

COMPARISON OF PROFITABILITY OF LISTED PHARMACEUTICAL COMPANIES OF BANGLADESH

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Abstract *Pharmaceutical industry is technologically the most advanced manufacturing industry in Bangladesh and the third largest industry in terms of contribution to government's revenue. The industry contributes about 1% of the total GDP. There are about 250 licensed pharmaceutical companies in Bangladesh. Currently a little over 100 companies are in production. According to IMS, a US-based market research firm, the retail market size is about BDT 84 billion as on 2011. Based on IMS report for the fourth quarter 2011, Square pharmaceutical holds the top market share in the retail market (18.7%), followed by Incepta and Beximco pharmaceutical. This sector fulfills 97% of the local medicine requirement. Besides, it is exporting chemicals and pharmaceutical products to global market including European market. The professional think tank, quality management, innovative ideas, government support are the key factors for the development of this sector. Hence the present study reports the profitability of two listed pharmaceutical companies of four year accounting period from 2008 to 2011. The analysis shows that average profitability indicators for Square are higher than Beximco, except gross profit ratio and operating profit ratio. On the other hand, the six other profitability indicators of Square are much higher than that of Beximco and go with the industry norm. Beximco has not been able to attain industry average net profit ratio, return on investment and return on equity, cash flow margin and cash return on assets*

Keyword: *Profit, Profitability Indicators, Square and Beximco Pharmaceutical Industry*

INTRODUCTION

Profit means a financial benefit that is realised when the amount of revenue gained from a business activity exceeds the expenses, costs, and taxes needed to sustain the activity. A firm's owners will usually want the firm to earn as much profit as possible; here the firm is viewed as a single economic decision maker whose goal is to maximise the owners' profit. Because managers who deviate from profit maximising for too long are typically replaced either by current owners or other firms who acquire the underperforming firm and then replace management team with their own. So profit maximisation is a basic and legitimate objective of a business concern. The long-term objective of a business is fruitfully achieved when it gains more than it invests. Profits provide the incentive for firms to do what consumers want (Paul H. Rubin, 2012). In the economic theory, the behaviour of a firm is analysed in terms of profit maximization. Profit maximisation means producing the products earning the highest returns, and producing these products at the lowest possible cost (Paul H. Rubin, 2012). Profit and profitability are two related concepts. Simply profitability means the ability to earn profit. Profit is an absolute measure of efficiency, but profitability is a relative measure. Profitability

reflects the earning power or operating performance of the investment outlayed. The sustainability of a business is ensured when its profitability is consistent.

Hence the present study approaches the comparison of profitability of two leading listed pharmaceutical companies in Bangladesh for four years.

LITERATURE REVIEW OF THE STUDY

Paul H. Rubin (2012) states that profit maximization mean producing the products earning the highest returns, and producing these products at the lowest possible cost. Lieberman and Hall (2005) mentions that the underperforming managers who deviate from profit maximizing are typically replaced either by current owners or other firms. Profits are the test of efficiency and a measure of control to the owners, a measure of the worth of their investment, to the creditors the margin of safety, to the employees a source of fringe benefits, to the Government a measure of taxable capacity and the basis of legislative action. Nimalathan, B (2007) states that profit in the accounting sense tends to become a long term objective which measures not only the success of a product, but also of the development of the market for it. Analysis

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of financial statements is of interest to lenders, security analysts, managers and others (Prasanna, 1995). Salauddin (2001) examined the profitability of the pharmaceutical companies of Bangladesh. By using ratio analysis, mean, standard deviation and co-efficient of variation he found that the profitability of the pharmaceuticals sector was very satisfactory in terms of the standard norms of return on investment. Pharmaceutical companies' profits are an important stimulus to, and source of funding for, research and development (R&D)—which in turn leads to a stream of health-enhancing new products (F.M. Scherer, 2001). Sina (1998) used financial ratios to test the financial strengths and weaknesses of Khulna Newsprint Mills Limited. Very few studies have been performed in the pharmaceutical area. Jahur (1995) used financial ratios to measure operational performance of limited company. He used profitability, liquidity, activity and capital structure to measure operational performance. Kate Barr (2008) in his article “Analyzing Financial Information Using Ratios” says that understanding the financial information is the building block of any financial discussion. Beyond understanding the reports, much can be learned from analysis of the information and interpretation of what it is telling. The basic analysis includes comparing financial reports to a benchmark such as the budget or the financial report from the previous year.) Collier (2004) in his article “An example of the use of financial ratio analysis: the Case of Motorola” mentioned that, The financial ratios indicate that Motorola has a higher cost of sales than the average firm in the semiconductor industry, resulting in a lower gross profit margin, and higher indirect costs, resulting in lower net profit margin performance relative to the semiconductor industry. Motorola has a better liquidity position, with both the current ratio and the quick ratio being higher than the industry average.

