Journal of Economics and Business

Mamun, Md. Abdullah Al. (2020), Profitability Analysis of Pharmaceutical Industry in Bangladesh. In: *Journal of Economics and Business*, Vol.3, No.4, 1316-1323.

ISSN 2615-3726

DOI: 10.31014/aior.1992.03.04.283

The online version of this article can be found at:
https://www.asianinstituteofresearch.org/

Published by:
The Asian Institute of Research

The Asian Institute of Research *Journal of Economics and Business* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of Economics and Business, which includes, but not limited to, Business Economics (Micro and Macro), Finance, Management, Marketing, Business Law, Entrepreneurship, Behavioral and Health Economics, Government Taxation and Regulations, Financial Markets, International Economics, Investment, and Economic Development. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Journal of Economics and Business* aims to facilitate scholarly work on recent theoretical and practical aspects of Economics and Business.

ASIAN INSTITUTE OF RESEARCH
Connecting Scholars Worldwide

ASIAN INSTITUTE OF RESEARCH
Connecting Scholars Worldwide

The Asian Institute of Research
Journal of Economics and Business
Vol.3, No.4, 2020: 1316-1323
ISSN 2615-3726

DOI: 10.31014/aior.1992.03.04.283

Profitability Analysis of Pharmaceutical Industry in Bangladesh

Md. Abdullah Al Mamun[1]

[1] Associate Professor, Department of Business Administration, Pabna University of Science and Technology, Pabna-6600, Bangladesh. Email: mamunfin38@yahoo.com

Abstract
This paper tries to analyze profitability performance of pharmaceutical companies listed in Dhaka stock exchange in Bangladesh. To achieve the objectives, data have been collected from secondary sources of listed pharmaceutical companies listed in Dhaka stock exchange for the period from 2000-01 to 2017-18. The collected data have been categorized, tabulated and analyzed by different profitability ratios and statistical tools like mean, standard deviation and coefficient of variation. The financial ratios includes gross profit margin, operating profit margin, and net profit margin, return on equity, return on assets. The results indicates that overall profitability of the industry is satisfactory but ambee, Ibn Sina, beximco and glaxo have enough scope to improve operational efficiency and pricing strategy, assets using to generate and retain profit for the shareholders.

Keywords: Profitability, Net Profit Margin, Returns on Equity and Return on Assets

1. Introduction

The industrialization is an essential condition of development of a country. Bangladesh is a country of over sixteen million people (Bank, W., 2015). The rises in awareness concerning health care, higher per capita income and increasing government expenditure have resulted in higher demand for drugs. The sector meets ninety-eight percent of local the demand for medication and may be thought of as self-sufficient (Wahal, 2016). This quickly growing sector contributes nearly 1 percent of the gross domestic product and is presently the third-largest tax-paying sector of the country. At present, Bangladesh's pharmaceutical sector is effectively sells their product to seventy-nine countries. The quantity of export is predicted to grow in upcoming years (n, d, 2013)]. Profitability performance could be a major concern of concern to manager, management also to shareholders of corporation (Kamruzzaman, 2014). Financial performance of an organization is measured by profitability of the firm. Earning enough profit is necessary for its existence (Ross, Wester field & Jordan, 2010). It has been found from the study of the profit earning ability, liquidity position, financial position and performance of sector doesn't seem to be in sound position and it had been also a lower level position of bankruptcy (Majumder & Rahman, 2011). The

explanations behind this position of the arena are inefficiency of monetary management, absence of realistic goals, strict government regulation and augmented price of raw-materials, labor and overhead. Therefore creating sustainable profit is the main goal of any business concern. There are some studies conducted by Chowdhury & Amin (2007), (Bhuiyan & Sultana (2010), (Bhuiyan, Sultana & Sultana (2011), Habib & Alam, (2011), Islam & Mili (2012) and Karim, Mamun & Miah (2017). By considering importance of the pharmaceutical sector and I have chosen an analysis of profitability of the pharmaceutical industry in Bangladesh.

1.1 Objectives of the study

The study is designed to achieve the following objectives:

- To assess the financial performance of the selected Pharmaceuticals firms.
- To identify the financial strengths and weaknesses of selected Pharmaceuticals firms.

