B R BANGLADESH RESEARCH PUBLICATIONS JOURNAL ISSN: 1998-2003, Volume: 7, Issue: 4, Page: 428-436, November - December, 2012

# FINANCIAL PERFORMANCE ANALYSIS OF NCBS IN BANGLADESH: A CASE STUDY ON JANATA BANK LIMITED

Md. Zakir Hossain<sup>1\*</sup>, Afjal Hossain<sup>2</sup>, Dhanonjoy Kumar<sup>3</sup>, Shaikh Masrick Hasan<sup>4</sup>, and Md. Farijul Islam<sup>5</sup>

Md. Zakir Hossain, Afjal Hossain, Dhanonjoy Kumar, Shaikh Masrick Hasan, and Md. Farijul Islam (2012). Financial Performance Analysis of NCBs in Bangladesh: A Case Study on Janata Bank Limited. Bangladesh Res. Pub. J. 7(4): 428-436. Retrieve from http://www.bdresearchpublications.com/admin/journal/upload/09365/09365.pdf

# Abstract

Commercial Banks play a vital role in the economic development of Bangladesh. Janata Bank is one of the leading state owned banks in our country which provides banking services all over the country. Present study tries to identify the financial performance of the bank. The study period is 2001-2010. Researcher used different ratios and statistical tools to measure the financial position of the bank. Maximum results (profitability ratio, productivity ratio, spread ratio etc) of the study are positive. Very few ratios (burden ratio-noninterest expenditure as percentage of working fund) in some years are not satisfactory, but except these few results overall calculated results show good sign for the bank. If the bank tries to recover some of its limitations it will enhance its performance in future.

Key words: Nationalized Commercial Banks (NCBs), Benchmarking, profitability, working fund.

## Introduction

Bangladesh is one of the developing countries in the world. Banking services are very crucial for its industrial fulfillment. At present banking scenario of Bangladesh both the Nationalized Commercial Banks (NCBs) and the Private Commercial Banks (PCBs) are facing a difficult transition period in terms of their assets quality and overall performance. This situation has been prevailing because of disproportionate productivity due to some environmental constraints, political instability and socio-economic instability. They are also facing to cope up with justifiable investment in commercial and agricultural activities. Generally, the financial performance of banks and other financial institutions has been measured using a combination of financial ratios analysis, benchmarking, measuring performance against budget or a mix of these methodologies (Avkiran, 1995). Simply stated much of the current bank performance literature describes the objective of financial organizations as that of earning acceptable returns and minimizing the risks taken to earn this return (Hempel *et al.*, 1996). Chien and Danw (2004) showed in their study that most previous studies

<sup>\*</sup>Corresponding Author

<sup>1</sup> Assistant Professor, Department of Accounting & Information Systems, Islamic University, Kushtia

<sup>2</sup> Assistant Professor, Department of Marketing, Patuakhali Science and Technology University, Patuakhali

<sup>3</sup> Lecturer, Department of Management, Islamic University Kushtia

<sup>4</sup> Lecturer, Department of Finance, Jagannath university, Dhaka

<sup>5</sup> Lecturer, Department of Marketing, Hajee Mohammad Danesh Science & Technology University, Dinajpur

concerning company performance evaluation focus merely on operational efficiency and operational effectiveness, which might directly influence the survival of a company. Elizabeth and Ellot (2004) indicated that all financial performance measure as interest margin, return on assets, and capital adequacy are positively correlated with customer service quality. Bahar (1989) in his seminar paper named "An Evaluation of Banks in Bangladesh: An Exploratory Approach" mentioned that productivity should be judged from quantitative as well as qualitative aspects of performance of different banks from: (a) Social banking, (b) Growth, (c) Profitability, (d) Productivity and (e) Customer's service. Janata Bank Limited, one of the state owned commercial banks in Bangladesh. Immediately after the emergence of Bangladesh in 1971, the erstwhile United Bank Limited and Union Bank Limited were renamed as Janata Bank. On 15<sup>th</sup> November, 2007 the bank has been corporatized and renamed as Janata Bank Limited.

## Objectives of the study

The prime objective of the study is to analyze the financial performance of Janata Bank Limited. The specific objectives of the study are:

- 1. To get an overall idea about Janata Bank Limited.
- 2. To measure the profitability of Janata Bank Limited.

