity shares shall be allotted at a price **not less than higher** of the following:

(a) The average of the weekly high and low of the volume weighted average price of the related equity shares quoted on the recognised stock exchange during the **twenty six weeks** preceding the relevant date; or
(b) The average of the weekly high and low of the volume weighted average prices of the related equity shares quoted on a recognised stock exchange during the **two weeks** preceding the relevant date.

(b) If listed for less than 26 weeks

The equity shares shall be allotted at a price **not less than the higher** of the following:

(a) the price at which equity shares were issued by the issuer in its initial public offer or
(b) the average of the weekly high and low of the volume weighted average prices of the related equity shares quoted on the recognised stock exchange during the period shares have been listed preceding the relevant date; or
(c) The average of the weekly high and low of the volume weighted average prices of the related equity shares quoted on a recognised stock exchange during the two weeks preceding the relevant date.

Further also any preferential issue of specified securities, to qualified institutional buyers not exceeding five in number, shall be made at a price not less than the average of the weekly high and low of the volume weighted average prices of the related equity shares quoted on a recognised stock exchange during the two weeks preceding the relevant date.

Valuation for the purpose of Issue of Sweat Equity Shares

Under the SEBI (Issue of Sweat Equity) Regulations, 2002, the price of sweat equity shares shall not be less than the higher of the following:

(a) The average of the weekly high and low of the closing prices of the related equity shares during last six months preceding the relevant date; or
(b) The average of the weekly high and low of the closing prices of the related equity shares during the two weeks preceding the relevant date.
(c)

"Relevant date" for this purpose means the date which is thirty days prior to the date on which the meeting of the General Body of the shareholders is convened, in terms of the provisions of the Companies Act, 2013 .

1. If the shares are listed on more than one stock exchange, but quoted only on one stock exchange on the given date, then the price on that stock exchange shall be considered.
2. If the share price is quoted on more than one stock exchange, then the stock exchange where there is highest trading volume during that date shall be considered.
3. If shares are not quoted on the given date, then the share price on the next trading day shall be considered.

Valuation under SEBI (Share Based Employee Benefits) Regulations, 2014

The company granting option to its employees pursuant to ESOS will have the freedom to determine

the exercise price subject to conforming to the accounting policies.

Valuation under SEBI (Delisting of equity shares) Regulations 2009

(1) The offer price shall be determined through book building in the manner specified in Schedule II of these regulations, after fixation of floor price. The final offer price shall be determined as the price at which the maximum number of equity shares is tendered by the public shareholders.

If the final price is accepted, then, the promoter shall accept all shares tendered where the corresponding bids placed are at the final price or at a price which is lesser than the final price. The promoter may, if he deems fit, fix a higher final price.

(2) The floor price shall be determined in terms of regulation 8 of Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011.

Valuation of Shares under the Sweat Equity Unlisted Companies (Share Cap. and Deb.) Rules, 2014

- The sweat equity shares to be issued shall be valued at a price determined by a registered valuer.
- The valuation of intellectual property rights or of know how or value additions for which sweat equity shares are to be issued, shall be carried out by a registered valuer.
- A copy of gist along with critical elements of the valuation report shall be sent to the shareholders with the notice of the general meeting.
- Where sweat equity shares are issued for a non-cash consideration on the basis of a valuation report in respect thereof obtained from the registered valuer, such non-cash consideration shall be treated in the following manner in the books of account of the company-

  (a) where the non-cash consideration takes the form of a depreciable asset, it shall be carried to the balance sheet of the company in accordance with the accounting standards; or
  (b) where clause (a) is not applicable, it shall be expensed as provided in the accounting standards.

SEBI (SAST) Regulations 2011

Offer Price regulation 8.

