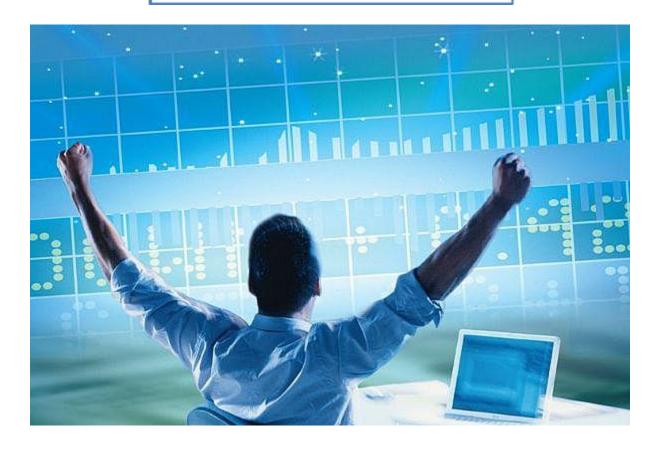


# **Chapter One**

# **INTRODUCTION**





### 1.0 Introduction

Stock market is the reflector of and countries economy system, and a broker house is a reflector of stock market. Broker house is a licensed buyer and seller of stock and securities for there clients. As a member of DSE the broker house does this service for commission on each transaction. That means more transaction more commission for houses and more wealth for it.

Before 1998 broker houses were not so active because people used to sell and buy there paper share direct to buyer or seller hand to hand. This hand to hand transaction was really a slow process and full of hustle. But after establishment of CDBL (Central Depository of Bangladesh Limited) it was just a matter of click. Since then investor in share market is increasing day by day, and activity of brokerage house is also increasing. Its not that this increasing activity only bring wealth for brokerage houses there is also enormous number of problem. Because houses have to deal with thousands of people every day and every one have there own needs and wants. In my whole internship period I have tried to identify problem which faces the brokerage houses and the future prospect of a brokerage firm on the perspective Stock and bond Ltd.

## 1.1 Significance Of The Report

This report is on the overall progress and performance measurement of brokerage houses in Bangladesh. It is obvious that this report can not discuss all the aspects of brokerage house because the basis of this report is only one company. But because it is one of the leading brokerage firms in Bangladesh Member of DSE, anyway it can give us an understanding of how the brokerage houses are performing in Bangladesh.

# 1.2 Background Of The Internship

BUS 498 (Internship), being a mandatory course offered by the Eastern University, bears the basic ideology to introduce the young graduates to the work-world as soon as they reach the completion of undergraduate studies to make them efficient and eligible for being among the leaders of tomorrow.



# 1.3 Objective Of The Report

The report objective focus on two aspects:

- 1.3.1 The Broad objective and
- 1.3.2 The Specific objective

# 1.3.1 Broad Objective

This part of the report encompasses a brief rundown on the various functions and operations of the capital Market of BRAC EPL Stock Brokerage Ltd. I was allowed to have a practical orientation in every department of the Stock Trading, Customer Care, and Portfolio Management of BRAC EPL Stock Brokerage. Thus, all practical information used in this is more or less collected through the day to day orientation.

# 1.3.2 Specific Objective

Apart from the organizational and the project parts, the report will also contains some specific objectives – to know about the historical background of the merchant banking of our country and the current status of the stock market of Bangladesh.

# 1.4 Methodology

The paper has been written on the basis of information collected from primary and secondary sources. The primary information has been collected from the Institutional and as well as some general clients of the BRAC EPL Stock Brokerage Ltd.

The secondary information has been collected from the BRAC EPL Stock Brokerage Ltd.'s records, corporate newsletter, branches manuals, different websites and various publications in it.

Some opinions and ideas have been incorporated in the paper through interactive sessions and interviews with the top management and mid level executives of the organization.



# 1.5 Limitations Of The Study

It is observable that almost all studies have some boundaries. During performing my work, I had to face a number of limitations. There were some confidential issues like financial issues, for which they were very strict and careful in revealing those information. Although they have provided the financial statement but only the methods the numbers in the statement were changed. Lack of enough materials like books, journals and other papers capture me for severe brainstorming during working this report.



# **Chapter Two**

# **COMPANY PROFILE**





### 2.0 COMPANY PROFILE

# 2.1 Background Of BRAC EPL Stock Brokerage Ltd.

BRAC EPL Stock Brokerage Limited is one of the leading stock brokers in the country. The company offers brokerage services to international institutions, domestic institutions, retail clients and non-resident Bangladeshis (NRBs). It is also the pioneer and leader in facilitating foreign portfolio investments in Bangladesh and boasts one of the best Equity Research teams of the country.

Previously known as Equity Partners Securities Limited (EPSL), the company was formed in early 2000 as a brokerage house licensed by the Securities and Exchange Commission of Bangladesh. In August 2009, BRAC Bank limited acquired 51% of its equity and renamed the company as BRAC EPL Stock Brokerage Limited.

BRAC EPL Stock Brokerage Limited has membership at both of the country's stock exchanges; the Dhaka Stock Exchange (DSE) and the Chittagong Stock Exchange (CSE). Presently there are 7branches, of which three are located in Dhaka, one in Chittagong, one in Comilla and one in Chowmuhani, and one in Sylhet. BRAC EPL STOCK BROKERAGE LTD. plans to open one branch in Bogra.

# 2.2 About The Sponsor

BRAC Bank Limited is one of the fastest growing banks in Bangladesh. A member of BRAC Enterprises, the Bank operates under a "double bottom line" agenda where profit and social responsibility go together as it strives towards a poverty-free, enlightened Bangladesh. BRAC Bank focuses on pursuing unexplored market niches in the Small and Medium Enterprise Business, which has remained largely untapped. Since inception in July 2001, the Bank's footprint has grown to 100 outlets (branches, SME Service Centers), 429 SME unit offices and 300 ATM sites across the country. Its customer base has expanded to include more than 500,000



deposit accounts and 187,000 advance accounts till December 2008. In the years ahead BRAC Bank expects to introduce many new services and products as well as add a wider network of SME unit offices, Retail Branches and ATMs across the country.

### 2.3 Gulshan Branch of BRAC EPL

Though initially BRAC EPL Stock brokerage adopted a single platform and centralized approach to support its full operation, but soon it expanded it wing through a commencing a new branch at Gulshan to provide broker and merchant banking service at Gulshan area to achieve BRAC EPL business goal. This branch operation was inaugurated 25<sup>th</sup> April with only one customer service executive to represent its service to the door of this areas client.

From the Perspective of BRAC EPL this branch created marketplace where it can display its goods"-the BRAC EPL's products and services-while building a stronger relationship with clients. This branch continuing to be a avenue of growth for this organization.

### 2.4 Product and Services

Despite our late start, we always stay in the top five among 250 brokers in the market. With a young but experienced team of traders, we offer the best trade execution to our clients. We offer the following services:

- Open Beneficiary Accounts (BO) for individuals
- Provide margin lending
- Trade for institutional investors, both domestic and international
- Provide stop-gap liquidity support, especially to foreign institutional investors
- Assist to create and follow an investment strategy
- Provide corporate finance advisory services
- Facilitate investment by the Non-resident Bangladeshis (NRBs)



# 2.5 Vision Of The Company

Their vision is to be one of the respected leading brokerage houses in the country and to follow ethical business practices.

## 2.6 Mission Of The Company

Create maximum possible values for all the stakeholders by adhering to the highest ethical standards.

#### For the Company:

Relentless pursuit of customer satisfaction through delivery of top quality services.

#### For the Shareholders:

Maximize shareholders' wealth through a sustained return on the investment.

#### For the employees:

Provide job satisfaction by making BRAC EPL Stock Brokerage's a center of excellence with opportunity of career development.

**For the society**: Contribute to the well-being of the society, in general, by acting as a responsible corporate citizen.

### 2.7 Goal

"Long term maximization of Stakeholders' value"

## 2.8 Corporate Philosophy

Discharge the functions with proper accountability for all actions and results and bind to the highest ethical standards.



# 2.9 Board of Director



Mr. Muhammad A. (Rumee) Ali Chairman



Saiful Islam Vice Chairman



Mr. Syed Mahbubur Rahman Director



Mr. Mohammad Mamdudur Rashid Director



# 2.10 The Management



**Mohammed Rahmat Pasha** 

Acting Chief Executive Officer











**Mr. Mohammad Menhaz Uddin** 

Mr. Aminul Haque

**Arif Kibria** 

Nagma **Mahmood** 

**Suraiya Zerin** 

**Chief Operating** Officer

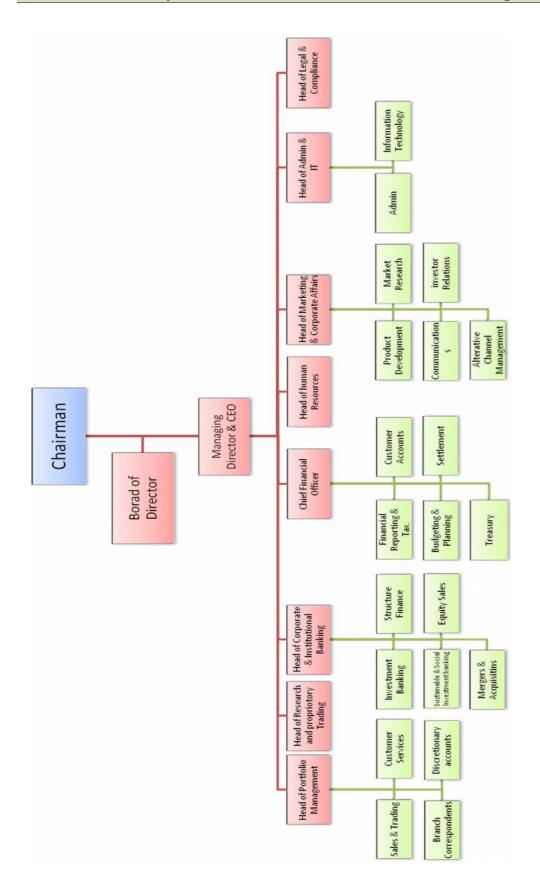
Head of Capital Markets

Head of Finance Head of HR, Admin & Corporate Affairs.

