

YEP TALK

The Young Entrepreneurs & Professionals page

From The Yep Desk

TODAY'S page is the continuation of the last week. Previously we had discussed about the financial Market Analysis and today it would be the follow of the previous including Industry and economic Analysis.

With the end of the millennium we would like to select the people from every walks of life to guide us in the next millennium. We would like to tell the YEP readers that they can send their suggestions about the live celebrities who has the leadership quality to guide us in the next millennium. We have respect for those who are longer with us. But we want from our readers a live personalities name from every field of life like Engineers, Doctors, Scientists, NGO workers, Politicians, Economists, Journalists, Entrepreneurs, Artists, Social Activists, Lawyers, Film Makers, Writers and many others.

With the end of year I would like to know the feed back of the YEP page.

Rafi Hossain

Industry and Economic Analysis

by Yawer Sayeed

Investment Philosophy: Top-Down vs. Bottom-Up
INVESTMENT analysis procedure is guided by two broad investment philosophies, i.e., top-down approach and bottom-up approach.

In top-down approach, an analyst starts with economic fundamentals, then go for different industry/sector analysis. Based on the industry outlook, then he/she decides on the asset allocation.

Contrary to that, bottom-up approach begins with analysis of companies. Here the performance of companies is the sole determinant factor in deciding asset allocation.

Both the approaches have got merits and demerits. Top-down approach may end-up with certain stock picks where most profitable companies may not have given the best weightage. But it ensures the very essence of investment, i.e., risk diversification.

On the other hand, bottom-up approach ensures that the investment profitability is really taken care of. But it risks industry shake-ups that arise out of government monetary and fiscal policy changes.

Economic Analysis

Macroeconomic variables shape the growth and the following table shows a development of any industry. Economic decisions factor in government monetary and fiscal policies. There are several economic indicators/index that affect industry profitability. Some of the basic economic factors are discussed below:

Fiscal Policy

a) Budgetary Provisions: Influences an economy through multiplier effect. For example, increases in road building increases the demand for concrete materials. The employees in those industries that supply construction materials will have more to spend on consumer goods, which raises the demand for consumer goods, that affects another set of suppliers.

b) Tax Credits/Additional Tax: Tax credits and tax cuts encourage spending, whereas additional taxes on income, gasoline, cigarettes discourages spending.

Monetary Policy: Expansionary or Restrictive
a) Interest Rate: An increase in interest rate as sought by restrictive monetary policy would raise firm's costs, discourage business growth, and make it more expensive for

individuals to finance home mortgages and the purchase cross-sectional study of some of other durable goods such as autos and appliances.

b) Money Supply: Reduction in money supply as used in restrictive monetary policy reduces the supply of funds for working capital and expansion of business.

Other Factors/Indicators
a) Protectionism: Tariff and Non-Tariff Barriers

b) Govt. Subsidy
c) Thrust Sector
d) Per capita GDP
e) Consumer Price Index/Inflation

f) Population Growth Rate
g) Foreign Exchange Rate
h) Rate of Urbanization
i) Literacy rate
j) War
k) Political uncertainty

Economic and stock market outlooks for a given country helps an analyst allocate assets within a global portfolio. Changes in economic expectations would result in underweighting or overweighting any particular economy or sector.

Industry Analysis
Industry can be termed as the set of companies producing same goods or services and competing against each other.

of risk-return profiles. Thus, in making our investment decisions, industry analysis has a profound impact.

The following factors can be considered while analyzing an industry:

a) Industry Life Cycle: Each industry goes through a four-stage life cycle and industry position in a life cycle can help forecast its sales.

1) Introduction
2) Growth
3) Maturity
4) Decline

b) Gross Margin
c) Net Margin
d) Growth in EPS
e) Earnings Multiplier (PE Ratio)

f) Dividend Yield:
g) Dividend Pay-out Ratio
h) P/BV Ratio

Words of Caution
1. Future industry performance may not be same as past performance.

2. Rates of return of firms within industries vary, so company analysis is a necessary follow-up to industry analysis.

3. Return of an industry may be high, but it comes with inherent risk.

The following table shows a cross-sectional study of some leading industries in Bangladesh.