Detailed discussion in take over chapter

Pricing under the Consolidated FDI Policy 2016

- Price of shares issued to **persons resident outside India under the FDI Policy**, shall **not be less than**:-

(a) the price worked out in accordance with the SEBI guidelines, where the shares of the company are listed on any recognised stock exchange in India;
(b) the fair valuation of shares done by a SEBI registered Merchant Banker as per any internationally accepted pricing methodology on arm's length basis, where the shares of the company are not listed on any recognised stock exchange in India; and
(c) The price as applicable to transfer of shares from resident to non-resident as per the pricing guidelines laid down by the Reserve Bank.

- Issue of Foreign Currency Convertible Bonds (FCCBs) and Depository Receipts (DRs)

(a) The pricing of eligible securities to be issued or transferred to a foreign depository for the purpose of issuing depository receipts should not be at a price less than the price applicable to a corresponding mode of issue or transfer of such securities to domestic investors under the relevant regulations framed under FEMA, 1999.

- Issue of Rights/Bonus Shares

The offer on right basis to the person resident outside India shall be:-

(a) in the case of shares of a company listed on a recognized stock exchange in India, at a price as determined by the company;
(b) in the case of shares of a company not listed on a recognized stock exchange in India, at a price which is not less than the price at which the offer on right basis is made to resident shareholders.

Q. What should be the content of valuation report for corporate strategies?

Contents of Summarized Valuation Report

- Background Information
- Purpose of Valuation and Appointing Authority
- Identity of the valuer and any other experts involved in the valuation
- Disclosure of valuer Interest/Conflict, if any
- Date of Appointment, Valuation Date and Date of Report
- Sources of Information
- Procedures adopted in carrying out the Valuation
- Valuation Methodology
- Major Factors influencing the Valuation
- Conclusion

1. Background Information

The valuation report should briefly cover the following:

- Brief particulars of company or business which is the valuation subject
- Proposed Transaction
- Key historical financials
- Capital structure of the company,
- Shareholding pattern, any significant changes (Promoters/FIs), and any changes as a result of the transaction

2. Purpose of Valuation & Appointing Authority

The context and purpose of the valuation and the appointing authority commissioning the exercise must be clearly stated.

3. Identity of the valuer and any other experts involved in the valuation

Identity of the Registered Valuer as well as organization doing the valuation and any other experts consulted in the process of valuation.

4. Disclosure of Valuer Interest/Conflict, if any

The Expert Group also recommends that a valuer shall disclose in his Report, possible sources of conflict and material interests, including association or proposed association/with the company.

5. Date of Appointment, Valuation Date and Date of Report

The Report should clearly state the date of the appointment of the valuer, Valuation Date and the date of the report.

6. Sources of Information

The valuer should clearly indicate in the report the principal sources of information, both internal and external, which have been relied upon for the purpose of valuation.

7. Procedures adopted in carrying out the valuation

The principal procedures actually adopted by the valuer in carrying out the valuation should be set out briefly in the report. Such procedures may typically include:

- Review of Past Financials
- Review and Analysis of Financial Projections
- Industry Analysis
- SWOT Analysis
- Comparison with similar transactions

The valuer should also include in his report:

- an affirmative statement that information provided and assumptions used by Management/Others in developing projections have been appropriately reviewed, enquiries made regarding basis of key assumptions in context of analysis of business being valued and the industry/economy; and
- an affirmative statement on adequacy of information and time for carrying out the valuations; with such modifications as may be appropriate and warranted.

8. Valuation Methodology

The methods which are often used for valuations.
The methods enumerated below are merely illustrative and not exhaustive.

- *Asset Approach*
  Book Value, Adjusted Book Value, and Liquidation Value
- *Income Approach*
  Capitalization of Earnings, Capitalization of Excess Earnings, and Discounted Future Earnings/Cash Flows.
- *Market Approach*
  Current Market Prices, Historical Market Prices, Price to Earnings, Price to Revenue, Price to Book Value, Price to Enterprise Value, etc.
- *Comparable Transactions/Valuations*
  Comparable International and Domestic Transactions.