Head of Internal Control & Compliance



# 2.11 Hierarchy of BRAC EPL Stock Brokerage Ltd.





# 2.12 SWOT Analysis of BRAC EPL Stock Brokerage Ltd

### **STRENGTH**

Main strengths of BRAC EPL are identified as follows:

- A versatile management team with the largest track record in the market, best execution skills and the highest professional standards
- Use of modern technology in providing services.
- Ensures best quality and professional services.
- Experienced in transacting over 80% of foreign portfolio investment
- Well trained traders recruited from the top business schools.
- Special focus on institutional and retail investors.
- Wide range of branches spreading across the country.
- A unique blend of fundamental and technical equity research

### **WEAKNESS**

There are some weaknesses of BRAC EPL also such as follows:

- Huge customer pressure can't control every time by limited human resources.
- Command and control may be little difficult due to wide distribution channel.



#### **OPPORTUNITY**

Opportunity means where the company can operate profitably. The Opportunities of BRAC EPL are as follows:

- The present capital market size is very large and there is always scope to expand our corporate service.
- Day by day number of customer is increasing.
- BRAC EPL has the scope to make service contract with the private organizations.
- Customers are very much aware about capital market.

#### **THREAT**

Every business has some threats. BRAC EPL face some threats such as-

- Huge market competition is a big threat for BRAC EPL,
- Dhaka Stock Exchange & Chittagong Stock Exchange frequently change their rules & regulation that have a great affect on the capital market as well as their business,
- In Bangladesh the capital market is not efficient that's why it creates complexity in doing business,
- Inclusion of new government rules and regulations may hamper their business objective.



# **Chapter Three**

# PERFORMANCE MEASUREMENT





### 3.0 Performance Measurement System

Performance measurement is a fundamental building block of TQM and a total quality organisation. Historically, organisations have always measured performance in some way through the financial performance, be this success by profit or failure through liquidation.

However, traditional performance measures, based on cost accounting information, provide little to support organisations on their quality journey, because they do not map process performance and improvements seen by the customer. In a successful total quality organisation, performance will be measured by the improvements seen by the customer as well as by the results delivered to other stakeholders, such as the shareholders.

This section covers why measuring performance is important. This is followed by a description of cost of quality measurement, which has been used for many years to drive improvement activities and raise awareness of the effect of quality problems in an organisation.

A simple performance measurement framework is outlined, which includes more than just measuring, but also defining and understanding metrics, collecting and analysing data, then prioritising and taking improvement actions. A description of the balanced scorecard approach is also covered.

### 3.1 Findings and Analysis

# 3.1.1 Financial Statement Analysis

Financial statement analysis is defined as the process of identifying financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and the profit and loss account.

There are various methods or techniques that are used in analyzing financial statements, such as comparative statements, schedule of changes in working capital, common size percentages, funds analysis, trend analysis, and ratios analysis.

Financial statements are prepared to meet external reporting obligations and also for decision making purposes. They play a dominant role in setting the framework of managerial decisions. But the information provided in the financial statements is not an end in itself as no meaningful conclusions can be drawn from these statements alone. However, the information provided in the financial statements is of immense use in making decisions through analysis and interpretation of financial statements.



#### **Tools and Techniques of Financial Statement Analysis:**

Following are the most important tools and techniques of financial statement analysis:

- 1. Horizontal and Vertical Analysis
- 2. Ratios Analysis

# 3.1.2 Horizontal Analysis

#### **Definition and Explanation of Horizontal:**

Comparison of two or more year's financial data is known as horizontal analysis, or trend analysis.

Horizontal analysis is facilitated by showing changes between years in both dollar and percentage form as has been done in the example below. Showing changes in dollar form helps the analyst focus on key factors t hat have affected profitability or financial position. Observe in the example that sales for 2002 were up \$4 million over 2001, but that this increase in sales was more than negated by a \$4.5million increase in cost of goods sold. Showing changes between years in percentage form helps the analyst to gain perspective and to gain a feel for the significance of the changes that are taking place. For example a \$1 million increase in sales is much more significant if the prior year's sales were \$2 million than if the prior year's sales were \$20 million. In the first situation, the increase would be 50% that is undoubtedly a significant increase for any firm. In the second situation, the increase would be 5% that is just a reflection of normal progress.

#### **Example of Horizontal Analysis:**



#### **Balance Sheet:**

Comparative Balance Sheet December 31, 2010, and 2009 (dollars in thousands)				
		,	Increase (	•
Acceto	2010	2009	Amount	Percent
Assets Current Assets:				
Cash	\$1,200	\$2,350	\$(1,150) <b>*</b>	(48.9)%
Accounts receivable	6,000	4,000	2000	50%
Inventory	8,000	10,000	(2000)	
Prepaid Expenses	300	120	180	150.0%
Total current assets	\$15,500	\$16,470	(970)	(5.9)%
Property and equipment:				
Land	4,000	4,000	0	0%
Building	12,000	8,500	3,500	41.2%
Total property and equipment	16,000	12,500	3,500	28%
Total assets	31,500 =====	28,970 =====	2,530 =====	8.7% =====
Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payables	\$5,800	\$4,000	1800	45%
Accrued payables Notes payables	900 300	400 600	500 (300)	125% (50%)
Notes payables			(300)	(5070)
Total current liabilities	7,000	5,000	2,000	40%
Long torm liabilities:				
Long term liabilities: Bonds payable 8%	7,500	8,000	(500)	(6.3)%
Donae payable 678				
Total long term liabilities	7,500	8,000	(500)	6.3%
Total Liabilities	\$14,500	13,000	1,500	(11.5)%
Stock holders equity:		•	•	` ,
Preferred stock, 100 par, 6%, \$100	\$2,000	\$2,000	0	0%
liquidation value				0%
Common stock, \$12 par Additional paid in capital	6,000 1,000	6,000 1,000	0 0	0% 0%
Additional paid in capital				
Total paid in capital	9,000	9,000	0	0%
Retained earnings	8,000	6,970	1,030	14.8%
Total stockholders' equity	17,000	15,970	1,030	6.4%
Total liabilities and stockholders' equity	\$31,500	\$28,970	\$2,530	8.7%
	====	=====	=====	=====



\*Since we are measuring the change between 2009 and 2010, the dollar amounts for 2009 become the base figure for expressing these changes in percentage form. For example, cash decreased by figures \$1,150 between 2001 and 2010. This decrease expressed in percentage form is computed as follows:

$$$1,150 \div $2,350 = 48.9\%$$

Other percentage figures in this example are computed by the same *formula*.

#### **Income Statement**

Comparative income statement and reconciliation of retained earnings For the year ended December 31, 2010, and 2009 (dollars in thousands)				
· ·	2010	2009	Increase ( Amount	Decrease) Percent
Sales Cost of goods sold		\$48,000 31,500	\$4,000 4,500	8.3%
Gross margin	16,000	16,500	(500)	(3.0)%
Operating expenses: Selling expenses Administrative expense	7,000 5,860	6,500 6,100	500 (240)	7.7% (3.9)%
Total operating expenses	12,860	12,600	260	2.1%
Net operating income Interest expense	3,140 640	3,900 700	(760) (60)	(19.5)% (8.6)%
Net income before taxes Less income taxes (30%)	2,500 750	3,200 960	(700) (210)	
Net income	1,750	2,240	\$ (490)	21.9%
Dividends to preferred stockholders, \$6 per share (see balance sheet above)	120	120		
Net income remaining for common stockholders	1,630	2,120		
Dividend to common stockholders, \$1.20 per share	600	600		
Net income added to retained earnings Retained earnings, beginning of year	1,030 6,970	1,520 5,450		
Retained earnings, end of year	\$ 8,000	\$ 6,970 =====		





# 3.1.3 Vertical Analysis

#### **Definition and Explanation of Vertical Analysis**

analysis is the procedure of preparing and presenting common size Vertical statements. Common size statement is one that shows the items appearing on it in percentage form as well as in dollar form.

Each item is stated as a percentage of some total of which that item is a part. Key financial changes and trends can be highlighted by the use of common size statements.

Common size statements are particularly useful when comparing data from different companies. For example, in one year, Wendy's net income was about \$110 million, whereasMcDonald's was \$1,427 million. This comparison is somewhat misleading because of thedramatically different size of the two companies. To put this in better perspective, the net income figures can be expressed as a percentage of the sales revenues of each company, Since Wendy's sales revenue were \$1,746 million and McDonald's were \$9,794 million, Wendy'snet income as a percentage of sales was about 6.3% and McDonald's was about 14.6%.

**Example of vertical analysis:** 



#### **Balance Sheet:**

	mparative B er 31, 2010, a rs in thousa	nd 2009		
(dona	2010	2009	Commo Percen 2010	
Assets				
Current assets:	<b>#</b> 4 000	<b>*</b> • • • • •	0.00/	0.40/
Cash	\$ 1,200	\$ 2,350	3.8%	8.1%
Accounts receivable, net Inventory	6,000 8,000	4,000 10,000	19.0% 25.4%	13.8% 34.5%
Prepaid expenses	300	120	1.0%	0.4%
Topala expenses			1.070	0.470
Total current assets	15,500	16,470	49.2%	56.9%
Property and equipment:				
Land	4,000	4,000	12.7%	13.8%
Building and equipment	12,000	8,5000	38.1%	29.3%
Total property and equipment	16,000		50.8%	43.1%
Total assets	\$ 31,500 =====			100.0%
Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payable	\$ 5,800	\$ 4,000	18.4%	13.8%
Accrued payable	900	400	2.9%	1.4%
Notes payable, short term	300	600	1.0%	2.1%
Total current liabilities	7,000	5,000	22.2%	17.3%
Long term liabilities:				
Bonds payable, 8%	7,500	8,000	23.8%	27.6%
Total liabilities	14,500	13,000	46.0%	44.9%
Stockholders' equity:				
Preferred stock, \$100, 6%, \$100	2,000	2,000	6.3%	6.9%
liquidation value				
Common stock, \$12 par	6,000	6,000	19.0%	20.7%
Additional paid in capital	1,000 	1,000	3.2%	3.5%
Total paid in capital	9,000	9,000	28.6%	31.1%
Retained earnings	8,000	6,970	25.4%	24.1%
Total stockholders equity	17,000	15,970	54.0%	55.1%
	\$ 31,500	\$ 28,970	100.0%	100.%
	=====	=====	=====	=====



\*Each asset in common size statement is expressed in terms of total assets, and each liability and equity account is expressed in terms of total liabilities and stockholders' equity. For example, the percentage figure above for cash in 2010 is computed as follows:

$$[\$1,200 / \$31,500 = 3.8\%]$$

Notice from the above example that placing all assets in common size form clearly shows the relative importance of the current assets as compared to the non-current assets. It also shows that the significant changes have taken place in the composition of the current assets over the last year. Notice, for example, that the receivables have increased in relative importance and that both cash and inventory have declined in relative importance. Judging from the sharp increase in receivables, the deterioration in cash position may be a result of inability to collect from customers.

