

QUESTIONS FOR BUSINESS VALUATION

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Q1. What do you mean by "valuation," and why do you think it's important??

The term "valuation" refers to the process of appraising or determining the worth of certain assets, such as those that are tangible or intangible, securities, liabilities, and a particular firm as a continuing concern or any company listed or unlisted, partnership or proprietorship. A thing's value, or its exchangeable worth, is quantified in terms of money.

The term "valuation" refers to the methodical analysis used to ascertain the actual or potential value of anything. In many situations, a business owner or interested party will find knowing the value of their company to be necessary. The fair market value standard is the price at which an arm's-length buyer and seller could exchange goods or services without any undue influence from either party and with full awareness of all relevant facts.

The need for valuation for various statutory and commercial purposes may be captured in the following points:

Assessment under Wealth tax act, Gift tax act.

ii) Formulation of scheme for amalgamation.

iii) Purchase and sale of shares of private companies.

iv) Raising loan on the security of shares. v) For paying court fees.

vi) Conversion of shares.

vii) Purchase of block of shares for the purpose of acquiring interest or otherwise in another company

viii) Purchase of shares by the employees of the company where retention of such shares is limited to the period of their employment.

ix) Compensation to the shareholders by the government under a scheme of nationalization

Acquisition of shares of dissenting shareholders under a scheme of reconstruction.

xi) To set a basis of value for a business when no valuation has been previously performed.

xii) To set a base line value for the business and develop a strategy to improve the profitability of the business and increase the value of the business for an exit strategy.

xiii) To identify whether the business is growing, stagnant or declining in value to restructure the business.

xiv) To determine the potential built-in-capital-gains tax in a conversion from a Corporation to an S-Corporation.

Q2. Provide an outline of the primary goals of the company valuation process?

The following is a list of the primary goals of the business valuation process:

- a) Provide guidance to either a buyer or a seller regarding the appropriate amount of purchase consideration.
- b) Provide assistance to an arbitrator who is attempting to resolve a dispute between two parties.
- b) Provide assistance to a lender in determining the value of the collateral for a loan.
- c) Set value for stamp duty.
- e) Provide a numerical representation of a value that will be included in the accounting records.
- d) Evaluate a consequential loss claim.
- g) Determine if a management buyout or a leveraged buyout would be beneficial.

Q3. What are some of the advantages of conducting a business valuation?

A method for determining the value of a company and all of its assets, business valuation is a term that refers to this process. When contemplating the sale of their company, the majority of business owners go through the process of having it appraised. There are also other factors, including as mergers, organisational reorganisation, and the dissolution of partnerships. When attempting to value a company, there are many different aspects that must be taken into consideration. In this context, sales are a significant driver, but they are not the only one taken into account during the process of valuation. The sort of business, including its history, financial position, stock value, value of intangible assets, competitiveness, and the general economic outlook are also being taken into consideration as additional considerations.

Thus, the advantages of business valuation may be captured under the following points:

1. Getting an accurate appraisal of the value of your company is extremely crucial. Because they are based on generalisations, estimates are not acceptable. It is necessary for business owners to receive specific numbers through valuation methods in order to obtain appropriate insurance coverage, know how much money to reinvest into the firm, and know how much money to sell the company for in order to remain profitable after the sale.
2. It is vital for the management to have an accurate understanding of the company's genuine value if they are considering selling the business. Because it will have the option to take more time to raise the company's value in order to get a higher selling price, this process should be started well in advance of the time when the firm will be put up for sale on the open market. It is absolutely necessary to have a solid understanding of the worth of the company. In order to successfully negotiate a better selling price, one must also have an accurate understanding of the resale value of the company.
3. A company's management may be able to gauge its value using only basic data such as its stock price, total assets, and cash on hand. But those are hardly the only things to consider when estimating a company's worth. When considering the option of selling a firm, knowing its genuine value is usually a deciding factor. It's also useful for illustrating the rise in revenue and market value of the company over the course of past years. Any company that can demonstrate sustained growth over time will appeal more to potential purchasers.
4. The importance of a company's valuation increases greatly when it is contemplating a merger or acquisition. Because it aids in establishing asset value, the state of the company's growth prior to a merger or acquisition, and whether or not the combined entity has room to grow. While trying to negotiate a high acquisition price, having a professional value your firm is invaluable.
5. Any time a business needs to raise capital, whether to fuel expansion or avoid bankruptcy, potential investors will want to see a thorough valuation study. If you're looking to get money from investors, you should also show them a valuation forecast. Investors want a clear explanation of how their money will be used and how they will profit from the venture.