9. Conclusion
In conclusion, the report must contain a clear statement of the value ascribed to the business/assets in question.

Background: Ranbaxy was founded in 1937 and derived its name from that of its founders – Ranjit Singh and Gurbax Singh. It started out as the Indian distributor of vitamins and anti tuberculosis drugs for a Japanese pharmaceutical company. After the Second World War, Ranbaxy continued its role as a distributor and ventured in manufacturing drugs by setting up its first plant in 1961. Ranbaxy's first real breakthrough came in 1969 with Calmpose, a copy of Roche patented Vellum tranquillizer. By 1971, Ranbaxy had extended its strong position in anti infectives in the Indian market and expanded manufacturing capacity to keep pace with sales.

Strategic Shift

Due to the changing business conditions, it had become essential in 1993 to change the strategy of the company in order to tap rising opportunities. The senior management team of Ranbaxy underwent a strategic planning exercise called Vision 2003. Ranbaxy aimed to achieve two milestones by 2003; 1 billion in revenues and the development of one new therapeutic chemical molecule. The mission statement to become an international, research based pharmaceutical company was posed with many challenges at all levels of the company. The company had to redefine its product offerings and the markets it served. In structuring the foreign ventures, Ranbaxy focused on the entire value chain to maximize margins. In February 2004, Ranbaxy crossed as $1 billion mark in its turnover.
In 2003, a gain a strategic planning revival exercise took place with a new plan in place called Vision2012:

- Aspire to be a $ 5 billion company by 2012
- Become a top 5 global generics pharma company
- Significant income from the proprietary products

The company has decided to focus on the following therapeutic areas to meet its Vision 2012:

- Infectious Diseases (Anti-bacterial and Anti-fungals),
- Urology (Benign Prostatic Hyperplasia (BPH) and Urinary Incontinence),
- Metabolic Diseases (Type 2 Diabetes, Hyperlipidemia) and
- Inflammatory/Respiratory diseases (Asthma, Chronic Pulmonary Obstructive Disease and Rheumatoid Arthritis).

These choices allow Ranbaxy to enter large markets with significant unattended medical needs and to build on its research strengths. In 2008, Ranbaxy achieved a consolidated sale of $ 1.7 billion. Its geographic and therapeutic sales break up is shown in Table 12.6 below:

Table 1 – Geographic and Therapeutic Sales of Ranbaxy in 2008

Region	%	Major therapy	%
North America	27	Anti –infective	37
European union	20	Cardiovascular	16
India	18	Gastrointestinal	NA
Asia (excluding India)	6	Musculoskeletal	8
Russia and Ukraine	7	Central Nervous System	6
Africa and Latin America	12	Respiratory	6

The Deal Value

According to details of the deal, the enterprise value of Ranbaxy is estimated to be US $ 8.5 billion at 737 price per share. The negotiated price of 737 represented a premium of 31.4% over the market price of Ranbaxy on the day of announcement. When the deal finally closed in November 2008, DIS had acquired 63.92% of the equity share capital of Ranbaxy as given below in table 2.

Table 2. – Daiichi-Sankyo acquisition of Ranbaxy

Date of Acquisition	Particulars	Number of Shares	% of Shareholding
October 15, 2008	Acquisition of Shares under Open Offer pursuant to Regulation 10 & 12 of the SEBI (Substantial Acquisition of Shares and Takeovers) Regulation, 1997 @ 737 per share	92,519,126	22.01
October 20, 2008	Allotment of Shares on Preferential basis @ 737 per share	46,258,063	11.00
October 20, 2008	Acquisition of Shares from the then Promoters of the Company @ 737 per share (First tranche)	81,913,234	19.49
November 07, 2008	Acquisition of Shares from the then Promoters of the Company @ 737 per share (First tranche)	48,020,900	11.42
Total		**268,711,323**	**63.92**