OBJECTIVES OF THE STUDY

The main objective of the study is to compare the profitability of pharmaceutical companies. The following specific objectives are taken to achieve the main objective:

1. To visualize the profitability scenario of the selected companies
2. To identify the indicators of profitability of the pharmaceutical companies over 4 years
3. To realize the significance of each profitability ratio
4. To identify the factors that affect profitability
5. To show a comparison between company Square and Beximco
6. To show a comparison between individual and industry profitability(industry average)

MATERIALS AND METHODS

The secondary data were used for the present study. The hand book of Chittagong Stock Exchange, annual reports of the companies, related journals and books were used for the data collection. A period of four years has been considered representative for this study.

Sampling Design

The samples have been selected purposively so that these can represent the industry. A total of two pharmaceutical (Square and Beximco) companies have been selected and these companies have sufficient credential for being the representative of this industry in terms on investment, technology, sales, contribution to the government, value addition, and employment.

Sample Companies and Their Activities

Two leading pharmaceutical companies have been selected here for profitability analysis. A short description is presented here.

Square Pharmaceutical Company Limited

Square Pharmaceutical was established in the year 1958 with a vision of business as a means to the material and social wellbeing of the investors, employees and the society at large. Square Pharmaceutical limited, the flagship company of Square group is holding the strong leadership position in the pharmaceutical industry of Bangladesh since 1985 and is now on its way to becoming a high performance global leader. At first it was a partnership business. In the year 1991 the company was converted into a public limited company with an authorized capital of Tk. 5000 million. Their focus is on the quality of product, process and services leading to growth of the company imbued with good governance practices. Square Pharma strives for top quality health care product, protection of owners' capital as well as ensure highest return, best compensation to the employees, fulfillment of responsibility to the government, social order devoid of malpractices, equality between sexes, races, religions, pollution-free environment, achievement of MDG for the human civilization.

The company exports pharmaceutical finished products in 38 countries following the international standards and quality at competitive price. Now this company is operating six business lines with 4617 employees.

Table 1: Year wise variations in profitability indicators in the pharmaceutical companies

Profitability indicators	Company	2008	2009	2010	2011	Mean	±SD	CV
Gross profit ratio (GPR)	Square	41.19	42.00	42.00	38.17	40.84	1.82	0.04
	Beximco	50.05	47.28	42.76	47.99	47.02	3.07	0.07
Operating profit ratio (OPR)	Square	16.73	18.00	18.00	19.19	17.98	1.00	0.06
	Beximco	13.59	12.83	18.21	15.18	14.96	2.38	0.16
Net profit ratio (NPR)	Square	20.69	20.00	20.00	19.20	19.98	0.61	0.03
	Beximco	24.90	20.56	23.46	25.20	23.53	5.02	0.22
Return on investment (ROI)	Square	10.87	13.00	13.00	14.46	12.84	1.48	0.12
	Beximco	3.67	3.14	13.89	5.20	6.48	5.02	0.77
Return on equity (ROE)	Square	16.41	17.00	18.00	20.39	17.95	1.75	0.10
	Beximco	5.21	5.73	18.06	6.99	8.99	6.09	0.68
Return on capital employed (ROCE)	Square	11.59	16.00	17.00	19.16	15.94	3.18	0.20
	Beximco	4.46	3.55	16.29	5.88	7.54	5.91	0.78
Cash flow margin (CFM)	Square	15.75	25.00	23.00	21.00	21.19	3.97	0.18
	Beximco	21.00	10.00	20.00	19.00	17.5	5.06	0.28
Cash return on assets (CRA)	Square	10.00	18.00	17.00	14.00	14.75	3.59	0.24
	Beximco	5.00	2.00	6.00	6.00	4.75	1.89	0.39

Beximco Pharmaceuticals Company Limited

Beximco Pharmaceuticals Limited belongs to Beximco Group, the largest private sector industrial conglomerate in Bangladesh. Incorporated in the late 70s, Beximco Pharma began as a distributor. It is one of the largest exporters of medicines in Bangladesh; winning National Export Trophy for a record three times. It has expanded its geographic footprint to 40 countries.