The main advantages of analyzing a balance sheet in this manner is that the balance sheets of businesses of all sizes can easily be compared. It also makes it easy to see relative annual changes in one business.

#### **Income Statement:**

Another application of the vertical analysis idea is to place all items on the income statement in percentage form in terms of sales. A common size statement of this type of an electronics company is shown below:

Common-Size Comparative income statement For the year ended December 31, 2010, and 2009 (dollars in thousands)					
, i		,	Common-Size Percentage		
	2010	2009	2010	2009	
Sales	\$52,000	\$48,000	100.0%	100.0%	
Cost of goods sold	36,000	31,500	69.2% 	65.6%	
Gross margin	16,000	16,500 	30.8%	34.4%	
Operating expenses:					
Selling expenses	7,000	6,500	13.5%	13.5%	
Administrative expense	5,860 	6,100 	11.3% 	12.7%	
Total operating expenses	12,860	12,600	24.7%	26.2%	
Net operating income	3,140	3.900	6%	8.1%	
Interest expense	640	700	1.2%	1.5%	
Net income before taxes	2,500	3,200	4.8%	6.7%	
Income tax (30%)	750 	960	1.4%	2.0%	
Net income	\$ 1,750 =====	\$2,240 =====	3.4%	4.7%	



\*Note that the percentage figures for each year are expressed in terms of total sales for the year. For example, the percentage figure for cost of goods sold in 2010 is computed as follows:

$$[(\$36,000 / \$52,000) \times 100 = 69.2\%]$$

By placing all items on the income statement in common size in terms of sales, it is possible to see at a glance how each dollar of sales is distributed among the various costs, expenses, and profits. And by placing successive years' statements side by side, it is easy to spot interesting trends. For example, as shown above, the cost of goods sold as a percentage of sales increased from 65.6% in 2001 to 69.2% in 2002. Or looking at this form a different view point, the gross margin percentage declined from 34.4% in 2001 to 30.8% in 2002. Managers and investment analysis often pay close attention to the gross margin percentage since it is considered a broad gauge of profitability. The gross margin percentage is computed by the following formula:

#### Gross margin percentage = Gross margin / Sales

The gross margin percentage tends to be more stable for retailing companies than for other service companies and for manufacturers. Since the cost of goods sold in retailing exclude fixed costs. When fixed costs are included in the cost of goods sold figure, the gross margin percentage tends to increase of decrease with sales volume. The fixed costs are spread across more units and the gross margin percentage improves.

While a higher gross margin percentage is considered to be better than a lower gross margin percentage, there are exceptions. Some companies purposely choose a strategy emphasizing low prices and (hence low gross margin). An increasing gross margin in such a company might be a sign that the company's strategy is not being effectively implemented.

Common size statements are also very helpful in pointing out efficiencies and inefficiencies that might other wise go unnoticed. To illustrate, selling expenses, in the above example of electronics company, increased by \$500,000 over 2001. A glance at the common-size income statement shows, however, that on a relative basis, selling expenses were no higher in 2002 than in 2001. In each year they represented 13.5% of sales.



# 3.1.4 Accounting Principles and Assumptions

The accounting data in financial statements are prepared by the firm's management according to a set of standards, referred to as generally accepted accounting principles (GAAP). The financial statements of a company whose stock is publicly traded must, by law, be audited at least annually by independent public accountants (i.e., accountants who are not employees of the firm). In such an audit, the accountants examine the financial statements and the data from which these statements are prepared and attest—through the published auditor's opinion—that these statements have been prepared according to GAAP. The auditor's opinion focuses on whether the statements conform to GAAP and that there is adequate disclosure of any material change in accounting principles.

The financial statements are created using several assumptions that affect how we use and interpret the financial data:

- Transactions are recorded at historical cost. Therefore, the values shown in the statements are not market or replacement values, but rather reflect the original cost (adjusted for depreciation, in the case of depreciable assets).
- The appropriate unit of measurement is the dollar. While this seems logical, the effects of inflation, combined with the practice of recording values at historical cost, may cause problems in using and interpreting these values.
- The statements are recorded for predefined periods of time. Generally, statements are produced to cover a chosen fiscal year or quarter, with the income statement and the statement of cash flows spanning a period's time and the balance sheet and statement of shareholders' equity as of the end of the specified period. But because the end of the fiscal year is generally chosen to coincide with the low point of activity in the firm's operating cycle, the annual balance sheet and statement of shareholders' equity may not be representative of values for the year.
- Statements are prepared using accrual accounting and the matching principle. Most businesses use accrual accounting, where income and revenues are matched in timing such that income is recorded in the period in which it is earned and expenses are reported in the period in which they are incurred to generate revenues. The result of the use of accrual accounting is that reported income does not necessarily coincide with cash flows.



Because the financial analyst is concerned ultimately with cash flows, he or she often must understand how reported income relates to a company's cash flows.

- It is assumed that the business will continue as a going concern. The assumption that the business enterprise will continue indefinitely justifies the appropriateness of using historical costs instead of current market values because these assets are expected to be used up over time instead of sold.
- Full disclosure requires providing information beyond the financial statements. The requirement that there be full disclosure means that, in addition to the accounting numbers for such accounting items as revenues, expenses, and assets, narrative and additional numerical disclosures are provided in notes accompanying the financial statements. An analysis of financial statements is therefore not complete without this additional information.
- Statements are prepared assuming conservatism. In cases in which more than one interpretation of an event is possible, statements are prepared using the most conservative interpretation.

The financial statements and the auditors' findings are published in the firm's annual and quarterly reports sent to shareholders and the 10K and 10Q filings with the Securities and Exchange Commission (SEC). Also included in the reports, among other items, is a discussion by management, providing an overview of company events. The annual reports are much more detailed and disclose more financial information than the quarterly reports.

#### There are three basic financial statements:

- Balance sheet
- Income statement
- Cash Flow statement



### 3.1.5 Balance Sheet

The balance sheet is a summary of the assets, liabilities, and equity of a business at a particular point in time—usually the end of the firm's fiscal year. The balance sheet is also known as the statement of financial condition or the statement of financial position. The values shown for the different accounts on the balance sheet are not purported to reflect current market values; rather, they reflect historical costs.

Assets are the resources of the business enterprise, such as plant and equipment that are used to generate future benefits. If a company owns plant and equipment that will be used to produce goods for sale in the future, the company can expect these assets (the plant and equipment) to generate cash inflows in the future.

Liabilities are obligations of the business. They represent commitments to creditors in the form of future cash outflows. When a firm borrows, say, by issuing a long-term bond, it becomes obligated to pay interest and principal on this bond as promised. Equity, also called shareholders' equity or stockholders' equity, reflects ownership. The equity of a firm represents the part of its value that is not owed to creditors and therefore is left over for the owners. In the most basic accounting terms, equity is the difference between what the firm owns—its assets—and what it owes its creditors—its liabilities.

### 3.1.6 Assets

There are two major categories of assets: current assets and noncurrent assets, where noncurrent assets include plant assets, intangibles, and investments. Assets that do not fit neatly into these categories may be recorded as either other assets, deferred charges, or other noncurrent assets.

#### 3.1.7 Current Assets

Current assets (also referred to as circulating capital and working assets) are assets that could reasonably be converted into cash within one operating cycle or one year, whichever takes longer. An operating cycle begins when the firm invests cash in the raw materials used to produce its goods or services and ends with the collection of cash for the sale of those same goods or services. For example, if Fictitious manufactures and sells candy products, its operating cycle begins when it purchases the raw materials for the products (e.g., sugar) and ends when it receives cash for selling the candy to retailers. Because the operating cycle of most businesses is less than one year, we tend to think of current assets as those assets that can be converted into cash in one year. Current assets consist of cash, marketable securities, accounts receivable, and inventories. Cash comprises both currency—bills and coins—and assets that are



immediately transformable into cash, such as deposits in bank accounts. Marketable securities are securities that can be readily sold when cash is needed. Every company needs to have a certain amount of cash to fulfil immediate needs, and any cash in excess of immediate needs is usually invested temporarily in marketable securities. Investments in marketable securities are simply viewed as a short term place to store funds; marketable securities do not include those investments in other companies' stock that are intended to be long term. Some financial reports combine cash and marketable securities into one account referred to as cash and cash equivalents or cash and marketable securities. Accounts receivable are amounts due from customers who have purchased the firm's goods or services but haven't yet paid for them. To encourage sales, many firms allow their customers to—buy now and pay later, || perhaps at the end of the month or within 30 days of the sale. Accounts receivable therefore represents money that the firm expects to collect soon. Because not all accounts are ultimately collected, the gross amount of accounts receivable is adjusted by an estimate of the uncollectible accounts, the allowance for doubtful accounts, resulting in a net accounts receivable figure. Inventories represent the total value of the firm's raw materials, work-in-process, and finished (but as yet unsold) goods. A manufacturer of toy trucks would likely have plastic and steel on hand as raw materials, work-in-process consisting of truck parts and partly completed trucks, and finished goods consisting of trucks packaged and ready for shipping. There are three basic methods of accounting for inventory, including:

- FIFO (first in, first out), which assumes that the first items purchased are the first items sold,
- LIFO (last in, first out), which assumes that the last items purchased are the first items sold, and
- Average cost, which assumes that the cost of items sold, is the average of the cost of all items purchased.

The choice of inventory accounting method is significant because it affects values recorded on the balance sheet and the income statement, as well as tax payments and cash flows.