2. Literature review

Rahman (2014) examined the financial performance of square pharmaceutical ltd. in Bangladesh. In order to analyze the financial performance, he has acquired secondary data of the firm from annual reports from 2006-2013. Researcher has analyzed the data using ratio, statistical tools. The ratio included current ratio, quick ratio, receivable turnover, inventory turnover ratio, total asset turnover ratio, financial leverage, gross profit margin, net profit margin, operating expense ratio, return on assets, return on equity. He found that receivable turnover, earning power and return on equity is satisfactory. He also found that liquidity position and inventory turnover is not satisfactory.

Majumder and Rahman (2011), made a study on financial analysis of selected pharmaceutical companies in Bangladesh. They have collected the both primary and secondary data. The sources of secondary data were annual reports of the selected pharmaceuticals companies for the period of 2005-06 to 2007-08. They had acquired primary data through discussion and interview with the executives. They used financial ratios, statistical tools and Altman Z score model to achieve the goal. The financial ratio includes current ratio, quick ratio, inventory turnover ratio, gross profit margin, net profit margin, return on investment, operating profit margin, return on capital employed, return on assets, current assets to fixed assets, net working capital to total assets, net fixed assets turnover, total assets turnover, debt-equity ratio, debt to total assets ratio. They found that the profit earning capacity, liquidity position, financial position and the performance of the most of the Pharmaceuticals are not in sound position.

Karim, Al-Mamun and Miah (2017) led a study on connection between working capital administration efficiency and corporate profitability: a study on square pharmaceuticals and beximco pharmaceuticals, in Bangladesh. Researcher has assembled secondary information of the firms for a time of 10 years from 2006 to 2015. They analyzed data by liquidity, solvency ratios, different profitability and correlation test. The investigation uncovers that there is a connection between working capital administration and profitability of both of the organizations. The financial performance of Beximco Pharmaceuticals Limited ought to be improved promptly through the effective administration of working capital to increase its profitability.

Bhunia (2014) made a study on financial analysis of selected Indian pharmaceutical companies. Researcher has collected the secondary data of two public sector pharmaceutical companies listed in Bombay stock exchange. The sources of secondary data were annual reports of the selected pharmaceuticals companies for the period of 1997-98 to 2008-09. Researcher acquired primary data through discussion and interview with the executives. He used liquidity, solvency, profitability and economic performance, numerous accounting ratios. The linear multiple regression analysis has been used to reach the goal. The financial ratio includes current ratio, quick ratio, inventory turnover ratio, gross profit margin, net profit margin, return on investment, operating profit margin, return on capital employed, return on assets, current assets to fixed assets, net working capital to total assets, net fixed assets turnover, total assets turnover, debt equity ratio, debt to total assets ratio. He found that the profit earning capacity, liquidity position, financial position and the performance of the Pharmaceuticals are in mixed position.

3. Methodology

In order to analyze the profitability performance of pharmaceutical industry in Bangladesh six listed companies in Dhaka stock exchange have been selected for the study purposively. The secondary data of these sample firms have been collected from their annual reports for a period of 18 years from 2000-01 to 2017-18. The collected data have been categorized, tabulated and analyzed by different profitability ratios and statistical tools like mean, standard deviation and coefficient of variation. The ratios include gross profit margin, operating profit margin, and net profit margin, return on equity and return on assets. The selected pharmaceutical companies are Ambee Pharmaceuticals Ltd(AMB), Beximco Pharmaceuticals ltd(BPL), Glaxo Smitkline Bangladesh ltd(GSK), The Ibn Sina Pharmaceutical Industry Ltd(IBN), Square Pharmaceuticals ltd and Renata ltd(RPL).

4. Data analysis and interpretations

4.1 Gross margin represents the percent of total sales revenue that the corporate retains after incurring the direct costs related to producing goods and services it sells. The higher the percentage, the more the company retains on each taka of sales, to service its other costs and debt obligations. Some authors believe that gross margin ratio ranging from 20% to 30% has been taken into consideration as the usual norm for any industrial organizations (Majumder & Rahman, 2011).

Table 1: Gross profit margin of pharmaceutical industry in Bangladesh from 2000-01 to 2017-18.