Q4. What are the different methods of valuation?

- 1. INCOME APPROACH:** The income valuation method is based on concept of valuing the present value of future benefits. This approach estimates business value by considering the future income accruing over a period of time. The methods most commonly used by business valuation professionals include the Capitalization of Earnings Method and the Discounted Earnings Method (Discounted Cash Flow Method and Dividend Discount Model).
- 2. MARKET APPROACH:** The term "market approach" is used to describe the practise of determining a company's worth by analysing how its stock price compares to those of other, comparable companies. The notion of substitution is at the heart of both the income method and the market method of business valuation. In order to provide a benchmark against which to evaluate the subject company, the business valuation specialist will research similar companies that have recently exchanged hands. The worth of a comparable company can be determined from the price at which similar businesses have recently sold. The Guideline Public Company Way, the Guideline Company Transactions Method, the Multiple of Discretionary Earnings Method, and the Gross Revenue Multiple Method are the most frequent approaches for a market-based valuation of a corporation.
- 3. ASSET BASED:** The idea of substitution underpins the asset business valuation method, which assumes that a buyer will not pay more for an asset than it would cost to acquire an alternative asset with the same usefulness. Depending on whether the business is being valued as a continuing concern or in liquidation, adjustments must be made to both the value of assets and liabilities.

PRACTICE QUESTIONS

Q1. Company The Vishal Corporation is a nationwide provider of construction equipment retailing. In its annual report, Vishal reported the income made 200,000 and distributed 20,000 in preferred dividends. Throughout the year, Vishal possessed 30,000 common shares with a par value of 5 each. Calculate return on equity

$$\text{Return on Equity Ratio} = \frac{\text{Net Income} - \text{Preference Share Dividend}}{\text{No. of Equity Shares Outstanding} \times \text{Market Price per share}}$$

$$\text{ROE} = 200000 - 20000 / 30000 \times 5 = 1.2/\text{share}$$

Q2: One company has a projected EPS of INR 10 for the current fiscal year. The average P/E ratio for a company in this sector is around 20. Company growth has been rapid recently. How much do you think the stock of this company is worth, roughly? Should you buy this stock?

ANS: It is reasonable to infer that the optimal P/E ratio for the company is 20, given that it is currently in the growth stage of its life cycle.

Hence, the price of a share is INR 20 times 10, which is INR 200.

If the current price is lower than 200 Indian Rupees, then the share ought to be purchased.

Q3: Calculate the company's liquidation value using the information below

1. Company realised Rs 100 Cr from the liquidation of its assets
2. Paid to creditors 20 CR
3. Paid to preference shareholders 30 CR
4. Number of outstanding equity shareholders of company are 2.1 lakhs

Ans:

LVPS = LIQUIDATION VALUE OF ASSET – SETTLEMENT TO CREDITORS - PREFERENCE SHARE HOLDERS /NUMBER OF OUTSTANDING SHARES

$$LVSP = 100 - 20 - 30 / 2.1 = 20$$

Q4: Calculate the company's liquidation value using the information presented below

Liabilities 55,00,000 Book value of the assets as per Balance Sheet 70,00,000 Estimated value to be realised by selling the assets in auction 65,00,000.

ANS:

LV = AUCTION VALUE – LIABILITIES

$$6500000 - 5500000 = 1000000$$

Q5: From the following information compute intrinsic value of share using dividend Discounted Model (GGM).

The price of one share of CNBC limited is currently quoted at INR 50. In addition, the rate of return for Company CNBC Limited is required to be 10%. At the moment, Company CNBC Limited distributes dividends in the amount of INR 2 per share for the coming year, and investors anticipate that these payouts will increase by 4% per year.