Another current asset account that a company may have is prepaid expenses. Prepaid expenses are amounts that have been paid but not as yet consumed. A common example is the case of a company paying insurance premiums for an extended period of time (say, a year), but for which only a portion (say, three months) is applicable to the insurance coverage for the current fiscal year; the remaining insurance that is prepaid as of the end of the year is considered an asset. Prepaid expenses may be reported as part of other current liabilities.

Companies'investment in current assets depends, in large part, on the industry in which they operate.



### 3.1.8 Non-current Assets

Noncurrent assets are assets that are not current assets; that is, it is not expected that noncurrent assets can be converted into cash within an operating cycle. Noncurrent assets include physical assets, such as plant and equipment, and nonphysical assets, such as intangibles.

Plant assets are the physical assets, such as the equipment, machinery, and buildings, which are used in the operation of the business. We describe a firm's current investment in plant assets by using three values: gross plant assets, accumulated depreciation, and net plant assets. Gross plant and equipment, or gross plant assets, is the sum of the original costs of all equipment, buildings, and machinery the firm uses to produce its goods and services. Depreciation, as you will see in the next chapter, is a charge that accounts for the using up of an asset over the length of an accounting period; it is a means for allocating the asset's cost over its useful life. Accumulated depreciation is the sum of all the depreciation charges taken so far for all the company's assets. Net plant and equipment, or net plant assets, is the difference between gross plant assets and accumulated depreciation. The net plant and equipment amount is hence the value of the assets—historical cost less any depreciation- according to the accounting books and is therefore often referred to as the book value of the assets.

Intangible assets are the current value of nonphysical assets that represent long-term investments of the company. Such intangible assets include patents, copyrights, and goodwill. The cost of some intangible assets is amortized (—spread out||) over the life of the asset. Amortization is akin to depreciation: The asset's cost is allocated over the life of the asset; the reported value is the original cost of the asset, less whatever has been amortized. The number of years over which an intangible asset is amortized depends on the particular asset and its perceived useful life. For example, a patent is the exclusive right to produce and sell a particular, uniquely defined good and has a legal life of 17 years, though the useful life of a patent—the period in which it adds value to the company-may be much less than 17 years. Therefore the company may choose to amortize a patent's cost over a period less than 17 years. As another example, a copyright is the exclusive right to publish and sell a literary, artistic, or musical composition, and is granted for 50 years beyond the author's life, though its useful life in terms of generating income for the company may be much less than 50 years. More challenging is determining the appropriate amortization period for goodwill. Goodwill was created when one company buys another company at a price that exceeds the acquired company's fair market value of its assets.

A company may have additional noncurrent assets, depending on their particular circumstances. A company may have a noncurrent asset referred to as investments, which are assets that are purchased with the intention of holding them for a long term, but which do not generate revenue or are not used to manufacture a product. Examples of investments include equity securities of another company and real estate that is held for speculative purposes. Other noncurrent assets



include long term prepaid expenses, arising from prepayment for which a benefit is received over an extended period of time, and deferred tax assets, arising from timing differences between reported income and tax income, whereby reported income exceeds taxable income.

Long-term investment in securities of other companies may be recorded at cost or market value, depending on the type of investment; investments held to maturity are recorded at cost, whereas investments held as trading securities or available for sale are recorded at market value. Whether the unrealized gains or losses affect earnings on the income statement depend on whether the securities are deemed trading securities or available for sale.

### 3.1.9 Liabilities

Liabilities, a firm's obligations to its creditors, are made up of current liabilities, long-term liabilities, and deferred taxes.

### 3.1.10 Current Liabilities

Current liabilities are obligations that must be paid within one operating cycle or one year, whichever is longer. Current liabilities include:

- Accounts payable, which are obligations to pay suppliers. They arise from goods and services that have been purchased but not yet paid.
- Accrued expenses, which are obligations such as wages and salaries payable to the employees of the business, rent, and insurance.
- Current portion of long-term debt or the current portion of capital leases. Any portion of long- term indebtedness—obligations extending beyond one year due within the year.
- **Short-term loans** from a bank or notes payable within a year.

The reliance on short-term liabilities and the type of current liabilities depends, in part, on the industry in which the firm operates.



## 3.1.11 Long Term Liabilities

Long-term liabilities are obligations that must be paid over a period beyond one year. They include notes, bonds, capital lease obligations, and pension obligations. Notes and bonds both represent loans on which the borrower promises to pay interest periodically and to repay the principal amount of the loan.

A lease obligates the lessee—the one leasing and using the leased asset—to pay specified rental payments for a period of time. Whether the lease obligation is recorded as a liability or is expensed as lease payments made depends on whether the lease is a capital lease or an operating lease.

A company's pension and post-retirement benefit obligations may give rise to long-term liabilities. The pension benefits are commitments by the company to pay specific retirement benefits, whereas post-retirement benefits include any other retirement benefit besides pensions. such as health care. Basically, if the fair value of the pension plan's assets exceeds the projected benefit obligation (the estimated present value of projected pension costs), the difference is recorded as a long-term asset. If, on the other hand, the plan's assets are less than the projected benefit obligation, the difference is recorded as a long-term liability. In a similar manner, the company may have an asset or a liability corresponding to post- retirement benefits.

### 3.1.12 Differed Taxes

Along with long-term liabilities, the analyst may encounter another account, deferred taxes. Deferred taxes are taxes that will have to be paid to the federal and state governments based on accounting income, but are not due yet. Deferred taxes arise when different methods of accounting are used for financial statements and for tax purposes. These differences are temporary and are the result of different timing of revenue or expense recognition for financial statement reporting and tax purposes. The deferred tax liability arises when the actual tax liability is less than the tax liability shown for financial reporting purposes (meaning that the firm will be paying the difference in the future), whereas the deferred tax asset, mentioned earlier, arises when the actual tax liability is greater than the tax liability shown for reporting purposes.



# 3.1.13 Equity

Equity is the owner's interest in the company. For a corporation, ownership is represented by common stock and preferred stock. Shareholders' equity is also referred to as the book value of equity, since this is the value of equity according to the records in the accounting books. The value of the ownership interest of preferred stock is represented in financial statements as its par value, which is also the dollar value on which dividends are figured. For example, if you own a share of preferred stock that has a \$100 par value and a 9% dividend rate, you receive \$9 in dividends each year. Further, your ownership share of the company is \$100. Preferred shareholders' equity is the product of the number of preferred shares outstanding and the par value of the stock; it is shown that way on the balance sheet. The remainder of the equity belongs to the common shareholders. It consists of three parts: common stock outstanding (listed at par or at stated value), additional paid-in capital, and retained earnings. The par value of common stock is an arbitrary figure; it has no relation to market value or to dividends paid on common stock. Some stock has no par value, but may have an arbitrary value, or stated value, per share. Nonetheless, the total par value or stated value of all outstanding common shares is usually entitled —capital stock or —common stock. Then, to inject reality into the equity part of the balance sheet, an entry called additional paid-in capital is added; this is the amount received by the corporation for its common stock in excess of the par or stated value. If a firm sold 10,000 shares of \$1 par value common stock at \$40 a share, its equity accounts would show:

Common stock, \$1 par value \$10,000

Additional paid-in capital \$390,000

There are actually four different labels that can be applied to the number of shares of a corporation on a balance sheet:

- The number of shares authorized by the shareholders.
- The number of shares issued and sold by the corporation, which can be less than the number of shares authorized
- The number of shares currently outstanding, which can be less than the number of shares issued if the corporation has bought back (repurchased) some of its issued stock.
- The number of shares of treasury stock, which is stock that the company has repurchased.

The outstanding stock is reported in the stock accounts, and adjustments must be made for any treasury stock. The bulk of the equity interest in a company is in its retained earnings. A retained- earnings is the accumulated net income of the company, less any dividends that have not been paid, over the life of the corporation. Retained earnings are not strictly cash and any



correspondence to cash is coincidental. Any cash generated by the firm that has not been paid out in dividends has been reinvested in the firm's assets—to finance accounts receivable, inventories, equipment, and so forth.

### 3.1.14 The Income Statement

An income statement is a summary of the revenues and expenses of a business over a period of time, usually one month, three months, or one year. This statement is also referred to as the profit and loss statement. It shows the results of the firm's operating and financing decisions during that time.

The operating decisions of the company—those that apply to production and marketing—generate sales or revenues and incur the cost of goods sold (also referred to as the cost of sales or the cost of products sold). The difference between sales and cost of goods sold is gross profit. Operating decisions also result in administrative and general expenses, such as advertising fees and office salaries. Deducting these expenses from gross profit leaves operating profit, which is also referred to as earnings before interest and taxes (EBIT), operating income, or operating earnings. Operating decisions take the firm from sales to EBIT on the income statement.

The results of financing decisions are reflected in the remainder of the income statement. When interest expenses and taxes, which are both influenced by financing decisions, are subtracted from EBIT, the result is net income. Net income is, in a sense, the amount available to owners of the firm. If the firm has preferred stock, the preferred stock dividends are deducted from net income to arrive at earnings available to common shareholders. If the firm does not have preferred stock (as is the case with Fictitious and most nonfictitious corporations), net income is equivalent to earnings available for common shareholders. The board of directors may then distribute all or part of this as common stock dividends, retaining the remainder to help finance the firm.

Companies must report comprehensive income prominently within their financial statements. Comprehensive income is a net income amount that includes all revenues, expenses, gains, and losses items and is based on the idea that all results of the firm—whether operating or nonoperating should be reflected in the earnings of the company. This is referred to as the all-inclusive income concept. The all-inclusive income concept requires that these items be recognized in the financial statements as part of comprehensive income.

It is important to note that net income does not represent the actual cash flow from operations and financing. Rather, it is a summary of operating performance measured over a given time period, using specific accounting procedures. Depending on these accounting procedures, net income may or may not correspond to cash flow.



# 3.1.15 Cash Flow Statement

It is a statement, which measures inflows and outflows of cash on account of any type of business activity. The cash flow statement also explains reasons for such inflows and outflows of cash so it is a report on a company's cash flow activities, particularly its operating, investing and financing activities.