How much did Daiichi-Sankyo pay

Nature of Transaction	*Acquisition Consideration (in million yens)*
Open market share purchases	169,407
Share purchases from founding family (Gain of Promoters)	230,970
Share purchases by issuances of new shares (Money infused in Ranbaxy's balance sheet)	85,001
Direct acquisition related expenditures	2,974
Total	488,352

How did Daiichi-Sankyo value Ranbaxy

Assets and Liabilities	*Value Attributed (Yen billions)*
Book value of assets and liabilities (Cash, Inventory etc.)	78.8

Inventories 2.0
(Increase in inventories in fair value)
Tangible assets (Land) 10.0
Intangible assets (Leasehold land) 5.9
Intangible assets (Increase in current products, etc. to fair value) 41.0
In-process R&D expenses 6.9
Deferred tax liability (20.0)
Minority Interests (45.0) 83.69
Goodwill 408.7
Total consideration 483.3

Valuation of Ranbaxy Laboratories Ltd.
Price paid per share by Daiichi 737
52 week high/low as on 11th June 2008 for Ranbaxy share 593/300
Valuation of 63.92% stake by Daiichi19804 crores
Valuation of 100% equity of Ranbaxy as per the deal 30982 crores
Enterprise Valuation of Ranbaxy (on a fully diluted basis) $8.5 billion
Market Capitalization of Ranbaxy as on 30th
May 2009 (Conclusion of Deal) 10434 crores

Table 3 – Impact of Ranbaxy deal on Daiichi-Sankyo Balance Sheet

Region	In Yens Billion	Remarks
Net Profit/(Loss) for Daiichi-Sankyo in FY 2008	97.6	Recording of Y 351.3 billion in extraordinary losses due to a one-time write-off goodwill pertaining to the investment in Ranbaxy.
Net Profit/(Loss) for Daiichi-Sankyo in FY 2008	(215.5)	
Net cash used in investing activities in FY 2008	49.4	It is due to the cash acquisitions of shares in U3 Pharma and Ranbaxy, which entitled cash outflows
Net cash used in investing activities in FY 2009	413.8	
Short term bank loans in FY 2009	0.1	Borrowings for the acquisition of Ranbaxy's share Y + 240.0 billion
Short term bank loans in FY 2009	264.3	Increase by consolidation of Ranbaxy

Financing of Deal
Daiichi-Sankyo funded the acquisition through debt and existing cash reserves. Daiichi-Sankyo has taken a short and long term loans of 240 billion yens. That's almost 50% of the total funding requirement of the deal.

Strategic Reasons

The acquisition shall pave this way for creating a new and complementary hybrid business model that provides sustainable growth by diversification that spans the full spectrum of pharma business. The expected synergistic benefits are summarized in the exhibit below:

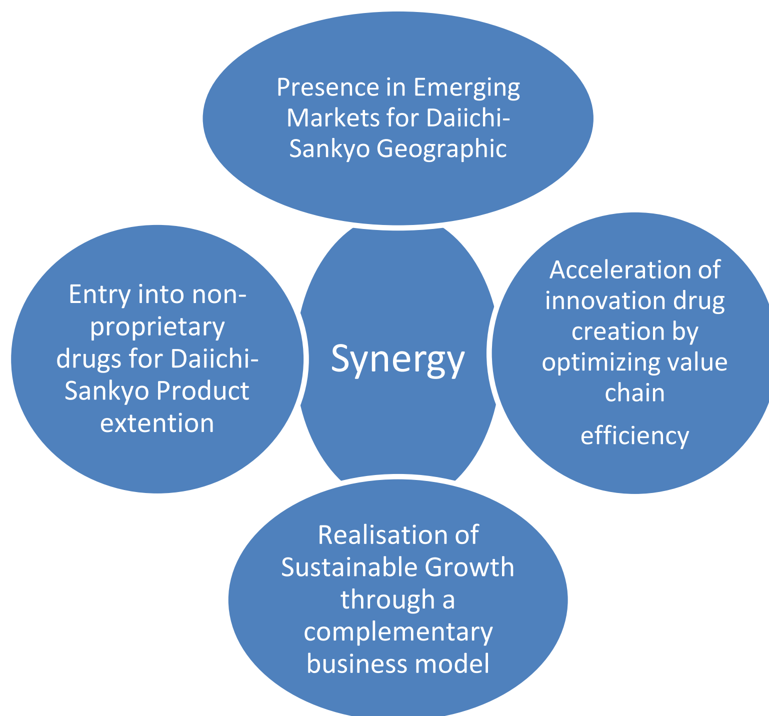


Figure 4

While DIS grew at 4.7% in 2007 to $7.12 billion, Ranbaxy grew at over 10% to $ 1.6 billion. While the world pharma industry grew at 6%, the generic segment is growing at 11%. The pursuit of the hybrid business model would help DIS to improve its growth rate substantially. Daiichi would be able to extend its reach to 56 countries from 21 countries where they currently operate.

Benefits to Daiichi Sankyo

In addition to the expected synergies, DIS will be benefited most by the low-cost manufacturing infrastructure and supply chain strengths of Ranbaxy. Further, DIS will be able to bring in efficiency in its operations by sourcing APIs6 and finished dosage products from Ranbaxy's 9 manufacturing plants in India and many more in other countries.

The R&D facilities of Ranbaxy would be used by DIS to not only reduce some of its R&D expenses, but also use competencies of Ranbaxy scientists to faster new product development. DIS is also expected to get Zenotech's expertise in the areas of biologies, oncology and specialty injectibles. (i)

Benefits to Ranbaxy

According to the promoters of Ranbaxy, the deal was meant to take it to the next level of growth. With India honouring the product Patent regime from 2005, Generic drug companies are finding it more difficult to make similar versions of innovative drugs. (ii) further, tough times ahead has forced global generic majors to merge or buy or become generic behemoths, e.g., Sandoz's acquisition of German company Hexal in 2005.
Besides, there was a strong feeling that perhaps the game is over for Indian drug companies unless they pull up their socks and strengthen their R&D. Analysts feel that promoters of Ranbaxy could visualize this in advance and got the best possible deal while the going was still good and made a very decent, honorable and attractive exit.

Risk Involved

The Food and Drug Administration (FDA) issued two warning letters to Ranbaxy Laboratories and an Import Alert for generic drug produced by Ranbaxy's Dewas and Paonta Sahib plants in India on 16 September 2008. US officials could detain at the US border, any API and finished drugs manufactured at these plants. Analysts estimate the loss of business to Ranbaxy as a result of this development to be at $40 million. This development has resulted in sharp fall of Ranbaxy share price by 6.6% on BSE.
Just a week after DIS announcement Ranbaxy announced the settlement of its protracted multi-country battle over Pfizer's $12 billion cholesterol drug lipitor. Ranbaxy had entered into an agreement wit Pfizer Inc. to settle most of the patent litigation worldwide over lipitor. After the announcement, Ranbaxy shares saw a dip by 7.7% as against Bombay Stock Exchange (B.S.E.) dip of 2.2%.
Analysts have expressed their doubt about the price paid for the acquisition as it was quite high compared to the present pricing of other Indian generic drug making companies. This many put severe strain on DIS's financials.

