Navkar Engineering Corporation:
Intricacies with Valuation

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The case of Navkar Engineering Corporation focuses upon various methods of equity valuation. Whole case discusses the importance of Intrinsic value technique over Book value multiples. Quantitative models that analysts use to value common stocks in terms of future earnings and dividends that a firm will yield have been discussed in the case in detail. Whereas Book values based on original cost, market values measure current values of assets and liabilities. The case emphasises the relative benefits of intrinsic value compared to book values. As Market values reflect the value of any firm as going concern, utility of such market values in equity valuation technique becomes important.

Benefits of sustainable growth rate over CAGR are captured in this case in elaborate manner. The case provides useful insights regarding the equity valuation methods.

Key Words: Intrinsic Value, Book Value, CAGR, Sustainable growth rate,

Mr. Darsh Shah, head of the Invest-Mentor Research Consultancy Firm has undertaken a project of evaluating a company named Navkar Engineering Corporation from one large mutual fund company. He wants his analysts to obtain fundamental value of this company. Mr. Anurag Shah, one of the analysts who specialises in Financial Research and Equity Valuation, has been entrusted to prepare a research report on Navkar Engineering Corporation, one of the growing companies in the areas of stone machines.

Mr. Darsh Shah has gathered certain information on non-financial dimensions of Navkar Eng. Corporation. Navkar Engineering Corporation is one of the India's leading manufacturers of marble cutting and stone processing machines. Established in 1984, Navkar manufacture Multi blade and single blade block stone cutting machines.

The Company is equipped with facilities to manufacture high quality marble cutting machines. Quality is a vital element that is ensured on each and every machines manufactured by the company. Company has a well-established quality management system, which aims at continuous improvement providing substantial value for the customer. Navkar Engineering Corporation is a destination where the best materialization of skill, talent and technology is a common affair, in addition to optimum utilization of resources. Hence, customer satisfaction is assured through quality products and value added services.

“Good products and very good management is a key to success of any firm” said Darsh Shah.
Mr. Darsh Shah to Mr. Anurag Shah, “Anurag, I think, we can use Book value multiples to estimate this company’s value. We can relate growth in such multiples with company’s non-financial parameters also”

Darsh Shah to Mr. Anurag Shah, “It is also necessary to study non-financial dimensions of company to correctly evaluate future prospects”

Mr. Anurag Shah to Mr. Darsh Shah “”Sir, Quality of management is always reflected in company’s sales growth, profit margins, and return on equity, so it is more better to estimate the value of equity based on its fundamental features with market prospects. “We need to estimate out intrinsic value which is better than book value multiple” said Mr. Anurag Shah to Mr. Darsh Shah.

Mr Darsh stated, “Anurag, I believe that Book Value represents minimum floor below which the market price will not fall,”

Mr. Anurag Replied, “Sir, there are certain firms selling at a market price below book value, we need to measure expectations of investors which is possible in certain quantitative models only.”

Mr. Anurag emphasised, “Comparison of Intrinsic value with market will give us an idea about stock value.”

Mr. Darsh shah strongly believes that last five years’ Book value and Return on equity estimates will suffice the purpose of analysing this company’s future prospects based on last five years financial data. While Mr. Anurag shah is thinking of carrying out analysis further by applying certain valuation techniques which can correctly estimate the value.

Mr. Darsh finally allocates the task of preparing report on Navkar Engineering Corporation to Mr. Anurag Shah informing him to incorporate both Book value and ROE as well as Intrinsic value estimates proposed.

Anurag Shah is thinking to find out intrinsic value of Navkar Eng. Corporation based on how company has done in the past. He believes that correct estimate of expected EPS will enable him to find out intrinsic value. For this he gathered the relevant data on company given below:

Table 1: Navkar Eng. Corporation’s Income statement for the last Five years

	2001	**2002**	**2003**	**2004**	**2005**
Net sales	1020	1090	1210	1350	1520
COGS	734	807	883	959	1095
Gross profit	286	283	327	391	425