248,632,137.00

72,980.00



Accounts payable

### 3.2 Financial Overview of BRAC EPL Stock Brokerage Ltd.

#### **Brac Epl Stock Brokerage Limited** Statement of Financial Position at December 2010 Amounts in BDT Notes 31-Dec-10 31-Dec-09 **Non-Current Assets** Property plant and equipment 38,933,933.00 16,774,413.00 Intangible assets 890,000.00 3,523,919.00 Investment unquoted securities 9,883,510.00 18,633,510.00 Investment in associate company 12,571,651.00 Differed tax assets 991,756.00 **Total current assets** 36,297,923.00 65,904,769.00 262,525,835.00 Current assets Investment in quoted securities 3,070,981,586.00 Loans and advances 231,379,486.00 1,694,001.00 Accounts receivable 49,474,274.00 18,909,004.00 Advances and deposits 27,676,892.00 2,917,501.00 Advance income tax 30,009,001.00 775,098,215.00 Cash and cash equivalents 1,384,117.00 Other receivables 3,642,865,921.00 829,183,991.00 3,708,770,690.00 865,481,914.00 **Equity** Share capital 390,000,000.00 300,000,000.00 Share premium 436,825,951.00 436,825,951.00 Retained earnings 209,293,905.00 104,513,277.00 Shareholders equity 1,036,119,856.00 841,339,228.00 **Non-Current liability** 955,974.00 Finance lease obligations-long term position **Total non-current liabilities** 955,974.00 **Current liabilities Customer deposits** 61,417,666.00 Loans and borrowings 2,072,599,718.00



Other liabilities	216,387,625.00	2,259,268.00
Provision for taxation	72,435,845.00	21,810,438.00
Finance lease obligations-current portion	221,870.00	-
Total current liabilities	2,671,694,861.00	24,142,686.00
Total Liabilities	2,672,650,835.00	24,142,686.00
Total equity and liabilities	3,708,770,691.00	865,481,914.00

# Brac Epl Stock Brokerage Limited Statement Comprehensive income for the year ended 31st December 2010

Amounts in BDT 31-Dec-10

	31-Dec-10	31-Dec-09
Interest income	224,823,660.00	-
Interest expense	(146,901,247.00)	Ξ
Net Interest income	77,922,413.00	-
Fee and commission income	368,370,253.00	4,258,835.00
Fee and commission expense	(192,290,403.00)	=
Net fee and commission income	176,079,850.00	4,258,835.00
Income from investment in securities	128,310,292.00	101,603,506.00
Fair Value adjustments for fall in value of investment in securities	(23,430,492.00)	=
	104,879,800.00	101,603,506.00
Other operating income	8,663,046.00	<u>1,486,560.00</u>
Total operating income	367,545,109.00	107,348,901.00
operating expenses	(103,112,062.00)	(17,531,262.00)
Depreciation	(8,572,461.00)	(2,187,821.00)
Operating profit	255,860,586.00	87,629,818.00



Finance income	11,457,487.00	27,042,993.00
Finance costs	(1,139,378.00)	(111,642.00)
Net Finance income	10,318,109.00	26,931,351.00
Share of profit of equity in associate company	<u>71,651.00</u>	=
Profit before income tax	266,250,346.00	114,561,169.00
Income tax expense	(71,469,718.00)	(21,810,439.00)
Profit after tax	194,780,628.00	92,750,730.00
Total Comprehensive income for the year	194,780,628.00	92,750,730.00

# Brac Epl Stock Brokerage Limited Statement of Cash Flow for the year ended 31st December 2010

Amounts in BDT

	31-Dec-10	31-Dec-09	
A. Cash flows from operating activities			
Net profit before tax Adjustments for non cash items:	266,250,345.00	114,561,169.00	
Depreciation	8,572,461.00	2,187,821.00	
Gains on disposal of property, plant and equipment	(70,994.00)	-	
Loss on foreign exchange	1,800.00	-	
Finance charge-lease	137,043.00	-	
Impairment provision on investment in unquoted securities	2,750,000.00	-	
Unrealized loss on investment in quoted securities	23,430,492.00	-	
Share of profit of equity in associate company	(71,651.00)	-	
Tax paid	(46,595,485.00)	(4,191,626.00)	



	254,404,011.00	112,557,364.00
Changes in working capital components:		
Loans and advances	(3,070,981,586.00)	-
Accounts receivable	(229,685,485.00)	(1,076,452.00)
Advances and deposits	30,565,270.00	(49,248,080.00)
Other receivable	(1,384,117.00)	(25,731,567.00)
Customer deposits	61,417,157.00	(1,934,330.00)
Accounts payable	248,559,157.00	-
other liabilities	214,128,357.00	(263,181.00)
	(2,747,381,247.00)	(78,253,610.00)
Net cash generated from operating activities	(2,492,977,236.00)	34,303,754.00
B. Cash flows from investing activities		
Acquisition of non-current Assets	(32,342,606.00)	(5,283,407.00)
Proceeds from disposal of property, plant and equipment	(12,500,000.00)	-
Investment in quoted securities	(279,958,125.00)	6,000,000.00
Net cash generated from investing activities	(324,800,731.00)	716,593.00
C. Cash flows from financial activities		
Paid up capital	-	131,062,480.00
Share premium	-	288,337,457.00
Short term loans	2,072,599,718.00	0
Capital lease obligation	(315,200.00)	-
Net cash generated from financing activities	2,072,284,518.00	419,399,937.00



D. Net changes in cash and cash equivalents (A+B+C)	(745,493,449.00)	454,420,284.00
E. opening cash and cash equivalents	755,098,215.00	320,677,931.00
F. Closing cash and cash equivalents	9,604,766.00	775,098,215.00



# 3.3 Who uses these analyses?

Financial statements are used and analyzed by a different group of parties, these groups consists of people both inside and outside a business. Generally, these users are:

- A. Internal Users: are owners, managers, employees and other parties who are directly connected with a company:
  - 1. Owners and managers require financial statements to make important business decisions that affect its continued operations. Financial analysis is then performed on these statements to provide management with more detailed information. These statements are also used as part of management's report to its stockholders, and it form part of the Annual Report of the company.
  - 2. Employees also need these reports in making collective bargaining agreements with the management, in the case of labour unions or for individuals in discussing their compensation, promotion and rankings.
- B. External Users: are potential investors, banks, government agencies and other parties who are outside the business but need financial information about the business for numbers of reasons.
  - 1. Prospective investors make use of financial statements to assess the viability of investing in a business. Financial analyses are often used by investors and is prepared by professionals (financial analysts), thus providing them with the basis in making investment decisions
  - 2. Financial institutions (banks and other lending companies) use them to decide whether to give a company with fresh loans or extend debt securities (such as a longterm bank loan ).
  - 3. Government entities (tax authorities) need financial statements to ascertain the propriety and accuracy of taxes and duties paid by a company.
  - 4. Media and the general public are also interested in financial statements of some companies for a variety of reasons.



# 3.4 Financial Ratio Analysis

Ratio analysis is such a significant technique for financial analysis. It indicates relation of two mathematical expressions and the relationship between two or more things.

Financial ratio is a ratio of selected values on an enterprise's financial statement.

There are many standard ratios used to evaluate the overall financial condition of a corporation or other organization. Financial ratios are used by managers within a firm, by current and potential stockholders of a firm, and by a firm's creditor. Financial analysts use financial ratios to compare the strengths and weaknesses in various companies.

Values used in calculating financial ratios are taken from balance sheet, income statement and the cash flow of company, besides Ratios are always expressed as a decimal values, such as 0.10, or the equivalent percent value, such as 10%.

## 3.4.1 Essence of Ratio analysis

Financial ratio analysis helps us to understand how profitable a business is, if it has enough money to pay debts and we can even tell whether its shareholders could be happy or not.

Financial ratios allow for comparisons:

- 1. Between companies
- 2. Between industries
- 3. Between different time periods for one company
- 4. Between a single company and its industry average

To evaluate the performance of one firm, its current ratios will be compared with its past ratios. When financial ratios over a period of time are compared, it is called time series or trend analysis. It gives an indication of changes and reflects whether the firm's financial performance has improved or deteriorated or remained the same over that period of time. It is not the simply changes that has to be determined, but more importantly it must be recognized that why those ratios have changed. Because those changes might be result of changes in the accounting polices without material change in the firm's performances.

Another method is to compare ratios of one firm with another firm in the same industry at the same point in time. This comparison is known as the cross sectional analysis. It might be more useful to select some competitors which have similar operations and compare their ratios with



the firm's. This comparison shows the relative financial position and performance of the firm. Since it is so easy to find the financial statements of similar firms through publications or Medias this type of analysis can be performed so easily.

To determine the financial condition and performance of a firm, its ratios may be compared with average ratios of the industry to which the firm belongs. This method is known as the industry analysis that helps to ascertain the financial standing and capability of the firm in the industry to which it belongs.

Industry ratios are important standards in view of the fact that each industry has its own characteristics, which influence the financial and operating relationships. But there are certain practical difficulties for this method. First finding average ratios for the industries is such a headache and difficult. Second, industries include companies of weak and strong so the averages include them also. Sometimes spread may be so wide that the average may be little utility. Third, the average may be meaningless and the comparison not possible if the firms with in the same industry widely differ in their accounting policies and practices. However if it can be standardized and extremely strong and extremely weak firms be eliminated then the industry ratios will be very useful.

# 3.4.2 What does Ratio analysis tell us?

After such a discussion and mentioning that these ratios are one of the most important tools that is used in finance and that almost every business does and calculate these ratios, it is logical to express that how come these calculations are of so importance.

What are the points that those ratios put light on them? And how can these numbers help us in performing the task of management?

The answer to these questions is: We can use ratio analysis to tell us whether the business

- 1. is profitable
- 2. has enough money to pay its bills and debts
- 3. could be paying its employees higher wages, remuneration or so on
- 4. is able to pay its taxes
- 5. is using its assets efficiently or not
- 6. has a gearing problem or everything is fine
- 7. is a candidate for being bought by another company or investor



But as it is obvious there are many different aspects that these ratios can demonstrate. So for using them first we have to decide what we want to know, then we can decide which ratios we need and then we must begin to calculate them.

## 3.4.3 Which Ratio for Whom

As before mentioned there are varieties of people interested to know and read these information and analyses, however different people for different needs. And it is because each of these groups have different type of questions that could be answered by a specific number and ratio.