# Methodology of the Study

The study covers a period of 10 (ten) financial and operational years from 2001 to 2010. Net profit, total deposit, total advances, total investment, reserve fund, employee & branch performance etc. were selected to measure the performance. In this study the main analytical area is financial performance and analytical tools are the various statistical techniques, spread ratios, burden ratios, profitability ratios and productivity ratios. All the necessary data are taken and analyzed in a systematic manner. The main sources of data used in the study are annual reports, annual accounts and official records of Janata Bank Limited. Moreover, published literatures and journals, Bangladesh Banks Booklets, web-sites of different banks and Books are used. The data collected for the purpose have been analyzed and examined critically on the light of various statistical techniques and selected accounting ratios.

## An Overview of Janata Bank Limited

Janata Bank Limited is a state owned commercial bank which was incorporated as a Public Limited Company on 21 May 2007 as per Companies Act 1994 and took over the business of the then Janata Bank with all of its assets, liabilities, right, power, privilege and obligation on a going concern basis through a vendor agreement signed between the Peoples Republic of Bangladesh and Janata Bank Limited on 15 November 2007 with a retrospective effect from 1st July 2007. All of its operational activities are governed by the Bank Companies Act 1991. The Bank has eight hundred sixty four (864) branches including four (04) overseas branches. Bangladesh Bank issued license on 31-05-2007 in the name of Janata Bank Limited to conduct the banking business. It is linked with 1202 foreign correspondents all over the world. The Bank provides all kinds of commercial banking services to its customers including accepting deposits, extending loan & advances, discounting & purchasing bills, remittance, money transfer, foreign exchange transaction, guarantee, commitments etc. The principal activities of its subsidiary are to carry on the remittance of hard-earned foreign currency to Bangladesh. Keeping this service in mind, the Bank has opened an NRB branch to render exclusive service to nonresident Bangladeshis. The mission of the bank is to actively participate in the socio-economic development of the nation by operating a commercially sound banking organization, providing credit to viable

#### Hossain et al.

borrowers, efficiently delivered and competitively priced, simultaneously protecting depositors' funds and providing a satisfactory return on equity to the owners.

# Data Analysis and Interpretation

					Net Profit as	Net Profit as	Net Profit as
Year	Net	Total	Total	Working	percentage	percentage	percentage
Tear	Profit	Income	Deposit	Fund	of Total	of Total	of working
					Income	Deposit	fund
2001	11.24	9,703.31	125,066.00	152,041.78	0.116	0.009	0.007
2002	14.81	10,990.00	138,892.00	168,234.65	0.135	0.011	0.009
2003	20.86	11,518.42	138,597.00	156,341.34	0.181	0.015	0.013
2004	0.01	10,934.56	151,036.00	169,030.50	0.000	0.000	0.000
2005	0.00	13,143.50	168,897.00	188,166.17	0.000	0.000	0.000
2006	-	16,272.17	182,947.00	212,663.92	-	-	-
2007	1,681.00	18,522.00	198,636.00	244,061.11	9.076	0.846	0.689
2008	3,145.35	20,922.04	221,336.00	267,157.24	15.034	1.421	1.177
2009	2,981.87	24,074.11	246,175.00	293,662.78	12.386	1.211	1.015
2010	4,907.00	30,703.60	286,525.46	345,709.86	15.982	1.713	1.419
Average					5.291	0.523	0.433
S.D.					6.613	0.664	0.551
C.V					124.991	127.004	127.140

Table 1. Profitability Ratio -I

Source: Annual Report

The above table depicts the following ratios of Profitability of the bank:

The first ratio indicates net profit as percentage of total income. The ratio increased last four years compare to first five years and the ratio in 2004, 2005 and 2006 were zero. The ratio was largest during the year 2010 (15.982) and smallest during the year 2004, 2005 and 2006 (0) while average ratio was 5.291 during the study period. The standard deviation and coefficient of variation were 6.613 and 124.988 respectively.

The second ratio indicates net profit as percentage of total deposit. The ratio increased last four years compare to first five years and the ratio in 2004, 2005 and 2006 were zero. The ratio was largest during the year 2010 (1.713) while average ratio was 0.523 during the study period. The standard deviation and coefficient of variation were 0.664 and 127.004 respectively. The co-efficient of variation during the study period was stable.

The third ratio indicates the net profit as percentage of working fund. The ratio increased last four years compare to first five years and the ratio in 2004, 2005 and 2006 were zero. The ratio was largest during the year 2010 (1.419) and average ratio was 0.433 during the study period. The standard deviation and coefficient of variation were 0.551 and -127.140 respectively.