Industry	Gross Margin (%)	Sales Growth (%)	Dividend Yield (%)	Sector PEX
Cement	20	5.7	6.94	9.33
Ceramic Tableware	21	11.0	8.41	14.60
Commercial Bank	15.01	2.56	4.60	
Drycell Batteries	21	18.0	15.16	10.41
General Insurance	12	9.39	9.36	6.79
Household Durables	32	11.4	9.30	11.69
Ind. & Medical Gas	38	13.0	4.02	13.97
Leasing	4	22.6	6.43	7.52
Leather	15	6.4	9.13	10.05
Life Insurance	41.7	7.47		
Pharmaceuticals	30	10.7	7.00	7.28
Real Estate	35	7.5	15.27	5.71
Retail Electric Appliances	13	Declining	3.77	18.42
Tea	34	3.0	4.61	9.38
Textiles	17	4.54	7.77	8.96

PEX, Dividend Yield are calculated based on Closing Rate of August 31, 1999

Annual Growth rates are calculated for the period 1993-98

Financial Analysis of Company A

Tahsina Rahman

FINANCIAL analysis is important to understand why a company is performing the way it is and where it is heading. There are different parties who are concerned about the financial analysis and the valuation of a company: a) Shareholders, b) Potential buyers, c) Management, d) Creditors, e) Vendors, f) Customers and g) Employees. Shareholders' intentions are to maximize the value of their investments. Potential buyers may be interested to continue the operations of the acquired company or to break the company into pieces and sell to make profit. Management's objective is to maximize a company's value, it must take advantage of the strengths and simultaneously, correct its weaknesses. Creditors need to ensure the company has a capacity to repay debt with interest as per schedule. Vendors need customers with strong cash flow, who can pay on time and will continue operations so that are able to buy products from them in future. Customers also need products to be supplied on time and if possible then on suppliers' credit. Financial analysis is important for employees to understand their job security and career path in the company. In this article we are focussing on shareholders point of view.

Financial analysts need to visit companies, factories and meet decision-makers of the companies to collect information required for analysis. They also need to be updated on the industry, economy and politics as well. Let us analyze Company A:

Assumption of Company A:

- Company A is an export oriented company.
- The company raised money by 1:1 rights issue @ Tk100/- in January 1997 to double its production capacity.
- Expected date of commencing commercial production in the new unit was March 1997, however delayed and started in September 1997.
- Capacity utilization rate is 70%.
- Corporate tax rate is 35%, but the company enjoys 50% tax exemption for being an export oriented company.
- Current share price is Tk130/-. For simplicity we are assuming that 1998 year end price was also Tk130/-.
- Industry P/E is 6x.

Income Statement

	Actual (Taka in million)			% of Sales		
	1996	1997	1998	1996	1997	1998
Sales	1,115	1,219	1,650	100.0	100.0	100.0
Cost of Goods Sold	(973)	(1,057)	(1,412)	(87.3)	(86.7)	(85.6)
Depreciation	(9)	(11)	(29)	(0.8)	(0.9)	(1.8)
Gross Profit	133	151	209	11.9	12.4	12.7
Selling Expenses	(8)	(14)	(16)	(0.7)	(1.1)	(1.0)
General & Administrative Expenses	(16)	(23)	(29)	(1.4)	(1.9)	(1.7)
Depreciation	(6)	(6)	(20)	(0.5)	(0.5)	(1.2)
Earning Before Interest and Tax (EBIT)	103	108	145	9.2	8.9	8.8
Interest Expenses	(49)	(78)	(86)	(4.4)	(6.4)	(5.2)
Other expenses	(1)	(2)	(2)	(0.1)	(0.2)	(0.1)
Other Income	-	6	1	-	0.5	0.1
Earning Before Tax (EBT)	53	34	58	4.8	2.8	3.5
Provision for Taxation	(10)	(6)	(6)	(0.9)	(0.5)	(0.4)
Net Profit After Tax	43	28	52	3.9	2.3	3.2

Balance Sheet

	Actual (Taka in million)			% of Total Assets		
	1996	1997	1998	1996	1997	1998
Current Assets						
Cash & Bank Balances	5	15	3	0.4	1.1	0.2
Accounts Receivables for Goods	214	248	413	19.1	18.8	25.5
Inventories	763	834	957.16	68.1	63.2	59.3
Total	982	1,098	1,373	87.6	83.2	85.0
Fixed Assets						
Investments	34	34	34	3.0	2.6	2.1
Total Assets	1,121	1,319	1,615	100.0	100.0	100.0
Current Liabilities						
Overdraft & Bank Loans	667	773	970	61.3	58.6	60.1
Accounts Payable for Goods	152	167	249	13.6	12.7	15.4
Dividend Payable	12	32	32	1.1	2.4	2.0
Provision for Taxation	13	14	11	1.2	1.1	0.7
Total	864	996	1,262	77.1	74.8	78.1