Therefore we can say there are different ratios for different groups, these groups with the ratio that suits them is listed below:

- **1. Investors:** These are people who already have shares in the business or they are willing to be part of it. So they need to determine whether they should buy shares in the business, hold on to the shares they already have or sell the shares they already own. They also want to assess the ability of the business to pay dividends. As a result the Return on Capital Employed Ratio is the one for this group.
- **2. Lenders:** This group consists of people who have given loans to the company so they want to be sure that their loans and also the interests will be paid and on the due time. Gearing Ratios will suit this group.
- **3. Managers:** Managers might need segmental and total information to see how they fit into the overall picture of the company which they are ruling. And Profitability Ratios can show them what they need to know.
- **4. Employees:** The employees are always concerned about the ability of the business to provide remuneration, retirement benefits and employment opportunities for them, therefore these information must be find out from the stability and profitability of their employers who are responsible to provide the employees their need. Return on Capital Employed Ratio is the measurement that can help them.
- **5. Suppliers and other trade creditors:** Businesses supplying goods and materials to other businesses will definitely read their accounts to see that they don't have problems, after all, any supplier wants to know if his customers are going to pay them back and they will study the Liquidity Ratio of the companies.
- **6. Customers:** are interested to know the Profitability Ratio of the business with which they are going to have a long term involvement and are dependent on the continuance of presence of that.





- 7. Governments and their agencies: are concerned with the allocation of resources and, the activities of businesses. To regulate the activities of them, determine taxation policies and as the basis for national income and similar statistics, they calculate the Profitability Ratio of businesses.
- 8. Local community: Financial statements may assist the public by providing information about the trends and recent developments in the prosperity of the business and the range of its activities as they affect their area so they are interested in lots of ratios.
- 9. Financial analysts: they need to know various matters, for example, the accounting concepts employed for inventories, depreciation, bad debts and so on, therefore they are interested in possibly all the ratios.
- 10. Researchers: researchers' demands cover a very wide range of lines of enquiry ranging from detailed statistical analysis of the income statement and balance sheet data extending over many years to the qualitative analysis of the wording of the statements depending on their nature of research.



## 3.5 Classification Ratios

In isolation, a financial ratio is a useless piece of information. In context, however, a financial ratio can give a financial analyst an excellent picture of a company's situation and the trends that are developing. A ratio gains utility by comparison to other data and standards.

Financial ratios quantify many aspects of a business and are an integral part of financial statement analysis. Financial ratios are categorized according to the financial aspect of the business which the ratio measures. Although these categories are not fixed in all over the world however there are almost the same, just with different names:

- 1. Profitability ratios which use margin analysis and show the return on sales and capital employed.
- 2. Rate of Return Ratio (ROR) or Overall Profitability Ratio: The rate of return ratios are thought to be the most important ratios by some accountants and analysts. One reason why the rate of return ratios is so important is that they are the ratios that we use to tell if the managing director is doing their job properly.
- 3. Liquidity ratios measure the availability of cash to pay debt, which give a picture of a company's short term financial situation.
- 4. Solvency or Gearing ratios measures the percentage of capital employed that is financed by debt and long term finance. The higher the gearing, the higher the dependence on borrowing and long term financing. The lower the gearing ratio, the higher the dependence on equity financing. Traditionally, the higher the level of gearing, the higher the level of financial risk due to the increase volatility of profits. It should be noted that the term —Leverage is used in some texts.
- 5. Turn over Ratios or activity group ratios indicate efficiency of organization to various kinds of assets by converting them to the form of sales.
- **6. Investors ratios** usually interested by investors.



## 3.5.1 Liquidity Ratios

The two liquidity ratios, the current ratio and the acid test ratio, are the most important ratios in almost the whole of ratio analysis and they are also the simplest to use. Liquidity ratios provide information about a firm's ability to meet its short- term financial obligations. They are of particular interest to those extending short term credit to the firm. Two frequently-used liquidity ratios are current and quick ratio.

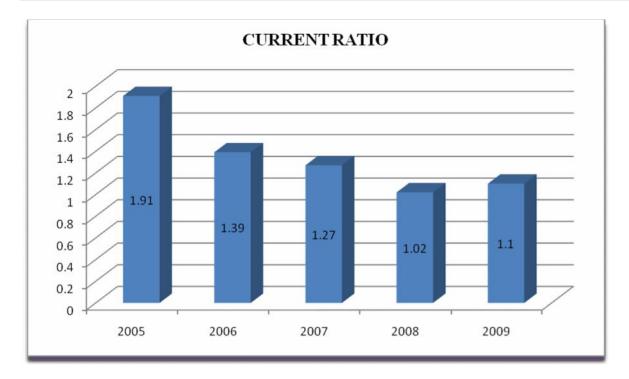
While liquidity ratios are most helpful for short-term creditors/suppliers and bankers, they are also important to financial managers who must meet obligations to suppliers of credit and various government agencies. A company's ability to turn short-term assets into cash to cover debts is of the utmost importance when creditors are seeking payment. Bankruptcy analysts and mortgage originators frequently use the liquidity ratios to determine whether a company will be able to continue as a going concern. A complete liquidity ratio analysis can help uncover weaknesses in the financial position of the business. Generally, the higher the value of the ratio, the larger the margin of safety that the company possesses to cover short-term debts.

#### 1. Current Ratio

$$Current \ Ratio = \frac{Current \ Asset}{Current \ liability}$$

	2005	2006	2007	2008	2009
Current Asset	837.65	772.52	960.17	1303.89	1361.61
Current Liabilities	439.30	556.05	755.18	1278.56	1242.72
Current Ratio	1.91	1.39	1.27	1.02	1.10





The ratio is mainly used to give an idea of the company's ability to pay back its short- term liabilities (debt and payables) with its short-term assets (cash, inventory, receivables). The higher the current ratio, the more capable the company is of paying its obligations. A ratio in each year suggests that the company would be able to pay off its obligations if they came due at that point, but the company has shown constant decreasing trend in its financial health in subsequent years, Since low current ratio does not necessarily mean that the firm will go bankrupt, but it is definitely is not a good sign. Short term creditors prefer a high current ratio since it reduce their risk.

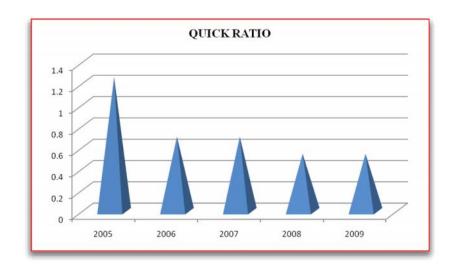


### 2. Quick or Acid-Test Ratio

The essence of this ratio is a test that indicates whether a firm has enough short-term assets to cover its immediate liabilities without selling inventory. So it is the backing available to liabilities that must be paid almost immediately. There are two terms of liquid asset and liquid liabilities in this formula, Liquid asset is all current assets except the inventories and prepaid expenses, because prepaid expenses cannot be converted to cash. The liquid liabilities include all current liabilities except bank overdraft and cash credit since they are not required to be paid off immediately.

$$Quick \ Ratio = \frac{Liquid \ Asset}{Liquid \ liability}$$

	2005	2006	2007	2008	2009
Liquid Asset	553.94	392.95	526.59	694.13	669.64
Liquid Liabilities	439.30	556.05	755.18	1278.56	1242.72
Quick Ratio	1.26	0.70	0.70	0.54	0.54



#### **Comments:**

The acid-test ratio is far more forceful than the current ratio, primarily because the current ratio includes inventory assets which might not be able to turn to cash immediately. Companies with ratios of less than 1 cannot pay their current liabilities and should be looked at with extreme caution. Furthermore, if the acid-test ratio is much lower than the current ratio, it means current assets are highly dependent on inventory.



## 3.5.2 Turnover Ratios

Accounting ratios that measure a firm's ability to convert different accounts within their balance sheets into cash or sales. Companies will typically try to turn their production into cash or sales as fast as possible because this will generally lead to higher revenues.

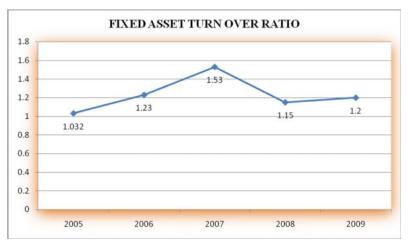
Such ratios are frequently used when performing fundamental analysis on different companies.

#### 1. Fixed assets turn over ratio:

It shows how the company uses its fixed assets to achieve sales. The formula is as follows:

Fixed Asset Turn Over Ratio = 
$$\frac{\text{Net Sales}}{\text{Fixed Assets}}$$

	2005	2006	2007	2008	2009
NET SALES	2681.06	3299.45	4910.83	5508.78	6,383.08
FIXED ASSETS	2597.08	2678.24	3214.23	4783.61	5312.97
FIXED ASSETS TURN OVER	1.032	1.23	1.53	1.15	1.20



#### **Comments:**

A High fixed asset turnover ratio indicates the capability of the firm to earn maximum sales with the minimum investing in fixed assets. So it shows that the company is using its assets more efficiently. As it is shown in above the Company is using its assets specially fixed assets more efficiently each year although it had a light decrease in efficiency in 2008 and 2009 compared to 2007.



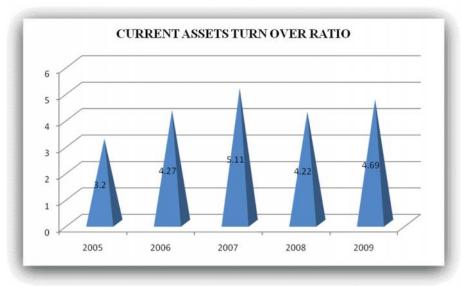
#### 2. Current assets turn over ratio:

It is almost like the fixed asset turnover ratio, it calculates the capability of organization to earn sales with usage of current assets. So it indicates with what ratio current assets are turned over in the form of sales.