### Table 2. Profitability Ratio -II

#### Amount in Million

Year	Net Profit	Curren t Assets	Fixed Assets	Total Assets	Capital Employ ed	Net Profit as perce ntage of Curre nt Assets	Net Profit as perce ntage of Fixed Assets	Net Profit as perce ntage of Total Assets	Net Profit as perce ntage of capita I emplo yed
2001	11.24	21,560.61	794.66	152,041.78	91,944.93	0.05	1.41	0.01	0.01
2002	14.81	20,483.17	919.37	168,234.65	104,520.29	0.07	1.61	0.01	0.01
2003	20.86	16,935.61	911.89	156,341.34	90,358.31	0.12	2.29	0.01	0.02
2004	0.01	20,420.13	1,418.55	169,030.50	97,031.22	0.00	0.00	0.00	0.00
2005	0.00	21,796.52	1,339.10	188,166.17	107,341.87	0.00	0.00	0.00	0.00
2006	-	22,033.16	1,287.32	212,663.92	120,977.16	-	-	-	-
2007	1,681.00	32,448.43	2,424.18	244,061.11	142,322.29	5.18	69.34	0.69	1.18
2008	3,145.35	29,595.65	2,446.43	267,157.24	156,548.41	10.63	128.57	1.18	2.01
2009	2,981.87	26,188.81	2,685.20	293,662.78	171,854.97	11.39	111.05	1.02	1.74
2010	4,907.00	27,505.72	6,327.98	345,709.86	211,467.06	17.84	77.54	1.42	2.32
Average	е					4.53	39.18	0.43	0.73
S.D.						6.19	49.34	0.55	0.92
<u> </u>						136.61	125.92	127.14	126.42

Source: Annual Report

The fourth ratio indicates net profit as percentage of Current Assets. The ratio was largest during the year 2010 (17.84) and smallest during the year 2004, 2005, 2006 while average ratio was 4.53 during the study period. The standard deviation and coefficient of variation were 6.19 and 136.61 respectively.

The fifth ratio indicates net profit as percentage of Fixed Assets. The average ratio was 39.18 during the study period. The standard deviation and coefficient of variation were 49.34 and 125.92 respectively. The co-efficient of variation during the study period was stable.

The sixth ratio indicates the net profit as percentage of Total Assets. The ratio increased last four years compare to first five years and the ratio in 2004, 2005 and 2006 were zero. The ratio was largest during the year 2010 (1.42) and average ratio was 0.43 during the study period. The standard deviation and coefficient of variation were 0.55 and 127.14 respectively. The co-efficient of variation during the study period was stable.

The seventh ratio indicates the net profit as percentage of Capital Employed. The ratio increased last four years compare to first five years and the ratio in 2006 was negative. The ratio was largest during the year 2010 (2.32) while average ratio was 0.73 during the study period. The standard deviation and coefficient of variation were 0.92 and 126.42 respectively. The co-efficient of variation during the study period was stable.

						A	mount in $N$	Nillion
Year	Total Income	Total Expenditure	Change in income	Change in expenditure	Δ  /	∆E / E	Productivity	Remarks (Fav / Unfav)
2001	9,703.31	9,300.76	-	-	-	-		
2002	10,990.00	9,682.43	1,286.69	381.674	0.133	0.041	3.23	Fav
2003	11,518.42	9,397.56	528.42	(284.874)	0.048	(0.029)	(1.63)	Unfav
2004	10,934.56	8,621.60	(583.86)	(775.958)	(0.051)	(0.083)	0.61	Unfav
2005	13,143.50	9,842.21	2,208.94	1,220.614	0.202	0.142	1.43	Fav
2006	16,272.17	12,058.64	3,128.67	2,216.427	0.238	0.225	1.06	Fav
2007	18,522.00	13,559.00	2,249.83	1,500.361	0.138	0.124	1.11	Fav
2008	20,922.04	13,919.01	2,400.04	360.010	0.130	0.027	4.88	Fav
2009	24,074.11	15,495.99	3,152.07	1,576.980	0.151	0.113	1.33	Fav
2010	30,703.60	18,622.78	6,629.49	3,126.786	0.275	0.202	1.36	Fav
Avera							1.40	
ge							1.49	
S.D							1.68	
C.V							113.061	

Table 3. Total Productivity of Janata Bank Limited

This table shows that the productivity levels of Janata Bank were favorable i.e. >1 in 2002, 2005, 2006, 2007, 2008, 2009 and 2010 i.e. 3.23, 1.43, 1.06, 1.11, 4.88, 1.33 & 1.36 respectively. Unfavorable positions were in 2003 and 2004 i.e., -1.63 and 0.61. From the analysis it is clear that in 2003 and 2004 the increasing trend in income is less than the increasing trend in expenditure, which means excessive expenditure caused the concern result in low level of productivity.