Year	AMB	SPL	BPL	GSK	IBN	RPL	Avg.
2000-01	41.43	36.03	39.24	28.44	18.51	41.23	34.15
2001-02	39.14	39.11	35.77	28.85	32.87	41.65	36.23
2002-03	48.76	36.06	37.92	27.81	33.01	58.95	40.42
2003-04	47.19	40.38	40.46	25.89	33.67	48.41	39.33
2004-05	46.79	40.75	46.84	22.59	35.40	48.45	40.14
2005-06	52.80	42.11	46.76	19.67	36.28	49.25	41.14
2006-07	42.99	43.09	45.30	21.56	36.09	48.74	39.63
2007-08	57.22	41.19	50.06	24.98	37.96	50.59	43.67
2008-09	55.07	42.24	47.29	31.23	38.53	53.33	44.62
2009-10	53.55	42.76	48.89	34.20	38.61	52.75	45.13
2010-11	54.20	42.81	47.99	28.48	38.72	52.46	44.11
2011-12	52.91	42.90	47.25	28.61	38.78	52.82	43.88
2012-13	52.38	43.07	46.12	32.67	39.41	50.71	44.06
2013-14	52.97	43.91	45.55	37.72	39.91	51.21	45.21
2014-15	52.31	45.18	46.28	39.33	40.03	50.81	45.66
2015-16	52.17	48.37	35.86	38.99	40.36	50.94	44.45
2016-17	52.53	48.68	59.54	38.78	40.50	50.51	48.42
2017-18	51.88	49.34	46.75	46.70	40.64	50.24	47.59
Mean	50.35	42.67	45.21	30.92	36.63	50.17	42.66
SD	4.95	3.70	5.72	7.20	5.20	3.99	3.76
CV	0.10	0.09	0.13	0.23	0.14	0.08	0.09

Sources: Compiled from annual reports of pharmaceutical companies from 2000-01 to 2017-18

The above table 1 shows the gross profit margin of six companies from 2000-01 to 2017-18 is 42.66 percentages. The table also exhibits average gross margin for *Ambee* (50.35) *Square* (42.67), *Beximco* (45.21), *Glaxo*, (30.92), Ibn *Sina* (36.63) and *Renata* (50.17) percentages. The ratio of *Glaxo*, (30.92), Ibn *Sina* (36.63) which are below to the industry average. The table also states that a coefficient variation of return was lowest for 0.06 for *Square* and the highest 0.19 in case of *Glaxo*. The gross profit margin of *Ambee* (50.35) *Square* (42.67), *Beximco* (45.21), and *Renata* (50.17) percentages are higher than of industry average reflects that more efficiency retaining more paisa of a taka sales. But the gross profit margin of *Glaxo*, (30.92), Ibn *Sina* (36.63) are lower than industry average which implies that firm retain less paisa of a taka of sales.

4.2 The operating margin of profit could be a ratio accustomed to measure a company's pricing strategy and operating efficiency. The operating margin of profit measures the share of every sale taka remaining in any case costs and expenses apart from interest, taxes, and preferred shares dividends are deducted. A high operating profit margin is preferred indicates efficiency as well. Operating profit ratio ranging 4% to 6% is considered norm for the purpose of comparison and control by some authors (Majumder & Rahman, 2011).

Table 2: Operating profit margin of pharmaceutical industry in Bangladesh from 2000-01 to 2017-18.