Operating expenses	72	74	85	105	120
Operating profit	214	209	242	286	305
Non-operating surplus / deficit	11	14	18	-12	-5
PBIT	225	223	260	274	300
Interest	40	45	60	66	55
PBT	185	178	200	208	245
Tax	35	38	40	52	50
PAT	150	140	160	156	195
Dividends	60	60	65	65	70
Retained earnings	90	80	95	91	125

Mr. Anurag Shah strongly believes that a good estimate is careful projection of company's revenue and costs. So he made following assumptions about this company so as to estimate the EPS for the next year 2006 based on data given in Table 1. He estimates that net sales will increase by 12 %, while COGS will increase by 11%, He estimates that operating expenses will increase by 10 %, there will be nil non-operating surplus /deficit, He forecast that interest will decrease by 2 %, tax rate will increase by 2 %.

Mr. Manthan Mehta, one colleague of Mr. Anurag shah suggested him that valuation exercise will complete only when he estimates P/E ratio correctly. Mr. Manthan said to Mr. Shah "As P/E ratio reflects the price which investors are willing to pay per rupee of EPS, this will help you to estimate intrinsic value by multiplying Such P/E ratio with Expected EPS"

Mr. Anurag Shah, based on the advice of his colleague, decides to derive P/E ratio using constant growth dividend model. Mr. Anurag shah is thinking of forecasting dividend pay-out ratio for 2006 as this is required in Gordon's dividend model. He intends to use average dividend pay-out ratio for the period of 2003-2005 as dividend pay-out ratio for 2006.

Mr. Anurag has felt the need to correctly estimate the cost of equity which will enable him to derive projected P/ E ratio. His Boss is of the opinion that CAPM model can be applied to estimate such required return. He found Market risk premium is 8% right now, while Beta of Navkar stock is 0.9 and average risk free rate is 9%.

Mr. Darsh has always used CAGR as a tool to measure growth of any company.

Mr. Darsh to Mr. Anurag Shah "CAGR as a measure of growth performance can be calculated from historical data and measuring last five years' CAGR of its Earnings, dividends and sales is better way to measure actual growth performance".

Mr. Anurag Shah is of the opinion that we need to focus upon the growth rate which can be maintained by the company. "Sustainable growth rate is better input to capture the contribution made by the company in its growth without borrowing money" said Mr. Anurag Shah to Mr. Darsh Shah

As constant growth version of dividend discount model asserts that company's earnings and dividend grow at some constant rate, Mr. Anurag Shah plans to use product of average retention ratio and average return on Equity for the last three years to correctly estimate the expected growth rate. Mr. Anurag Shah obtained following data of Navkar Eng. so as to estimate return on equity.

Table 2: Financial figures of Navkar Engineering Corporation for the last five years.

Particulars	**2001**	**2002**	**2003**	**2004**	**2005**
Equity share capital (Rs 10 par)	200	200	200	200	200
Reserves and surplus	400	480	575	616	741
Loan funds	400	450	550	600	615
Capital employed	1000	1130	1325	1466	1606
Net fixed assets	600	650	710	850	900
Investments	50	55	60	70	80
Net current assets	350	425	555	546	626
Market price per share	60	55	65	57	75

QUESTIONS

(1) Do you agree with Mr. Darsh Shah’s opinion about Book Value. How book Value multiples helps in understanding company performance? Determine Book value of Navkar Engineering for the last five years and discuss the major limitations of Book value multiples.

(2) “Intrinsic value which is better than book value multiple” Do you agree with the statement made by Mr. Anurag Shah? How and Why?

(3) Help and enumerate the intrinsic value of Navkar Engineering Corporation as per the methodology proposed by Mr. Anurag Shah.

(4) Which method of growth calculations should be incorporated into the methodology suggested by Mr. Anurag Shah? How and Why? Do you agree with the process suggested by Mr. Anurag Shah?

(5) ‘CAGR measures Historical Growth not future prospects” Do you agree with the statement? Explain in detail. Measure and Enumerate the CAGR of Sales, Earnings and dividends for the last five years as suggested by Mr. Darsh Shah.

(6) Analyze the Navkar Engineering Corporation based on the valuation matrices discussed in case.

(7) Discuss the benefits and limitations of Dividend Discount Model.