This ratio is calculated as:

Current Asset Turn Over Ratio = 
$$\frac{\text{Net Sales}}{\text{Current Assets}}$$

	2005	2006	2007	2008	2000
NET SALES CURRENT	2681.06	3299.45	4910.83	5508.78	6,383.08
ASSETS	837.65	772.52	960.17	1303.89	1361.61
CURRENT ASSETS TURN OVER RATIO:	3.20	4.27	5.11	4.22	4.69



#### **Comments:**

In this formula current assets are balance sheet accounts that represent the value of all assets that are reasonably expected to be converted into cash within one year in the normal course of business. A higher current assets turnover ratio is more desirable since it shows the better financial position of company and better usage of these current assets. It can be seen from above figure that the company has shown high ratio in 2005, 2006, 2007, and 2009, never mind the slight decrease in 2008. It means the company is using its current assets more efficiently. The comparison between two ratios over the same period of time, also shows that company has used its current assets better than its fixed assets



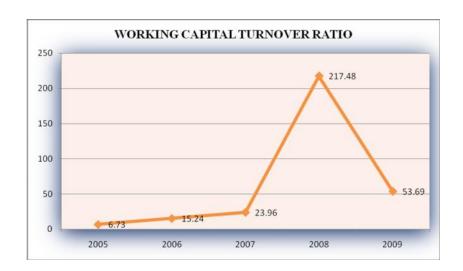
### 3. Working capital turn over ratio:

As its name suggests it is the relationship between turnover and working capital. It is a measurement comparing the depletion of working capital to the generation of sales over a given period. This provides some useful information as to how effectively a company is using its working capital to generate sales.

A company uses working capital to fund operations and purchase inventory. These operations and inventory are then converted into sales revenue for the company. The working capital turnover ratio is used to analyze the relationship between the money used to fund operations and the sales generated from these operations.

Working Capital Turn Over Ratio = 
$$\frac{\text{Net Sales}}{\text{Working Capital}}$$

	2005	2006	2007	2008	2009
NET SALES	2681.06	3299.45	4910.83	5508.78	6,383.08
WORKIN	398.35	216.47	204.99	25.33	118.89
WORKING CAPITAL TURN	6.73	15.24	23.96	217.48	53.69





The term working capital is a measure of both a company's efficiency and its short-term financial health. The working capital ratio is calculated as:

Positive working capital means that the company is able to pay off its short-term liabilities. Negative working capital means that a company currently is unable to meet its short-term liabilities with its current assets.

In a general sense, the higher the working capital turnover, the better because it means that the company is generating a lot of sales compared to the money it uses to fund the sales.

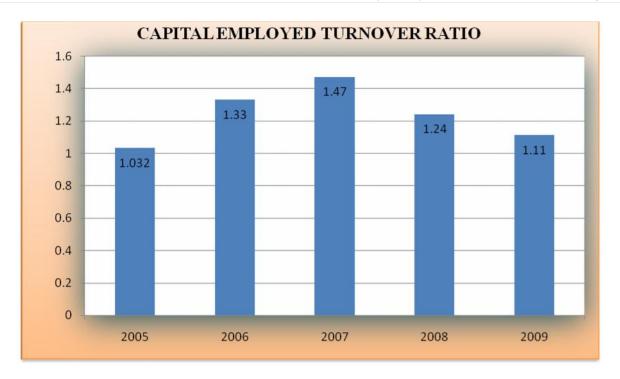
### 4. Capital Employed Turnover Ratio

The capital employed turnover ratio tells us the state of the relationship between the shareholders' investment in the business and the sales that the management of the business has been able to generate from it.

Capital Employed Turn Over Ratio = 
$$\frac{\text{Net Sales}}{\text{Capital Employed}}$$

	2005	2006	2007	2008	2009
Net Sales	2681.06	3299.45	4910.83	5508.78	6,383.08
Capital Employed	2598.84	2490.01	3342.41	4436.72	5742.05
Capital Employed Turnover Ratio	1.032	1.33	1.47	1.24	1.11





Capital employed can be expressed in different terms, all generally refer to the investment required for a business to function. By "employing capital" you are making an investment. So, capital employed indicated the long term funds supplied by creditors and owners of the firms. So it can be computed as:

Capital Employed = share capital + Long term liabilities + reserve and surpluses

This ratio shows the efficiency of the firm with which the capital employed is being utilized. A high ratio is a sign of capability of firm to earn maximum sales with minimum amount of capital employed and this firm is constantly improving its ratio from 2005 to 2007 except for 2008 and 2009 it is due to current economic slowdown prevailing in the country as well as in the world.

## 3.5.3 Solvency Ratios

Gearing is concerned with the relationship between the long terms liabilities that a business has and its capital employed. The idea is that this relationship ought to be in balance. It is a general term describing a financial ratio that compares some form of owner's equity (or capital) to borrowed funds. The shareholders and lenders of long term loans may be interested in this ratio.

### 1. Debt Equity ratio:

This ratio reflects the relative claims of creditors and share holders against the assets of the firm, debt equity ratios establishment relationship between borrowed funds and owner capital to measure the long term financial solvency of the firm. The ratio indicates the relative proportions of debt and equity in financing the assets of the firm.

It is calculated as

$$Debt Equity Ratio = \frac{Debt}{Shareholder'S Fund}$$

The debts side consist of all long term liabilities of the firm. The shareholders' fund is the share capital plus reserve and surpluses.

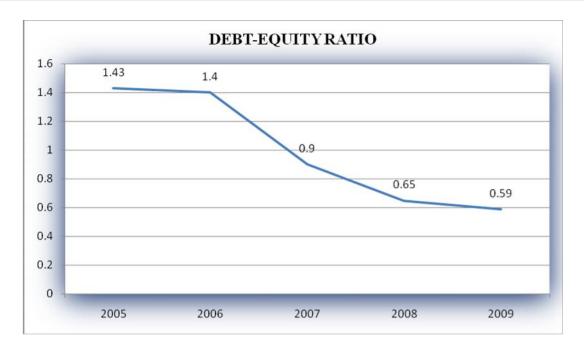
The lower the debt equity ratio the higher the degree of protection enjoyed by the creditors.

The debt equity ratio defined by the controller of capital issue, debt is defined as long term debt plus preference capital which is redeemable before 12 years and shareholders' fund is defined as paid up equity capital plus preference capital which is redeemable after 12 years plus reserves & surpluses.

The general norm for this ratio is 2:1. on case of capital intensive industries as norms of 4:1 is used for fertilizer and cement industry and a norms of 6:1 is used for shipping units.

	2005	2006	2007	2008	2009
DEBT	1531.38	1451.83	1578.63	1740.50	2141.63
SHAREHOLDERS' FUND	1067.13	1038.27	1763.78	2696.99	3602.1
DEBT EQUITY RATIO	1.43	1.40	0.90	0.65	0.59





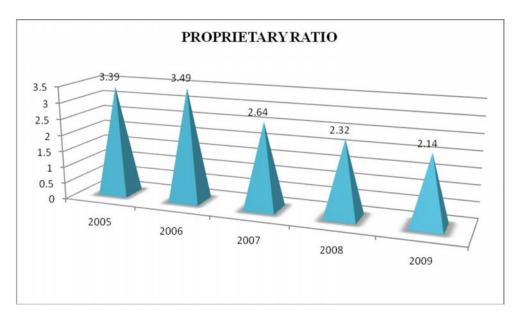
In this ratio shareholders' fund is the share capital plus reserve and surpluses. In case of high debt equity it would be obvious that the investment of creditors is more than owners. And if it is so high then it brings the firm in a risky position. Or if it is too low it might indicate that the organization has not utilized its capacity of borrowing which must be utilized and that is because the borrowing from outsiders is a good source of fund for business with lower returns in compare to equity. The UltraTech Cement Ltd. is trying to lower its debt equity ratio by lowering its liabilities and increasing its equity. So it wants to improve its position since, a relatively lower ratio is favorable.



It is primarily the ratio between the proprietor's funds and total assets. It indicates the relationship between owners fund and total assets. And shows the extent to which the owner s' fund are sunk in assets or different kinds of it.

$$Proprietary\ Ratio = \frac{Proprietors\ Funds}{Total\ Assets}$$

	2005	2006	2007	2008	2009
Owner's fund	1067.13	1038.27	1763.78	2696.99	3602.1
Total Asset	3619.52	3623.11	4657.85	6258.40	7709.38
Proprietary Ratio	3.39	3.49	2.64	2.32	2.14



#### **Comments:**

This ratio indicates the proportion of proprietor's funds used for financing the total assets. As a very rough measure, it is suggested that 2/3rd to 3/4th of the total assets should be financed through borrowings. A high ratio will indicate high financial strength but a very high ratio will indicate that the firm is not using external funds adequately.



## 3.5.4 Profitability Ratios

As the name itself suggests, this ratio is calculated to determine profitability of the firm. The basic objective of almost every business is to earn profit which is essential for survival of the business.

A business needs profits not only for its existence but also for its expansion and diversification. The investors want an adequate return on their investments, workers want higher wages, creditors want higher security for interest and loan and the list could continue.

It is a class of financial metrics that are used to assess a business's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time. For most of these ratios, having a higher value relative to a competitor's ratio or the same ratio from a previous period is indicative that the company is doing well.

### 1. Gross profit ratio:

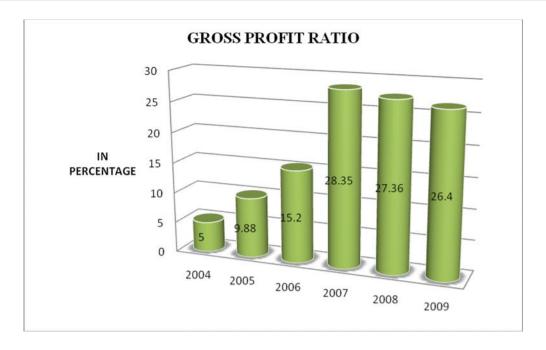
The gross profit margin ratio tells us the profit a business makes on its cost of sales. It is a very simple idea and it tells us how much gross profit our business is earning. Gross profit is the profit we earn before we take off any administration costs, selling costs and so on. So we should have a much higher gross profit margin than net profit margin.