					Amount i	n Miliion
	Advance	Deposit	Income	Expenditure	Establishment	Spread
Year	per	Per	Per	Per	Exp Per	Per
	Employee	Employee	Employee	Employee	Employee	Employee
2001	5.589	7.493	0.581	0.557	0.136	0.018
2002	6.108	8.505	0.669	0.593	0.144	0.033
2003	6.344	8.666	0.720	0.588	0.156	0.094
2004	6.863	9.617	0.696	0.549	0.165	0.121
2005	8.124	11.024	0.858	0.642	0.204	0.178
2006	9.375	12.385	1.102	0.816	0.240	0.197
2007	8.745	14.332	1.340	0.098	0.141	0.101
2008	10.814	16.544	1.564	1.040	0.298	0.273
2009	12.678	18.760	1.835	1.181	0.337	0.342
2010	17.327	21.892	2.346	1.423	0.432	0.542
Average	9.197	12.922	1.171	0.749	0.225	0.190
S.D.	3.440	4.600	0.560	0.360	0.096	0.152
C.V.	37.409	35.596	47.814	48.014	42.390	79.950
Maximum	17.327	21.892	2.346	1.423	0.432	0.542
Minimum	5.589	7.493	0.581	0.098	0.136	0.018

Table 4. Productivity Ratio (Productivity per Employee)

Source: Annual Report

Table -04 shows the productivity ratios as per employee. Column 1 showed that advance per employee increased proportionately during the study period. The highest advance per employee was Tk. 17.327 million in 2010 and the lowest Tk. 5.589 million in 2001 while the average was Tk. 9.197 million. The standard deviation and coefficient of variation were 3.440 and 37.409 respectively. The coefficient of variation during the study period was stable. Here it is found that the increased manpower in the study period was productive in case of loan and advances.

Column 2 showed that deposit per employee increased proportionately during the study period. Maximum and minimum deposit per employee were Tk. 21.892 million in 2010 and Tk. 7.493 million in 2001 respectively while the average was Tk. 12.922. The standard deviation and coefficient of variation were 4.600 and 35.596 respectively. That means the increase in manpower during the study period contributes well to the deposit mobilization.

Column 3 showed that income per employee increased proportionately during the study period. The maximum level and minimum level were Tk. 2.346 million and Tk. 0.581 million respectively. The average was Tk. 1.171 million. The standard deviation and coefficient of variation were 0.560 and 47.814 respectively.

Column 4 showed that the maximum and minimum expenditure per employee were Tk. 1.423 million and Tk. 0.495 million respectively while the average was Tk. 0.789 million. The standard deviation and coefficient of variation were 0.303 and 38.412 respectively.

Column 5 showed that the highest establishment expenses per employee was Tk. 0.432 million in 2010 and the lowest Tk. 0.136 million in 2001 while the average was Tk. 0.225 million. The standard deviation and coefficient of variation were 0.096 and 42.390 respectively.

Column 6 showed that the highest spread per employee was Tk. 0.542 million in 2010 and the lowest Tk. 0.018 million in 2001 while the average was Tk. 0.190 million. The standard deviation and coefficient of variation were 0.152 and 79.950 respectively.

	Advance	Deposit	Income Per	Expenditure	Establishment	Spread
Year	Per	Per	Branch	Per Branch	Exp Per	Per
	Branch	Branch	DIGHCH		Branch	Branch
2001	103.659	138.962	10.781	10.334	2.521	0.329
2002	114.653	159.646	12.554	11.129	2.707	0.615
2003	119.789	163.633	13.599	11.095	2.948	1.778
2004	127.256	178.319	12.910	10.179	3.054	2.243
2005	146.950	199.406	15.518	11.620	3.693	3.222
2006	163.317	215.739	19.189	14.220	4.178	3.437
2007	142.925	234.241	21.840	15.990	2.312	1.651
2008	170.410	260.702	24.643	16.395	4.697	4.295
2009	195.486	289.277	28.289	18.209	5.195	5.277
2010	262.474	331.627	35.537	21.554	6.547	8.214
Average	154.692	217.155	19.486	14.073	3.785	3.106
S.D.	44.698	58.826	7.647	3.672	1.295	2.256
C.V.	28.895	27.089	39.245	26.095	34.218	72.624
Maximum	262.474	331.627	35.537	21.554	6.547	8.214
Minimum	103.659	138.962	10.781	10.179	2.312	0.329