Notes:

1. In October 03, 2007, Ranbaxy entered into share purchase agreement with the promoters of Zenotech Laboratories Ltd. (ZLL) for acquiring 27.35% shares of ZLL' at a price of 160 per share. On the completion of the above acquisition, Ranbaxy made the public announcement to the shareholders of ZLL' to acquire upto 20% shares at a price of 160 per share. On the completion of the above acquisition, Ranbaxy' holds 46.79% shares of ZLL. As on October 20, 2008, Ranbaxy held 46.85% shares of ZLL'. As a result of acquisition of Ranbaxy by DIS, DIS has indirectly acquired 46.85% shares of ZLL'. In July, the Madurai bench of the Madras High Court had given stay on the open offer, following complaints made by minority shareholders. However, DIS got relief from the Supreme Court to go ahead with the offer.
2. India changed its policy of Patent regime from product to process in 1970 after enactment of Indian Patent Act. This has opened doors of reverse engineering to prepare formulations. This has helped Indian pharma companies in developing their capabilities at manufacturing low cost APIs, which global majors were selling at extremely high prices. In 2005, the wheel of patent perfection came a full circle as India amended the Patent Act, to recognize the product patent under the obligation of WTO regime.
3. Under the agreement, Ranbaxy will delay the start of its 180 days exclusively period for a generic version of lipitor, until November 2011. While the settlement avoided further legal cost

for Ranbaxy in fighting Pfizer, if it had won the case, Ranbaxy could have introduced generic version as early as March 2010.

4. DIS plans to record a valuation loss of $3.99 billion on its shares in its India based subsidiary Ranbaxy Laboratories to reflect the decline in the market value of shares. On a non correlated basis DIS plans to record a non-cash valuation loss of $3.99 billion on its shares in Ranbaxy in its third quarter to reflect a more than 50% decline in market value of these securities versus the purchase price. The company said in a statement on the company's website. DIS sees no impact on its forecasts for non-consolidated net-sales, operating income or ordinary income for the third-quarter as a result of these anticipated extraordinary losses. The company also sees no impact in cash flows. However, these items will have a significant negative impact on the company's consolidated financial results for the net income for the year 2008-09. Reacting to this news DIS shares fell 1.2% on the Tokyo stock exchange.

Valuation for liquidation/insolvency

Net Realisable Value Method

This method is generally used in case of liquidation. Where the business of the company is being liquidated, its assets have to be valued as if they were individually sold and not on a going concern basis. Liabilities are deducted from the liquidation value of the assets to determine the liquidation value of the business.

Any distribution to the shareholders of the company on its liquidation, to the extent of accumulated profits of the company is regarded as deemed dividend. Dividend Distribution tax will have to be captured for such valuation.

Valuation of Slump Sale

The concept of Slump Sale was incorporated in the Income tax Act, 1961 when Section 2(42C) was inserted defining the term 'slump sale' as transfer of one or more undertakings as a result of the sale for a lump sum consideration without values being assigned to the individual assets and liabilities.
Prior to the insertion of Section 2(42C), Courts have held that slump sale is a sale of a business on a going concern basis where the lump sum price cannot be attributed to individual assets or liabilities.

The undertaking has to be transferred as a result of sale. If an undertaking is transferred otherwise than by way of sale, say, by way of exchange, compulsory acquisition, extinguishment, inheritance by will, etc., the transaction may not be covered by Section 2(42C). The consideration for transfer is a lump sum consideration. This consideration should be arrived at without assigning values to individual assets and liabilities.

As regards the valuation of slump sale it is appropriate to brief the provisions of Section 50B of the Income Tax Act, 1961.

Section 50B provides the mechanism for computation of capital gains arising on slump sale. Capital gains arising on slump sale are calculated as the difference between sale consideration and the net worth of the undertaking. Net worth is deemed to be the cost of acquisition and cost of improvement for the purpose of calculation of capital gains tax.

Valuation of Assets in a Demerger

As per Section 2(19AAA) "demerged company" means the company whose undertaking is transferred, pursuant to a demerger, to a resulting company;

A demerger scheme usually involves the allotment of shares in the transferee company to the shareholders of the transferor company, in lieu of their reduction of their interest in the transferee company having a mirror image of shareholdings.

If post demerger as part of strategy, intention is to create holding subsidiary relationship or retain part stake than it is possible to allot shares of the transferee company to the transferor company.