ANS:

INTRINSIC VALUE OF SHARE = $D_1 / (R - G)$

D1 = DIVIDEND PAID

R = REQUIRED RATE

G = GROWTH RATE

$$2 / (.10 - .04) = 33.33 \text{ INTRINSIC VALUE}$$

Q6: HDFC is expected to provide dividend of Rs 4.00. expected price of the share is 24 Rs. What price it would sell now if investors expected rate of return is 12%

ANS:

$$P_0 = \frac{D_1}{(1 + R)} + \frac{P_1}{(1 + R)}$$

Po = current price of equity share (which will be your intrinsic value of share)

D1 = dividend expected after one year

P1 = price of the share expected

R = Rate of return on equity share

$$Po = 3.5/1.12 + 24/1.12 = 25 \text{ rupee per share intrinsic value}$$

Q6: Company Vedanta has Expected dividend price per share is 4. The dividend growth is 5%. The equity share price will grow 5% Calculate the intrinsic value of share if expected rate is 15%

ANS:

$$P_0 = \frac{D^1}{R - g} \quad (\text{use this formula when growth is given})$$

$$PO = 4/.15-5 = 40 \text{ per share will be your intrinsic value of share}$$

Q7: Mr D has forecasted that Punjab transport Corp will pay dividends of 4 in the first year, 5 in the second year, and 6 in the third year. You expect that at the end of the third year, the selling price of the company's stock will be 125 per share. The estimated cost of capital is 5%. The current stock price is 100 per share.

ANS:

$$V_0 = \frac{D_1}{(1+r)^1} + \frac{D_2}{(1+r)^2} + \dots + \frac{D_n}{(1+r)^n} + \frac{P_n}{(1+r)^n}$$

- P_0/V_0 – the current fair value of a stock
- D_n – the dividend payment in the n th period from now
- P_n – the stock price in the n th period from now
- r – the estimated cost of equity capital

$$\begin{aligned} P_0 &= 4/(1+0.05)^1 + 5/(1+0.05)^2 + 6/(1+0.05)^3 + 125/(1+0.05)^3 \\ &= 121/\text{share (intrinsic value)} \end{aligned}$$

Q8: Assume company CC pays dividend yield 2. The current price of the share is 10rs and growth of the share is expected to be 5 % Calculate the required rate of return.

Calculate the Expected rate of return on the basis of dividend and equity share price ($D_1/P_0 + g$)

$$E(R) = 2/40 + 0.05 =$$

DISCOUNTED CASH FLOW .

QNO 9:

BALANCE SHEET OF ARZONA LIMITED AT THE END OF YAER 0

LIABILITIES		ASSETS	
SHAREHOLDERS FUND	250	NET FIXED ASSETS	400
EQUITY CAPITAL	100	NET WORKING CAPITAL	100
(10 CRORES SHARES OF 10 EACH)			
RESERVES AND SURPLUS	150		
LOANS @ 9% INTEREST RATE	250		
	500		500

The return on invested capital (ROIC) is 12% is defined as NOPAT/NET INVESTMENT

The growth rate of assets revenues and NOPAT will be 20% for the first three years, 12% for next two years and 8 % for there after

The effective tax rate of the firm is 33.33 % and pretax cost of debt and equity is 9% and 16% respectively.

Based on the above information calculate intrinsic value of arizona limited,

ANS : (PLEASE REFER TABLE GIVEN BELOW WITH EACH STEP)

STEP 1: divide future into two parts, the explicit forecast period and balance sheet forecast period. take 6 years (explicit period) a forecast period after that company will be well established and settled

STEP2: forecast the free cash flow year by year during the explicit year by year during the explicit forecast period (free cash flow is a cash which is available to the equity share holders after payment of expenses and debenture holders and capital investments)

The FCF = NOPAT - NET INVESTMENT =

(1) NOPAT = as we have given in question that ROIC is defined as NOPAT/INVESTED CAPITAL

SO OUR CALCULATIONS FOR NOPAT WILL BE = ROIC = NOPAT/ INVESTED CAPITAL

INVESTED CAPITAL WE HAVE = EQUITY + RESERVES AND SURPLUS + DEBT WHICH IS EQUAL TO 500

ROIC = 12%

OUR EQUATION WILL BE $12\% = \text{NOPAT}/500 = 60$

AS question says NOPAT WILL GROW 20% FOR FIRST THREE YEARS AND 12% FOR THE NEXT TWO YEARS

$$60 \times .20 = 12 = 60 + 12 = 72$$

$$72 \times .20 = 14.4 = 74 + 14.4 = 86.4$$

$$86.4 \times .20 = 17.28 \quad = \quad 86.4 + 17.28 = 103.68$$

$$103.68 \times .12 = 12.44 \quad = \quad 103.68 + 12.44 = 116.1 \text{ (HERE ONWARDS 12% RATE FOR NEXT TWO YEARS)}$$

$$116.1 \times .12 = 13.9 \quad = \quad 116.1 + 13.9 = 130.1$$

(2) Net Investment = change in fixed asset + change in net working capital

Net fixed asset is = 400

Net working capital is = 100

AS question says net fixed will grow 20% year on year and investment on net fixed asset is 20% of net fixed asset including fixed asset and net working capital