 Table 5. Productivity Ratio (Productivity Ratio per Branch)

Amount in Million

Source: Annual Report

Table -13 shows the productivity ratios as per branch. Column 1 showed that the highest advance per branch was Tk. 262.474 million in 2010 and the lowest Tk. 103.659 million in 2001 while the average was Tk. 154.692 million to the period. The advance per branch increased at a significant rate and it becomes almost three times higher in 2010 in compared to 2001. The standard deviation and coefficient of variation were 44.698 and 28.895 respectively.

Column 2 showed that deposit per branch increased proportionately during the study period. The maximum and minimum were Tk. 331.627 million and

Tk. 138.962 million respectively. The average was Tk. 217.155 million. The standard deviation and coefficient of variation were 58.826 and 27.089 respectively.

Column 3 showed that income per branch increased proportionately during the study period. The maximum and minimum were Tk. 35.537 million and Tk. 10.781 million respectively while the average was Tk. 19.486 million. The standard deviation and coefficient of variation were 7.647 and 39.245 respectively.

Column 4 showed that the maximum and minimum of expenditure per branch were Tk. 21.554million and Tk. 8.097million respectively. The average was Tk. 14.073 million. The standard deviation and coefficient of variation were 3.672 and 26.095 respectively.

Column 5 showed that the maximum and minimum establishment expenditure per branch were Tk. 6.547 million and Tk. 2.312 million respectively. The average was Tk. 3.785 million during the study period. The standard deviation and coefficient of variation were 1.295 and 34.218 respectively.

Column 6 showed that the maximum and minimum of spread per branch were Tk. 8.214 million and Tk. 0.329 million respectively while the average was Tk. 3.106 million. The standard deviation and coefficient of variation were 2.256 and 72.624 respectively.

 Table 6. Spread Ratio

Amount in Million

Year	Interest Income	Interest Expenditure	Spread	Working Fund	Interest Earned as percentage of Working Funds (1)	Interest Paid as percentage of Working Funds (2)	Spread as percentage of Working Funds (3)
2001	6,938.10	6,642.17	295.92	152,041.78	4.563	4.369	0.195
2002	7,460.80	6,925.34	535.46	168,234.65	4.435	4.116	0.318
2003	7,924.91	6,419.36	1,505.54	156,341.34	5.069	4.106	0.963
2004	7,398.81	5,499.01	1,899.80	169,030.50	4.377	3.253	1.124
2005	8,903.79	6,174.95	2,728.84	188,166.17	4.732	3.282	1.450
2006	10,845.78	7,931.37	2,914.41	212,663.92	5.100	3.730	1.370
2007	6,017.32	4,617.38	1,399.94	244,061.11	2.465	1.892	0.574
2008	12,953.20	9,306.50	3,646.70	267,157.24	4.849	3.484	1.365
2009	14,867.97	10,376.98	4,490.99	293,662.78	5.063	3.534	1.529
2010	19,058.22	11,961.47	7,096.75	345,709.86	5.513	3.460	2.053
Average					4.617	3.522	1.094
S.D.					0.789	0.652	0.555
C.V					17.095	18.501	50.765

## *Source: Annual Report*

The above table depicts the ratios of spread in which include three ratios. The first ratio indicates interest earned as percentage of working fund. The ratio was largest in the year 2010 (5.513) and smallest in the year 2007(2.465) while the average ratio was 4.617 during the study period. The standard deviation and coefficient of variation were 0.789 and 17.095 respectively.

The second ratio indicates the interest paid as percentage of working fund. The ratio was largest in the year 2001 (4.369) and smallest in the year 2007(1.892) while the average ratio was 3.522 during the study period. The standard deviation and coefficient of variation were 0.652 and 18.501 respectively.

The third ratio indicates the spread as percentage of working fund. The ratio was largest in the year 2010 (2.053) and smallest in the year 2001(0.195) while the average ratio was 1.094 during the study period. The standard deviation and coefficient of variation were 0.555 and 50.765 respectively.