In the context of a demerger scheme, a valuation exercise is mandatory in order to determine the number of shares to be issued to the shareholders of the transferor company in consideration for the spin off/demerger of the undertaking or undertakings.
If demerger is going to be in 'Shell Company', than valuation is primarily to determine the capital structure of the Transferee/Resultant Company.

If the demerged and resulting companies belong to same group of management and shareholders are common, share exchange ratio based on Net Asset Based valuation model may be adopted. Any other business valuation method may also be adopted considering the same shareholding as it will not impact value for the shareholders in demerged company post-demerger.
In ideal situation like the companies are profitable and shareholders are different, it is recommendable to use Profit Based Valuation model for deciding on the share exchange ratio. While demerging to the shell company, there is no value of the shell company. Therefore, any no of shares may be issued to the shareholders of the demerged company as there will not be any impact on the shareholders' wealth.

VALUATION OF BRANDS

It is the hallmark of a shrewd businessman to commence his business with a roadmap of his plans. When brands take charge of consumers' minds, the name of its proprietor takes the backseat. There lies the power of brands.

Functions of Brands

Brands indicate the origin of goods

Brands connect the consumer's mind to the manufacturer or service provider

Brands make the job of the consumers very easy and consumers are choosy!

Consumer believe that branded goods and services offer them a particular quality or other value proposition

Same manufacturer may use different brands to differentiate goods of same description having different quality and value

Brands enable premium pricing

The Importance of Brand valuation

Brands/marks are a class of assets like human resource, knowledge etc. They create a value premium for the goods and services. Therefore, without the brand/mark, the goods/services may be address less. In order to market it or use this asset wisely valuing the same is essential.
There is no prescribed manner to value a brand. But all knows that brands connect markets with products and thereby they create value.
Brands do not command any value unless they are able bring cash flows to the Company that has adopted the same.

Protect the Value of the Brand

In order to sustain the valuation of the brand, there must a constant attempt from the Company on the following aspects:

~ To secure registration of the Brand in all relevant classes.

- To secure registration of the Brand in all countries where there are opportunities to sell Branded Products of the Company.
- To set up a “surveillance team” within the Marketing Department of the Company so as to ensure that there is no dilution to the value of the Brand.
- To ensure that attempts to use fake brands that are similar or deceptively similar are challenged with full force so as to spread the message that the Company is conscious of the value of its brand and it will be aggressive in taking steps not only to put an end to such illegal, dishonest and unauthorized use but also to punish such users and claim exemplary damages from those who had passed off their goods to people and those who are found to be guilty of infringement.
- To ensure that there is always a budget allocation for promoting the brand and the Company should devise a continuous process for being present in the existing markets and prospective markets.
- To ensure that there is a conspicuous distinction in the description of the brand when it is used to sell premium products as opposed to use of the same brand for selling goods to the masses.
- To adopt a proper policy to augment IP profile of the Company and constantly update and upgrade the same.

For the purpose of valuation of brands, it may be necessary to make a through enquiry into the policies and business of the company to the extent they relate to brands. For such enquiry, the following questionnaire may prove to be helpful: (FROM ICSI MODULE)

Sl. No.	Query
1.	What are the brands requiring valuation? Please mention all its variants and styles also.
2.	What is the date of adoption of each brand?
3.	Does the company use the brand owned by any third party?
4.	What are goods or products that are sold under those brands?
5.	For how long they have been in use?
6.	Whether the use of brands has been continuous?
7.	Whether use of any brand has been stopped?
8.	Whether the brands of the company have been registered under the Trademarks Act, 1999?
9.	Whether there has been any opposition to registration of the any of the Brands of your company?
10.	What are the Brands/Trademarks which have not yet been registered though necessary applications have been filed already with the Registrar of Trademarks?
11.	Whether the artistic works contained in the brands of the company have been registered under the Copyrights Act,1957?
12.	Whether your company has adopted any slogan or catchy phrase to highlight the policy of your company or its branded goods?
13.	What is the turnover of the company from goods sold under brand? (Brand-wise data from three financial years may be provided)
14.	Whether the company has a website of its own? Give details.
15.	Whether the company has dealer/agent network?
16.	Whether the company has dealer/agent network?
17.	Has the company any brand adoption policy? Please furnish a copy of the policy.
18.	Has the company granted may permission to any party for brand use? Please provide a copy