It produces pharmaceutical formulations and active pharmaceutical ingredients, having a current portfolio of more than 400 products and a dedicated team of more than 2,500 employees. In its long journey over three decades, the simple principle on which it was founded remains the same: producing high quality generics and providing better access to medicines at a much affordable cost.

Measures

The two types of profitability ratios are margin ratios and return ratios. Margin ratios represent the firm's ability to translate sales taka into profits. Return ratios measure the overall ability of the firm to generate shareholder wealth. Margin ratios include i)Gross Profit Margin; ii)Operating Profit Margin; iii) Net Profit Margin; iv) Cash Flow Margin and returns ratios include i) Return on Assets (Investments); ii) Return on Equity; iii) Cash Return on Assets. Secondary data were used to measure the indicators of profitability.

LIMITATION OF THE STUDY

- The study covered two pharmaceutical companies only, which are listed under CSE in Bangladesh, in order to measure and compare the profitability.
- The study has been conducted during the period from 2008 to 2011. Any change made after this period has not been covered in this study.

RESULTS AND DISCUSSION

An inter-comparison of profitability of the pharmaceutical companies is measured in terms of some important ratios such as (A) Gross profit ratio (GPR), (B) Operating profit ratio (OPR), (C) Net profit ratio (NPR), (D) Return on investment (ROI), (E) Return on equity (ROE), (F) Return on capital employed (ROCE), (G) Cash flow margin(CFM) and (H) Cash return on assets(CRA). These important indicators are individually discussed below based on the obtained results (Table 1) for the two major pharmaceutical companies.

Gross Profit Ratio (in %)

Gross profit ratio presents the excess of sales over cost of goods sold. This ratio is found by dividing the gross profit by net sales. The higher the gross profit ratio the higher is the purchasing efficiency. The gross profit ratio is the gross profit expressed as a percentage of total sales. Gross profit

is taken before tax and other indirect costs. Higher GP ratio indicates lower cost of production; a low gross margin is dangerous also. The gross profit ratios of the companies for the study period have been shown in Table 1.

The GP ratio of Square showed a downward trend from 2008 to 2011. It is not a good sign for the company. This is due to increasing level of raw material cost and competitive market. Beximco's gross profit showed a downward trend from 2008 to 2010, but in 2011 it increased again. That's why its average gross profit ratio (47.02%) is higher than that (40.84%) of Square. But variation (.0653) in gross profitability of Beximco is higher than that of Square (.0445) though it is negligible. This speaks about the stability of the gross profit earning of this industry.

Operating Profit Ratio (in %)

Operating profit ratio is calculated to get the idea of the operating performance of a business. That's why the non-operating expenses are excluded here as they are not related to the business operation directly. Non-operating expenses include expenses of borrowing funds and taxes paid to the government. Operating profit ratio of Square shows a decreasing trend. This is because of increasing operating expenses and it also shows lack of expertise in controlling costs. In case of Beximco, it decreased in 2009 but again it increased from 2010 which is a good sign. Average operating profit of Beximco is greater than that of Square, though its variability is higher.

Net Profit Ratio (in %)

Net profit is calculated by subtracting a company's total expenses from total revenue, thus showing what the company has earned in a given period of time (usually one year). Net profit ratio is calculated by dividing after-tax profit by net sales and the quotient is multiplied by 100. Net profit margin essentially measures the amount of each taka of sales that a company has left over after it pays all of its expenses. A high net profit margin means a company is able to control its costs that buy goods and services at prices significantly higher than it costs to produce or provide them. It is awfully tempting to rely on net earnings alone to gauge profitability. A standard net profit margin varies from 4% to 6%. The net profit margin of Square shows an upward trend, this is because of increasing operating and non-operating incomes. In case of Beximco, net profit margin is fluctuating though it is higher than that of Square. That's why its standard deviation is greater than that of Square.

The above three ratios show that Beximco is better in case of gross profit and net profit ratios and unlike these two,

Square's operating profit ratio is higher. It means Square manages well its operating expenses.