### Table 7. Burden Ratio

Amount	in	million

435

Year	Non- Interest Income	Non- Interest Expendit ure	Burden	Working Fund	Non- Interest Income as percenta ge of Working Funds (1)	Non- Interest Exp as percentag e of Working Funds (2)	Burden as percenta ge of Working Funds (3)
2001	2,765.22	2,658.58	106.63	152,041.78	1.819	1.749	0.070
2002	3,461.44	2,757.09	704.35	168,234.65	2.058	1.639	0.419
2003	3,593.51	2,978.19	615.32	156,341.34	2.299	1.905	0.394
2004	3,535.75	3,122.59	413.16	169,030.50	2.092	1.847	0.244
2005	4,239.71	3,667.26	572.45	188,166.17	2.253	1.949	0.304
2006	5,426.39	4,127.27	1,299.12	212,663.92	2.552	1.941	0.611
2007	3,256.06	2,249.18	1,006.88	244,061.11	1.334	0.922	0.413
2008	7,968.84	4,612.51	3,356.33	267,157.24	2.983	1.727	1.256
2009	9,206.14	5,119.01	4,087.13	293,662.78	3.135	1.743	1.392
2010	11,645.38	6,661.30	4,984.07	345,709.86	3.369	1.927	1.442
Average					2.389	1.735	0.654
S.D.					0.596	0.289	0.484
C.V					24.966	16.684	73.948

#### *Source: Annual Report*

The above table depicts the ratios of burden in which include three ratios.

The first ratio indicates non-interest income as percentage of working fund. Non-interest income as percentage of working fund increased proportionately during the study period but decrease in 2007 only. The ratio was largest during the year 2010 (3.369) and smallest during the year 2007 (1.334) while the average ratio was 2.389 during the study period. The standard deviation and coefficient of variation were 0.596 and 24.966 respectively. The co-efficient of variation during the study period was stable.

The second ratio indicates non-interest expenditure as percentage of working fund. The ratio was largest during the year 2005 (1.949) and smallest during the year 2007 (0.922) while average ratio was 1.735 during the study period. The standard deviation and coefficient of variation were 0.289 and 16.684 respectively. The co-efficient of variation during the study period was stable.

The third ratio indicates the burden as percentage of working fund. The ratio increased during 2001-2005 as against that in 2006-2010. The ratio was largest during the year 2010 (1.442) and smallest during the year 2001 (0.070) while average ratio was 0.654 during the study period. The standard deviation and coefficient of variation were 0.484 and 73.948 respectively. The co-efficient of variation during the study period was stable.

## Conclusion

The study reveals that maximum calculated ratios are increasing. All the results show satisfactory situation for the bank. Here the main weaknesses of the bank are decreasing trend in net profit, trend in profitability and Profitability ratios first six years during the study period, increasing trend in expenditure. Bank should formulate policy to appreciate its strengths and remove weakness to ensure its growth and expansion and greater contribution towards industrial development of Bangladesh. It is to be noted that Janata Bank Limited is a nationalized commercial bank. The bank is regulated according to the government decisions and rules imposed by the government. The social benefit should be considered in

#### Hossain et al.

performance evaluation. But social activities and benefits are not in our consideration. In a nutshell, we can say that the bank's performances are increasing day by day and if this trend remains in the bank then it would be a more profitable bank in near future.

## References

- Avkiran, N. K. 1995. *Developing an Instrument to Measure Customer Service Quality in Branch Banking*. International Journal of Banks Marketing. Vol. 12(6), pp. 10-18.
- Bahar, M. H. 1989. An Evaluation of Banks in Bangladesh: The Exploratory Approach. Bank Parikrama, BIBM. Seminar Proceedings Special Issue. Vol. XIV, Dhaka. pp. 89 – 95.
- Chien, T. and Danw, S. Z. 2004. *Performance Measurement of Taiwan Commercial Banks.* International Journal of Productivity and Performance Management. Vol. 53(5), pp. 425-434.
- Elizabeth, D. and Greg, E. 2004. *Efficiency Customer Service and Financial Performance Among Australian Financial Institutions*. International Journal of Bank Marketing. Vol. 22(5), pp. 319-342.
- Hempel, G., Coleman, A. and Smon, D. 1986. Bank Management Text and Cases. Wiley, New York.