Year	AMB	SPL	BPL	GSK	IBN	RPL	Avg.
2000-01	2.30	23.34	25.81	8.67	6.27	38.67	17.51
2001-02	3.59	29.18	21.61	6.74	9.93	13.43	14.08
2002-03	5.59	20.39	19.69	7.28	9.77	16.50	13.20
2003-04	4.48	25.61	20.86	6.97	8.79	18.12	14.14
2004-05	3.15	29.79	21.77	5.32	8.17	19.70	14.65
2005-06	4.91	25.95	20.16	-0.71	4.45	20.98	12.62
2006-07	3.35	24.34	18.20	4.98	4.41	21.71	12.83
2007-08	3.44	20.70	24.91	11.26	5.01	23.74	14.84
2008-09	3.70	24.12	20.57	14.28	4.35	24.85	15.31
2009-10	3.95	20.77	25.20	14.75	4.89	25.78	15.89
2010-11	3.93	20.43	25.20	8.80	4.50	26.34	14.87
2011-12	3.57	20.69	23.77	6.38	4.36	28.17	14.49
2012-13	3.63	21.45	22.16	8.92	5.23	27.51	14.82
2013-14	8.53	23.95	21.58	14.78	6.45	26.21	16.92
2014-15	7.20	27.87	21.99	15.53	7.31	24.45	17.39
2015-16	7.03	30.66	22.25	12.52	8.00	25.59	17.68
2016-17	8.37	28.28	22.23	13.02	8.32	25.40	17.60
2017-18	5.59	32.23	22.91	24.57	8.71	25.57	19.93
Mean	4.79	24.99	22.27	10.23	6.61	24.04	15.49
SD	1.86	3.91	2.07	5.58	2.03	5.43	1.97
CV	0.39	0.16	0.09	0.55	0.31	0.23	0.13

Sources: Compiled from annual reports of pharmaceutical companies from 2000-01 to 2017-18

The above table 2 shows the operating profitability of selected companies of pharmaceutical industry in Bangladesh. The industry average of operating profit of six companies and for the study period of 2000-01 to 2017-18 is 15.49 percentages. From the table, it appears that average operating profit margins of the companies are *Ambee* (4.79), *Square* (24.99), *Beximco* (22.27), *Glaxo*, (10.23), Ibn *Sina* (6.61) and *Renata* (24.04) percentages. The operating margin of *Square* (24.99), *Beximco* (22.27), and *Renata* (24.04) percentages which are higher than industry average of 15.49 percentages reflects that more efficiency retaining more paisa of a taka of sales. But the operating profit margin of *Ambee* (4.79), Glaxo, (10.23), Ibn *Sina* (6.61) percentages which lower than industry average 15.49 percentages which implies that firm retain less paisa of a taka of sales.

4.3 The net profit margin measures the percentage of each sales dollar remaining after all costs and expenses, including interest, taxes have been deducted. The higher the firm's net profit margin is the better.

Table 3: Net profit margin of pharmaceutical industry in Bangladesh from 2000-01 to 2017-18

Year	AMB	SPL	BPL	GSK	IBN	RPL	Avg.
2000-01	0.85	19.12	16.73	4.92	4.02	8.17	8.97
2001-02	2.30	20.69	13.54	5.98	7.30	7.96	9.63
2002-03	3.48	18.81	9.49	6.68	6.93	23.26	11.44
2003-04	2.73	20.55	12.25	14.42	6.40	26.80	13.86
2004-05	2.10	23.55	14.71	3.64	6.13	11.97	10.35
2005-06	2.25	19.14	12.71	-1.19	3.56	12.56	8.17

2006-07	2.23	17.37	9.82	2.83	3.55	13.26	8.18
2007-08	2.64	16.73	13.60	6.62	4.11	14.02	9.62
2008-09	2.72	19.25	12.83	10.71	3.85	15.47	10.80
2009-10	2.74	18.84	16.20	11.29	3.74	16.73	11.59
2010-11	2.80	19.48	15.19	5.96	4.03	16.73	10.70
2011-12	2.80	18.05	14.20	4.39	3.33	16.26	9.84
2012-13	2.30	18.61	13.39	8.06	3.95	15.92	10.37
2013-14	2.19	19.85	13.65	11.50	4.75	15.49	11.24
2014-15	1.92	21.21	15.07	12.41	6.89	15.58	12.18
2015-16	1.60	34.22	14.71	10.26	5.81	15.62	13.70
2016-17	2.06	35.89	14.36	9.85	5.83	16.28	14.05
2017-18	2.37	29.27	14.72	3.05	9.71	17.18	12.72
Mean	2.34	21.70	13.73	7.30	5.22	15.51	10.97
SD	0.56	5.59	1.88	4.06	1.75	4.43	1.81
CV	0.24	0.26	0.14	0.56	0.34	0.29	0.17

Sources: Compiled from annual reports of pharmaceutical companies from 2000-01 to 2017-18