Total Liabilities	864	996	1,262	77.1	74.8	78.1
Share Capital	80	160	160	7.1	12.1	9.9
Reserves & Surplus	177	173	193	15.8	13.1	12.0
Shareholders' Fund	257	333	353	22.9	25.2	21.9
Total Liabilities and Shareholders' Fund	1,121	1,319	1,615	100.0	100.0	100.0

Cash Flow Taka in million

	1997	1998
Net Profit After Tax	28	52
Depreciation	17	49
Change in Accounts Receivable	(34)	(165)
Change in Inventory	(71)	(123)
Change in Accounts Payable	15	82
Change in Accrued Liabilities	1	(3)
Net Cash Provided by Operating Activities	(44)	(108)
Change in Fixed Assets	(100)	(69)
Net Cash Used in Investing Activities	(100)	(69)
Change in Short Term Financing	96	197
Change in Equity	80	0
Dividends Paid	(12)	(32)
Net Cash from Financing Activities	154	165
Net Increase in Cash	10	(12)
Actual Change in Cash	10	(12)

Ratios

	1996	1997	1998
# of Shares (million)	0.800	1.600	1.600
EPS (Tk)	53.75	17.50	32.50
Price (Tk)	200.00	160.00	130.00
P/E (x)	3.72	9.14	4.00
Book Value per Share (Tk)	321.25	208.13	220.63
Price to Book Value (x)	0.62	0.77	0.59
Dividend (Tk)	15.00	20.00	20.00
Yield (%)	7.50	12.50	15.38
ROE (%)	16.73	8.41	14.73
ROA (%)	3.84	2.12	3.22
Debt/Equity (%)	267.32	232.13	274.69
Effective Tax Rate (%)	18.87	17.65	10.34

Analysis - 1997

- 9% sales growth was volume driven and lower than market expectation due to delay in production in new unit.
- Selling, general and administration (SG&A) expenses increased from 2.1% to 3.0% of sales to support the expansion and pipeline orders.
- Interest expenses increased by 59% due to inefficient working capital management, although year end figure shows stable efficiency.
- Delivered production reduced NPAT margin.
- Company A raised Tk80m by issuing rights share.
- Cash increased by Tk10m as the capacity expansion was not completed by the end of 1997.
- Fixed Assets increased by Tk83m.

Analysis - 1998

- Company A achieved a sales growth of 35% following the expansion program.
- Gross profit margin increased due to reduction of raw material prices.
- Addition of fixed assets increased depreciation expenses by Tk32m in 1998.
- Efficiently controlled SG&A expenses reduced by 0.3% of sales.
- Effective tax rate declined by 7.3% due to tax holiday, as a result NPAT margin increased to 3.2% from 2.3%.
- Accounts receivable in days increased from 74 to 91 due to increased credit terms to capture market for expansion.
- Inventory in days reduced from 288 to 247 to meet pipeline orders.
- Overdraft increased for working capital finance.
- Company A managed to increase accounts payable to reduce bank borrowing.

Sensitivity Analysis

Small investors do not have an access to information required for financial analysis. They have limited information from newspapers, magazines, annual reports and prospectus. Using own judgment and available information investors are able to do simplified analysis called 'What if Analysis'. The following is an actual income statement of Company A for 1998, management prepared projections for 1999 and then from conservative point of view a 'What if Analysis' of 1999 projections:

	Income Statement (Tk in million)			% of Sales		
	Actual 1998	Projected 1999	Conservative 1999	Actual 1998	Projected 1999	Conservative 1999
Sales	1,650	2,475	2,063	100.0	100.0	100.0
Cost of Goods Sold	(1,412)	(2,079)	(1,777)	(85.6)	(84.0)	(85.6)
Depreciation	(29)	(29)	(29)	(1.8)	(1.2)	(1.4)
Gross Profit	209	367	264	12.7	14.8	12.8
Selling Expenses	(16)	(20)	(21)	(1.0)	(0.8)	(1.0)
General & Administrative Expenses	(28)	(40)	(35)	(1.7)	(1.6)	(1.7)