Return on Investment (in %)

This ratio measures the profitability of enterprise on total investment. The Planning Commission, Government of Bangladesh has declared that the entire existing project in the public sector would have to guarantee a fixed return to 7.5% of the investment. This may be considered as the standard norm for the industrial enterprise. The return on investment on an average for the period under study varies from 12.84% (Square Pharma) to 6.48% (Beximco Pharma). ROI is calculated as the ratio of net profit after tax and total assets multiplied by 100. Here we get net profit generated per Tk. of asset. It is a very significant measure of testing profitability. The ROIs of Square are much higher than that of Beximco. It speaks about the efficiency in utilizing the fund (investment) properly. The Beximco ROI was 3.14, but it jumped to 13.89 in the year 2011. That's why its standard deviation is high. ROI figures of Square are consistent and show an increasing trend.

Return on Equity (in %)

The return on equity is calculated to find the profitability of the owner's investment. The term shareholders equity includes (i) equity share capital (ii) preference share capital (iii) reserves and surplus less accumulated loss. The return on equity is calculated to find the profitability of the owner's investment. ROE compares net profit after tax (minus preferred stock dividends, if any) with the equity that shareholders have invested in the firm. The return on equity of Square is much higher than that of Beximco and it shows an increasing trend. A high return on equity often reflects the firm's acceptance of strong investment opportunities and effective expense management (Van Horne and Wachowicz, Jr., 2007).

Return on Capital Employed (in %)

This ratio indicates the efficiency and profitability of a company's capital investment. It is expressed as percentage, complements the return on equity ratio by adding a company's debt liabilities to equity to reflect a company's total capital employed. This measure narrows the focus to gain a better understanding of a company's ability to generate returns from its available capital base. This ratio is calculated by dividing net profit after taxes by capital employed. Capital employed represents the sum of net tangible fixed assets and net current assets. ROCE of Square is much higher than that of Beximco and it shows an increasing trend.

Table 2: Average profitability ratios of the selected companies (in %)

Name of the company	Average gross profit ratio	Average operating profit ratio	Average net profit ratio	Average return on investment	Average return on capital employed	Average return on equity	Average cash flow margin	Average cash return on asset
Square	40.84	19.98	17.98	12.84	15.94	17.95	21.19	14.75
Beximco	47.02	23.53	14.96	6.48	7.54	8.99	17.50	4.75
Industry average*	45	20	15	6.67	3.59	13.26	19	9

*Industry average figures have been found by averaging the profitability ratios of the selected companies that capture more than 50% share of the pharmaceutical industry.

Cash Flow Margin

Cash flow margin is also called Operating Cash Flow Margin and Margin Ratio. This ratio measures how well a company's daily operations can transform sales of their products and services into cash.. Cash is what a company needs to generate to pay its expenses and purchase assets, and how well a company can convert sales into cash is crucial. Knowing that a company is continually improving its Cash Flow Margin is extremely valuable and is a key indicator of profitability performance. Cash flow margin of Square is higher than that of Beximco. So it can be said that the cash management of Square is better.

Cash Return on Assets

The Cash Return on Assets measures the Cash Flow from Operations in relation to Total Assets. Cash Return on Assets basically shows how well (or how poorly) the company is generating cash from its asset investments. Similar to Return on Total Assets, the company hopes to generate as much revenue as possible from its assets. This calculation is especially important to evaluating companies with large investments in assets, such as manufacturing concern. Cash return on asset of Square is much higher than that of Beximco, but it shows a decreasing tendency. Beximco cash return is improving gradually.

Average Profitability Indicators of the Selected Companies

Table 2 shows that average profitability indicators for Square are higher than Beximco, except gross profit ratio and operating profit ratio. These two ratios of Beximco follow the industry norm but which is not the case of Square. On the other hand the six other profitability indicators of Square are much higher than that of Beximco and go with the industry norm. Beximco has not been able to attain industry average net profit ratio, return on investment, return on equity, cash flow margin and cash return on assets.

CONCLUSION

This analysis attempts to show a comparative profitability analysis between two leading pharmaceutical companies and tries to find the way out to identify the areas where the profitability can improve. From the discussion, it can be concluded that the profitability performance of Square is better than Beximco though this is not the case of gross profit and operating profit ratio. This analysis identifies the elements that influence the profitability position and suggests some corrective measures. Comparative profitability analysis is a useful tool of judging a business concern's financial status in an industry. The Pharmaceuticals should regularly make use of ratio analysis and measures should be taken to improve undesirable ratios at least to the point of industry's average.

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