The above table 3 depicts the picture of net profit margin of selected pharmaceutical companies in Bangladesh. The industry average of net profit margin is 10.97 percentages, with minimum 8.17 and maximum 13.86 percentages and standard deviation of gross margin 1.81 percentages. Net profit margins are for *Ambee* (2.34), *Square* (21.70), *Beximco* (13.73)*, Glaxo*, (7.30), Ibn *Sina* (5.22) and *Renata* (15.51) percentages. The net profit margins of *Ambee* (2.34), *Glaxo*, (7.30) and Ibn *Sina* (5.22) percentages which are below to industry average. The table also states that coefficient variation of return are lowest for *Beximco* (0.14) and the highest for *Glaxo* (0.56). The net profit margins of *Square* (21.70), *Beximco* (13.73)*,* are higher than of industry average reflects that more efficiency retaining more paisa of a taka sales. But the net profit margin of *Ambee* (2.34), *Glaxo*, (7.30) and Ibn *Sina* (5.22) percentages are lower than industry average which implies those firms retain less paisa of a taka of sales.

4.4 The return on equity (ROE) measures the return earned on the common stockholders' investment in the firm. Generally, greater these returns, the better off are the owners. A rate of return ranging from 11% to 12% return on equity may be considered as reasonable for a selected enterprise (Majumder & Rahman, 2011).

Table 4: Return on equity of pharmaceutical industry in Bangladesh from 2000-01 to 2017-18.

Year	AMB	SPL	BPL	GSK	IBN	RPL	Avg.
2000-01	2.38	22.26	9.64	9.05	11.24	17.70	12.04
2001-02	8.46	23.20	7.69	11.57	22.36	16.25	14.92
2002-03	10.67	19.86	4.51	13.20	21.31	55.22	20.79
2003-04	9.71	20.97	6.09	21.92	19.62	62.25	23.43
2004-05	6.69	22.55	7.17	5.96	20.48	26.00	14.81
2005-06	10.97	20.94	5.92	-2.23	12.71	24.65	12.16
2006-07	16.03	17.77	4.28	5.64	16.61	34.32	15.78
2007-08	13.64	16.42	5.22	13.70	22.94	26.06	16.33
2008-09	12.01	19.00	5.74	27.82	22.86	27.34	19.13
2009-10	15.10	18.42	6.58	29.70	22.35	28.65	20.14
2010-11	15.11	18.99	7.00	19.83	21.54	27.55	18.34
2011-12	15.05	17.81	7.17	16.42	10.11	24.60	15.19
2012-13	14.75	17.73	7.10	29.51	12.37	22.14	17.27

2013-14	12.95	18.64	7.31	35.69	18.74	22.19	19.25
2014-15	11.25	19.83	8.69	31.92	26.14	21.33	19.86
2015-16	13.74	27.93	12.78	24.93	23.33	21.04	20.62
2016-17	11.98	25.16	8.88	25.45	21.16	20.94	18.93
2017-18	13.40	20.07	9.44	11.72	36.86	21.13	18.77
Mean	11.88	20.42	7.29	18.43	20.15	27.74	17.65
SD	3.45	2.91	2.07	10.58	6.26	12.09	3.07
CV	0.29	0.14	0.28	0.57	0.31	0.44	0.17

Sources: Compiled from annual reports of pharmaceutical companies from 2000-01 to 2017-18

The above table 4 shows the return on equity of selected companies of pharmaceutical industry in Bangladesh. The industry average of return on equity of pharmaceutical industry in Bangladesh is 17.65 percentages. From the table, it appears that average return on equity of *Ambee* (11.88), *Square* (20.42), *Beximco* (7.29), *Glaxo* (18.43) *Ibn Sina* (20.15) and *Renata (27.74)* percentages respectively. The coefficient variations return on equity is highest for *Glaxo (0.57)* and the lowest for *Square (0.14)*. The average return on equity of *Square* (20.42), *Glaxo* (18.43) *Ibn Sina* (20.15) and *Renata (27.74)* percentages which are higher than industry average and standard norms reflects efficiency in generating return for shareholders. But the return on equity of *Beximco* (7.29) percentages which lower than industry average and standard norms which implies that firm have less efficiency in generating returns for shareholders.