Depreciation	(20)	(20)	(20)	(1.2)	(0.8)	(1.0)
Earning Before Interest and Tax (EBIT)	145	288	188	8.8	11.6	9.1
Interest Expenses	(66)	(120)	(120)	(5.2)	(4.9)	(5.8)
Other expenses	(2)	(4)	(4)	(0.1)	(0.2)	(0.2)
Other Income	1	7	-	0.1	0.3	-
Earning Before Tax (EBT)	58	170	64	3.5	6.9	3.1
Provision for Taxation	(6)	(17)	(13)	(0.4)	(0.7)	(0.6)
Net Profit After Tax	52	153	51	3.2	6.2	2.5

	Actual 1998	Projected 1999	Conservative 1999
# of Shares (m)	1,600	1,600	1,600
EPS (Tk)	32.50	95.74	31.89
Price (Tk)	130.00	130.00	130.00
P/E (x)	4.00	1.36	4.08
Dividend payout ratio (%)	61.54	36.56	60.00
Dividend (Tk)	20.00	35.00	19.14
Yield (%)	15.38	26.92	14.72

Assumptions for Sensitivity Analysis

	Company Projections	What if analysis
Sales growth	50% due to capital expansion	25%. In 1998 the company already achieved 35% sales growth. From conservative perspective, we believe it should at least increase sales by 25%.
Cost of Goods Sold	84% of sales.	85.8% of sales, only 0.2% of sales higher than last year.
Depreciation	29m	29m (no change to make the analysis simple)
Selling Expenses	0.8% of sales	1% of sales (Same as last year. In 1997 and 1998 company A already spent enough to capture new market for additional sales.)
General & Administrative Expenses	1.6% of sales	1.7% of sales (Same as last year)
Depreciation	20m	20m (No change)
Interest Expenses	120m	120m (No change)
Other expenses	4m	4m (No change)
Other Income	7m	0 (This is not the main source of income so we assume it to be nil from conservative point of view.)
Provision for Taxation	10% of earning before tax (same as last year)	20% of earning before tax. (What if the government increases tax rate or reduces tax benefits.)
Dividend (Tk)	35	20. (Based on 60% dividend pay-out ratio i.e., if net profit is Tk100 then dividend would be Tk60.)

After doing this conservative analysis, we have derived that in 1999 company A will make profit and pay dividend at least the same as last year. We have calculated the down side risk. The company will obviously try to meet its goal and even if the management achieves 50% of their budgeted net profit, it will be higher than our expectation. By doing this kind of simple analysis small investors can decide whether they should buy the shares at current price.

At the price of Tk130, I would recommend to BUY.

Problems of Financial Analysis In Bangladesh Share Market: Impact of Subjective/Qualitative Factors

by M. Minhaz Zia

WHY we need Analysis for Investment?

Efficient Frontier:

We need financial analysis simply because our investible surplus or resources both for individual and institutions are limited and there are several alternative investment opportunities available with a matrix of varying return potentials along with varying degree of risk associated with each. Our objective as a rational investor is to pick up the investment, be it in individual asset or portfolio construction, offering the highest return at the acceptable level of risk or alternatively lowest risk for a desirable return. Therefore in any investment decision you have to consider or analyze both risk and return. Otherwise you will be left with an investment which is sub-optimal in terms of results.

Types of Analysis
There are basically two types of analyses practiced in the market

Technical Analysis

Fundamental Analysis

Technical Analysis

Technical Analyst base

his trading decision on examination of prior price and volume data to determine the recurrent and predictable pattern in the movement of individual security or market as a whole to enhance return with the basic assumption that 'market is its own best predictor'.

Fundamental Analysis

Fundamental Analyst on the other hand makes an extensive use of company, industry and macro-economy data and accounting information to make estimate of future earning prospect of a security. Such estimate ordinarily incorporates judgmental assessment based on insights the analyst believes he has gained ahead of other market participants. The key premise of fundamental analysis is that each security has an 'intrinsic value' and an appropriate study of data information will reveal whether the security is

fairly valued, undervalued or overvalued.

Which Analysis: Efficient Market Hypothesis (EMH):

What analysis is appropriate, to some extent depends on the analysts view about the efficiency level of the market not necessarily operationally but informationally. Generally efficient market hypothesis states that in an informationally efficient market all relevant information are quickly and get reflected in the price movement. However, there are three versions of it:

Weak Form

Semi-Strong Form

Strong Form

Weak Form

In its weak form EMH states that all past data regarding a given security is already reflected in the current price. Hence such information is of no value and cannot be used for predicting future price. This directly challenges the technical analysis.

Semi-Strong