Net fixed asset for 1st year given in asset side of balance sheet is = 400

Similarly net working capital is = 100

$$400 \times .20 = 80$$

$$100 \times .20 = 20 \quad (80 + 20) = 100 \text{ for first year}$$

$$600 \times .20 = 120 \text{ CHANGE IN NET INVESTMENT FOR 2ND YEAR}$$

$$720 \times .20 = 144 \text{ CHANGE IN NET INVESTMENT FOR 3RD YEAR}$$

$$864 \times .12 = 103.68 \text{ CHANGE IN NET INVESTMENT FOR 4TH YEAR}$$

$$967.7 \times .12 = 116.1 \text{ CHANGE IN NET FIXED ASSET FOR 5TH YEAR}$$

$$1083.2 \times .08 = 86.6 \text{ CHANGE IN NET FIXED ASSET FOR 6TH YEAR}$$

(8% rate is for 6 year onward till infinity)

So to calculate FCF we have to subtract NOPAT from net investment (please refer table below)

STEP 3: CALCULATE WEIGHTED AVERAGE COST OF THE CAPITAL (WACC)

$$WACC = W_e K_e + W_d K_d (1 - \text{tax})$$

W_e = Weight of equity which is given in question that 1:1 I.e 50%

K_e = Cost of equity which is 16% given in question

W_d = weight of debt (50%)

K_d = Cost of debt which is 9% given in question

$$\text{So } WACC = .50 \times 16 + .50 \times 9 (1 - 33.33) = 11$$

STEP 4 : CALCULATE HORIZON VALUE

Value of Horizon = $VH = FCF (1 + g) / (WACC - g)$ (g is growth rate for horizon period onwards which is 8% given in question)

$$VH = 43.4 (1 + 0.08) / (.11 - 0.08) = 1562.4 \text{ Crores}$$

Step 5: estimate enterprise value

$$EV = FCF_1/(1+WACC)^1 + FCF_2/(1+WACC)^2 + FCF_3/(1+WACC)^3 + FCF_4/(1+WACC)^4 + FCF_5/(1+WACC)^5 + FCF_6/(1+WACC)^6 + VH/(1+WACC)^H \text{ (H= 6YEAR ONWARDS)}$$

$$EV = -40/1.11 - 48.0/(1.11)^2 - 57.6/(1.11)^3 + 0/(1.11)^4 + 0/(1.11)^5 + 43.4/(1.11)^6 + 1562.4/(1.11)^6 = 741.9 \text{ crores}$$

Step 6: Calculate equity value

$$\text{Equity value} = EV - \text{DEBT}$$

$$741.9 - 250 = 491.9 \text{ CRORES}$$

STEP 7: CLACULATE VALUE / SHARE

EQUITY VALUE / NUMBER OF OUTSTANDING SHARES

EQUITY VALUE IS 491.9

NUMBER OF OUTSTANDING SHARES ARE 10 CRORES

$$491.9/10 = 49.2 \text{ (INTRANSIC VLALUE)}$$

YEAR	1	2	3	4	5	6
Asset at beginning	500	600	720	864	967.7	1083.2
NOPAT	60	72	86.4	103.7	116.1	130.1
Net Investment	100	120	144	103.7	116.1	86.7
FCF	-40	-48	-57.6	0	0	43.4
GROWTH RATE	20%	20%	20%	12%	12%	8%

RELATIVE VALUATION RATIOS:

1. PRICE TO EARNING RATIO
2. PRICE TO BOOK VALUE RATIO
3. PRICE TO SALES RATIO
4. EV/EBITDA RATIO

AS I HAVE TAUGHT YOU THESE RATIOS MULTIPLE TIMES, PEEASE LOOK AT ANY BOOK GIVEN IN YOUR SYLLUBUS THESE RATIOS ARE EASY TO UNDERSTAND AND CALCULATE (INVESTMENT ANALYSES AND PORTFOLIO MANAGEMNT BY REILLY BROWN)