4.5 The return on total assets (ROA), measures the total effectiveness of management in generating profits with its available assets. The higher the firm's return on total assets, the better the firm's profitability. Some authors consider 10% to 12% rate of return on total assets as reasonable norm for a profitable firms and this might be considered as reasonable norm for the selected enterprises (Majumder & Rahman, 2011).

Table 5: Return on assets of Pharmaceutical Industry in Bangladesh from 2000-01 to 2017-18.

Year	AMB	SPL	BPL	GSK	IBN	RPL	Avg.
2000-01	1.00	16.29	6.83	6.61	7.50	9.85	8.01
2001-02	3.42	18.21	5.21	8.30	12.09	10.17	9.57
2002-03	3.89	14.71	2.80	8.65	10.00	29.93	11.67
2003-04	3.10	18.48	3.55	16.56	9.57	34.51	14.30
2004-05	1.87	23.73	5.02	4.49	11.89	15.11	10.35
2005-06	2.07	15.28	4.12	-1.64	6.55	13.63	6.67
2006-07	2.75	13.17	2.96	4.33	7.67	15.59	7.75
2007-08	2.24	11.92	4.07	10.28	9.52	13.70	8.62
2008-09	2.43	14.56	3.60	21.14	8.81	15.67	11.03
2009-10	2.56	15.18	5.10	21.07	9.77	16.65	11.72
2010-11	2.68	15.15	5.40	11.77	10.73	14.18	9.99
2011-12	2.80	14.17	5.54	8.61	7.67	12.79	8.60
2012-13	2.55	14.88	5.40	15.47	8.13	10.91	9.56
2013-14	1.99	16.61	5.42	18.32	11.11	11.87	10.88
2014-15	1.54	19.20	6.53	15.69	15.49	12.43	11.82
2015-16	1.92	28.20	9.51	11.77	12.12	13.23	12.79
2016-17	1.66	24.41	6.83	11.50	12.04	14.41	11.81
2017-18	1.85	21.69	6.71	2.77	19.68	15.36	11.34
Mean	2.35	17.55	5.25	10.87	10.57	15.56	10.36
SD	0.71	4.37	1.66	6.35	3.17	6.40	1.95
CV	0.30	0.25	0.32	0.58	0.30	0.41	0.19

Sources: Compiled from annual reports of pharmaceutical companies from 2000-01 to 2017-18

The above table 5 exhibits the return on total assets of selected pharmaceutical companies for the period of 18 years from 2000-01 to 2017-18. The industry average of return on total assets is 10.36 percent with maximum of 14.30 percent and minimum 6.67 percent and standard deviation of return on total assets 1.96 percent. The table also states that average return on total assets of *Ambee* (2.35), *Square* (17.55), *Beximco* (5.25), *Glaxo* (10.87) percent*, Ibn Sina* (10.57) and *Renata* (15.56) percentages. The return on total asset for the company *Square* (17.55)*, Glaxo* (10.87)*, Ibn Sina* (10.57) and *Renata* (15.56) percentages that are higher than of industry average and standard norms reflects that more efficiency in using assets to generate profit. But the return on total assets of *Ambee* (2.35) and *Beximco* (5.25) percentage which are lower than industry average and standard norms. It implies inefficiency in using assets to generate profit compared to the industry leader.

5. Findings of the study

By considering the gross profit margin of the firms*,* industry average and standard norms the overall profitability is satisfactory. The operating profit margins of *Ambee* (4.79), Glaxo, (10.23), Ibn *Sina* (6.61) percentages which lower than industry average 15.49 percentages which implies that firm retain less paisa of a taka of sales. The net profit margin of *Ambee* (2.34), *Glaxo*, (7.30) and Ib*n Sina* (5.22) percentages are less than industry average**.** The return on equity of *Beximco* (7.29) percentages which lower than industry average and standard norms which implies that firm have less efficiency in generating returns for shareholders**.** The return on total assets of *Ambee* (2.35) and *Beximco* (5.25) percentage which are lower than industry average and standard norms. It implies less inefficiency in using assets to generate profit compared to the industry leader.

6. Recommendations

The industry overall profitability is satisfactory. But the profitability of *Ambee, Glaxo, Ibn Sina and beximco* is not satisfactory in terms of operating profit, net profit, return on equity and return on assets. The result is due inefficiency of financial management, the pricing policy, credit policy, inventory planning, absence of realistic goals, strict government regulation and increased cost of raw-materials, labor and overhead. These firms should increase their profitability by formulating appropriate pricing, credit, inventory policy and proper cost management.