	of Licence agreement if any.
19.	Has the company a marketing division of its own?
20.	Has there been any advertisement about the brands? Please furnish complete details regarding advertisements in the print media/electronic media?
21.	Whether there have been any radio commercial programmes of your company's brands?
22.	Hs there been any use of the brand in any country other than India?
23.	What are the most prominent states in India where the branded goods of the company sell significantly?
24.	Can you give product wise turnover for three financial years?
25.	Can you furnish state wise turnover for three financial years?
26.	Can you furnish names of the States where the products of the Company are not sold at all?
27.	Can you furnish details of those products, which though manufactured by the company are sold without applying any brand?
28.	Can you furnish details of those goods that are sold by your company as branded goods even though they are simultaneously sold without applying those brands?
29.	Is there any product that the company gets manufactured through any other party (such as a sub-contractor) who puts the brand of the company upon those goods and delivers to the company?
30.	What is the budget of the company for its advertisement and publicity for three financial years? How much of the same could be related to brand promotion?
31.	Who are the major competitors of your company's goods? What are their brands? How those brands are superior or inferior to your company's brands?
32.	What is the total market India for the goods of your company? Please give details in value terms and in quantity terms if possible.
33.	What would the approximate market share of your company?
34.	Has the market share improved after introducing branded goods?
35.	In your opinion would the price of branded goods sold is higher than the price of same goods sold without brands? (You may consider a market place where two traders are selling the same or similar goods, your company selling those goods as branded goods and the other trader selling his goods without any brand).
36.	Do you think because of Brands the goods of your company have been commanding higher (premium) valuation?
37.	Do you think your company has not reached out to customers adequately in respect of any territory?
38.	Could you please provide financial projections for the next three financial years?
39.	Has there been any raid or criminal action against sale of spurious goods similar to your goods upon which the Brands of your company or any brand deceptively similar to the Brands of your company have been used?
40.	Has your company ever given any warning or caution notice about Brands of your company?
41.	Has your company at any time opposed the registration of any brand or trademarks of any other person?
43.	Has your company issued any legal notice to any party against misuse of any Brands of your company?
44.	Has there been any suit against any party for passing off or infringement of any of the Brands of your company?

45.	Has there been any legal notice or legal action against your company alleging copying or misuse of brands of others?
46.	Has there been any valuation of any of the Brands of your company at any time before this?

VALUATION APPROACH

Basically in an enterprise, physical resources are of the following two types:

- Machinery, that work with applied force;
- Men who work.

Both the above assets are capable of being organized provided the two vital inputs are present; viz., money and knowledge.

Cost Approach for valuation of Brands may not help. The cost incurred in the initial years would not have been very high as all resources should have been used up for setting up manufacturing facility and sales force to give customers high quality Products for value and to ensure that customers are happy. In the case of a premium brand, a company may be incurring expenditure in order to capitalize the position and expand the territories and to ward off competition. Therefore for every rupee incurred by the Company on an established brand, returns would be manifold. This enables the Company to introduce the brand for new products and new markets.

Thus depending upon the facts and circumstances of each case, suitable method of valuation of the brands should be adopted. In the case of a premium brand, the price of the products that are sold under the premium brand may command a premium price as compared to any other similar product that is sold under an ordinary brand or without any brand. The price differential between the goods carrying premium brand and other similar goods would show the extent of premium the branded goods command. Taking the said premium as an indicator, it is possible to evaluate the value of the brand using the usual cash flow model of valuation.