High ratios are favorable in this, since it indicates the business is earning a good return on the sale of its merchandise.

$$Gross Profit Ratio = \frac{Gross profit}{Net Sales} \times 100$$

	2005	2006	2007	2008	2009
NET SALES	2681.06	3299.45	4910.83	5508.78	6,383.08
GROSS PROFIT	265.02	501.62	1392.44	1507.01	1684.46
GROSS PROFIT RATIO	9.88	15.20	28.35	27.36	26.40





This ratio indicates the relation between production cost and sales and the efficiency with which goods are produced or purchased. If it has a very high gross profit ratio it may indicate that the organization is able to produce or purchase at a relatively lower cost. Gross profit is the profit we earn before we take off any administration costs, selling costs and so on. Here company has achieved very good efficiency in 2007 compared to other financial years.

### **Net profit ratio:**

This shows the portion of sales available to owners after all expenses. A high profit ratio is higher profitability of the firm. This ratio shows the earning left for shareholder as percentage of Net sales.

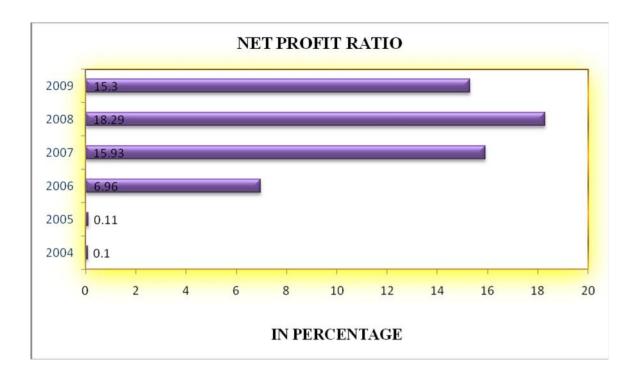
Net Margin Ratio measures the overall efficiency of production, Administration selling, financing, pricing and Taste Management.

Net Profit Ratio = 
$$\frac{\text{Net Profit After Tax}}{\text{Net Sales}} \times 100$$





	2005	2006	2007	2008	2009
NET SALES	2681.06	3299.45	4910.83	5508.78	6,383.08
NET PROFIT	2.85	229.76	782.28	1007.61	977.02
NET PROFIT RATI	0.11	6.96	15.93	18.29	15.30



It is depicted from the above diagram that company has been trying to improve its profitability year by year except for 2009 because of environmental instability which includes the economic meltdown in the country and whole world.



### 3. Operating net profit ratio:

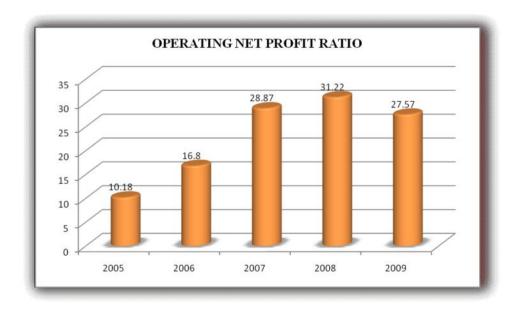
This ratio establishes the relation between the net sales and the operating net profit. The concept of operating net profit is different from the concept of net profit operating net profit is the profit arising out of business operations only. This is calculated as follows:

### Operating net profit = Net Profit + Non operating expenses - non operating income.

Alternatively, this profit can also be calculated by deducting only operating expenses from the gross profit. This ratio is calculated with help of the following formula.

Operating Net Profit Ratio = 
$$\frac{\text{Operating Net Profit}}{\text{Net Sales}} \times 100$$

	2005	2006	2007	2008	2009
NET SALES	2681.06	3299.45	4910.83	5508.78	6,383.08
OPERATING NET PROFIT	272.81	554.26	1,417.81	1,720.06	1,760.29
OPERATING NET PROFIT RATIO	10.18	16.80	28.87	31.22	27.57





# 3.5.5 Overall Profitability Ratios

The ROI is perhaps the most important ratio of all. It is the percentage of return on funds invested in the business by its owners. In short, this ratio tells the owner whether or not all the effort put into the business has been worthwhile. If the ROI is less than the rate of return on an alternative, the owner may be wiser to sell the company, put the money in risk-free investment such as a bank savings account, , and avoid the daily struggles of small business management.

These Liquidity, Leverage, Profitability, and Management Ratios allow the business owner to identify trends in a business and to compare its progress with the performance of others through data published by various sources. The owner may thus determine the business's relative strengths and weaknesses.

#### 1. Return on assets:

This ratio actually measures the profitability of the investments in the firm. And the related formula is:

Return on Asset Ratio = 
$$\frac{\text{Net Profit After Tax}}{\text{Asset}} \times 100$$

	2005	2006	2007	2008	2009
NPAT	2.85	229.76	782.28	1007.61	977.02
TOTAL ASSET	3619.52	3623.11	4657.85	6258.40	7709.38
RETURN ON ASSET RATIO	0.07	6.34	16.79	16.10	12.67





Because this ratio shows the profitability of investment in the firm so higher the ratio, the better is the return to the owners of the company.

#### 2. Return on equity:

This ratio also known as return on shareholders' funds or return on proprietors' funds or return on net worth, indicates the percentage of net profit available for equity shareholders to equity shareholders' funds and not on total capital employed.

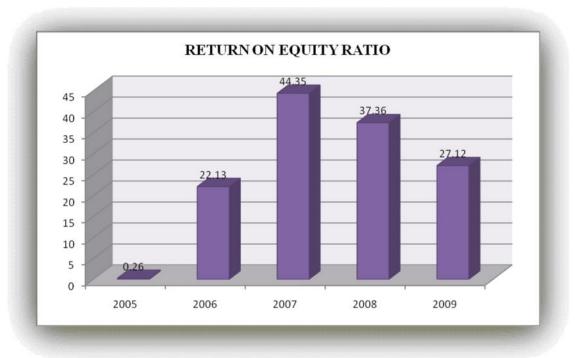
It is calculated as:

Return On Equity Ratio 
$$= \frac{\text{Net Profit After Tax} - \text{Prefernece Dividend}}{\text{Equity Share Holders Fund}} \times 100$$





	2005	2006	2007	2008	2009
N.P.A.T – PREF.DIVIDEND	2.85	229.76	782.28	1007.61	977.02
Equity Share Holders Fund	1067.13	1038.27	1763.78	2696.99	3602.1
ROE RATIO	0.26	22.13	44.35	37.36	27.12



This ratio indicates the productivity of the owned funds employed in the firm. However, in judging the profitability of a firm, it should not be overlooked that during inflationary periods, the ratio may show an upward trend because the numerator of the ratio represents current values whereas denominator represents historical values.



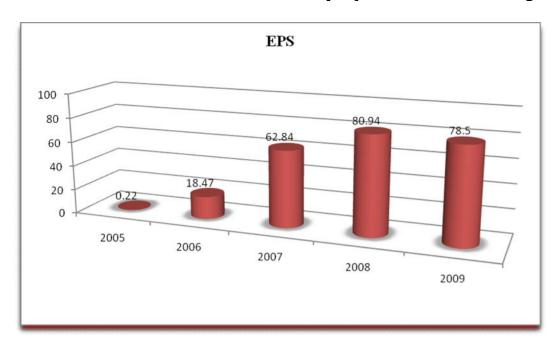
## 3.5.6 Investors Ratios

### 1. Earnings per share:

EPS measures the profit earned per share. The higher EPS will attract more investors to acquire shares in the company as it indicates that the business is more profitable enough to pay the dividends in time. So it is of utmost importance to investors in order to decide the prospects.

It is calculated as:

$$Earnings Per Share = \frac{Net Profit After Tax - Prefernece Dividend}{Number of equity shares Outstanding}$$



#### **Comments:**

As mentioned above, EPS is one of the important criteria for measuring the performance of a company. If EPS increases, the possibility of a higher dividend per share also increases. However, the dividend payment depends on the policy of the company. Market price of shares of a company may also show an upward trend if the EPS is showing a rising trend. However, it should be remembered that EPS of different companies may vary from company to company due to the following different practices by different companies regarding stock in trade, depreciation, source of raising finance, tax-planning measures etc.



## RECOMMENDATIONS

The most important recommendation for financial-statement preparation is to conform to key accounting norms and industry standards. These include generally accepted accounting principals (GAAP) and international financial reporting standards (IFRS). Besides GAAP and IFRS, other edicts include U.S. Securities and Exchange Commission guidelines. By law, accountants must display financial items in a specific way when presenting accounting data. For example, they must show assets distinctly from liabilities in a balance sheet. Similarly, they must separate revenues from expenses in an income statement.



### Conclusion

At this instant, most of the capital market investors in Bangladesh are people who use it as their primary source of earnings. As they solely depend on the market for living, they unknowingly create a large syndicate which is practically invisible because of its widespread dimensions. When they transect within the syndicate, both buyers and sellers assume that they have made an intelligent transaction. These acts fuel the price bubble so slowly that the regulators miss this by identifying it as "rising investor confidence". In this way, the bubble gets bigger remaining unnoticed by the stakeholders leading to an inevitable explosion. As the market is going through corrections, to avoid this phenomenon in future, the regulators might forward some directions demanding the current and potential investors to have a source of guaranteed income and allowing them to utilize capital market as an extra source of earnings.

Again, the market should encourage new shares of good fundamentals for making the market reach a stable level. Family-oriented big businesses should shake off the traditional fear of losing control once going public. Governmental motivations could be given in order to display them the benefits of being public as well as to remind them of the responsibility of the rich to the fellow countrymen. Also, foreign companies could be encouraged to raise capital from the market for creating safer diversification opportunities.

In addition, all government organisms should act in a responsible way by running pilot projects before forwarding any new directive and seeing the effect of the decision from a holistic point of view so that a clear idea may be got regarding the overall macroeconomic impact. Moreover, as the Bangladeshi investors mostly depend on the media for stock market information, care should be taken during the selection of the media reporters so that their sometimes "immature" way of interpreting a usual matter do not create any panic among the mass.

As an end note, the intern affirms that it was the efficiency of BRAC EPL STOCK BROKERAGE LTD, that made it continue standing like a pillar during the total period of disorder (the stable turnover being the evidence). Strong forecasting capability was the main key that helped them build the strategies long before the inception of the bear-run. BRAC EPL STOCK BROKERAGE LTD. is still making predictions and preparing ahead for performing sustainably in the coming days which clearly demonstrate the elegance of the officials.



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