7. Conclusion

The present study to analyze the profitability performance of pharmaceutical industry in Bangladesh six listed companies in Dhaka stock exchange have been selected for the study purposively. In order to conduct the study data of these sample firms have been collected from their annual reports for a period of 18 years from 2000-01 to 2017-18. The collected data have been categorized, tabulated and analyzed by different profitability ratios and statistical tools like mean, standard deviation and coefficient of variation. The ratios include gross profit margin, operating profit margin, and net profit margin, return on equity and return on assets. The results of the study is compared across firms of industry, industry average and standard norms, the overall profitability of industry is satisfactory but *Ambee, Glaxo, Ibn Sina and beximco* have enough scope to improve their profitability by formulating appropriate pricing, credit, inventory policy and proper cost management.

References

Annual reports of Ambee Pharmaceuticals Ltd, Beximco Pharmaceuticals ltd, Glaxo Smitkline Bangladesh ltd, The Ibn Sina Pharmaceutical Industry Ltd, Square Pharmaceuticals ltd and Renata ltd. From 2000-01 to 2017-18.

Bangladesh has done well in the pharmaceutical sector. (2013). *Hub pages*. Retrieved 5 April 2016, from https://hubpages.com/business/pharmaceutical-sector-of-Bangladesh.

Bank, W., 2015. World Bank: Country data. *Retrieved from World Bank website: http://www. World Bank. Org/en/country/bangladesh*.

Bhuiyan, A., Sultana, M., & Sultana, S. (2011). Analysis of Pharmaceutical industry of Bangladesh. *Bangladesh Res. Pub. J*, *5*(2), 142-156.

Bhuiyan, M.A.R, & Sultana, S. (2010). Analysis of Pharmaceutical industry of Bangladesh. Challenges and Critical Success Factor, *BUBT Journal,3,* 59-77

Bhunia, A. (2010). Financial Performance of Indian Pharmaceutical Industry A Case Study. *Asian Journal of Management Research,* 427-451

Chowdhury, A. & Amin, M. M. (2007). Working capital management practiced in Pharmaceutical companies listed in Dhaka Stock Exchange. *BRAC University Journal, IV* (2), 75-86.

Habib, M. A., & Alam, M. Z. (2011). Business analysis of pharmaceutical firms in Bangladesh: problems and prospects. *Journal of Business and Technology (Dhaka)*, *6*(1), 61-77.

Islam, M. N., & Mili, S. A. (2012). Financial diagnosis of selected listed pharmaceutical companies in Bangladesh. *Situations*, *4*(4).

Kamruzzaman, M. (2014). *Financial Management*, (1st ed,), Dhaka, Bangladesh Samonnoy Prokashani. P.488

Karim, R., Al-Mamun, M. A., & Miah, M. T. (2017). Relationship Between Working Capital Management Efficiency and Profitability: A Comparative Study on Square Pharmaceuticals Limited and Beximco Pharmaceuticals Limited, in Bangladesh. *International Journal of Economics, Finance and Management Sciences*, *5*(2), 121-128.

Majumder, M. T. H., & Rahman, M. M. (2011). Financial analysis of selected pharmaceutical companies in Bangladesh. *European Journal of Business and Management*, *3*(2).

Rahman, D. (2014). Financial Performance of Pharmaceutical Industry in Bangladesh with Special Reference to Square Pharmaceuticals Ltd. *IOSR Journal of Business and Management*, *16*(10), 38-46.

Ross, S. A., Westerfield, R., & Jordan, B. D. (2010). *Fundamentals of corporate finance*. Tata McGraw-Hill Education 2-5.

S.P. Jain & K.L Narang,. *Financial Accounting*, Kalyani Publishers, Ludhiana, New Delhi, pp V1/27 – V1/44.

Wahal, V. (2016). *Bangladesh Emerges in Drug Exportation Industry – DRG Blog – DRG.DRG*.Retrieved1March 2017, from https://decisionresourcesgroup.com/drg-blog/bangladesh-emerges-in-drug-exportation-industry/