

A Comparative Rural Development Scheme of Islami Bank Bangladesh Limited and Grameen Bank: Finding a Cost Effective Institutional Mechanism to Rural Development for the Emerging Economies

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Abstract. There is growing need that economic development should focus rural development to be sustainable & meaningful in the countries, territories or conveyances where majority of the population live in the villages or semi urban clusters. It is especially important in the traditional Muslim societies where the value system plays a vastly and valuable dominant role. Bangladesh is a country with more than 90% of its population are Muslims. It stands as the fourth-largest Muslim-populated country and "the constitution of Bangladesh declares Islam as the state religion". There is a famous maxim "Familiarity breeds confidence" Islami Bank Bangladesh Limited (IBBL) is an institution that is Muslim faith based and engaged in rural poverty reduction program through its instrumentality RDS (Rural Development Scheme). The main aim of the study is to confirm that Shariah based banking through its cost effective outreach to rural development is efficient than contemporary microfinancing. The method used is to compare & contrast the secondary data for financial information of both Islami Bank Bangladesh Limited (IBBL) & Grameen Bank (GB) that supports the above assertion.

Keywords: Shariah compliant · Sustainable development · Micro financing · Efficiency · Efficacy & operational effectiveness

1 Introduction

IBBL, "a joint Venture Public Limited Company engaged in commercial banking business based on Shariah" having the largest branch network (total 384 Branches) is a private sector bank in Bangladesh. It is the first Islamic Bank in the South East Asia was established on the 13th March 1983 having 63.09% foreign shareholding." 2 GB on the other hand, although originated in 1976 "was authorized by national legislation to operate as an independent bank in October 1983 with 25% stakes by the People's Republic of Bangladesh. Grameen Bank received a tax exempt status for the special nature of the services it provides to the people. It is worth mentioning that Bankers Ron Grzywinski and Mary Houghton of ShoreBank, a community development bank in Chicago, helped Dr, Yunus (the founder) with the official incorporation of the bank under a grant from the Ford Foundation"¹. Comparisons have therefore, been made to primarily quantify the financial performance of these two institutions.

2 Reviews of the Related Literature and Proposed Relationships in the Conceptual Model

Third Islamic summit conference 25–28 January 1981 – mandated that "Islamic countries should develop a separate banking system of their own in order to facilitate their trade and commerce".

UNDP-2017 – In "Scaling up Islamic Microfinance in Bangladesh through the Private Sector" UNDP report referred to a World Bank study that mentions "that there are more than one million small businesses in Bangladesh as potential borrowers, but only 7% of them have access to formal financial institutions. IBBL created this programme in order to capture this market and to address the gap that the government, conventional MFIs and NGOs failed to address." Chakraborty (2015) observed a "new silver lining" and an "increasing performance efficiency" in his "Financial Performance Analysis of Islamic Banks in Bangladesh: A Case Study on Islami Bank Bangladesh Limited (IBBL)" after evaluating IBBL operational activities in terms of productivity ratio, solvency ratio, quick ratio and similar other performance indicators.

Hossain (2017) remarked that "level of trust and confidence of the people of Bangladesh is increasing in Islamic banks with the passage of time similar other performance indicators and manifestation of a positive attitude of the people for considering Islamic financial products as alternate and viable financing options" Ana Maria Moreno (2010) – in the Honors.

Theses Paper Maria Moreno remarked in the conclusion "although Grameen-like microfinance may not be a panacea for global poverty alleviation, given its limitations, the success of the Grameen Bank has nevertheless demonstrated that microfinance can be an effective development tool." that provides new food for thought about finding an alternate like Islami Bank Bangladesh Limited (IBBL) that has been operating its Rural Development schemes.

Habib Ahmed (2002) – Ahmed inferred that Islamic Microfinance institutions (MFIs) are financing the poorest, as a result extreme poor are integrated in the financing model by integrating the Zakat principle.

3 Methodology, Design of the Study and Data Collection Procedure

The study is based on secondary data primarily of company annual reports, annual audited financials posted in their respective websites on the internet for the period from 2009–2018. The large body of data has been taken in order to verify data integrity for comparison and underlying analysis. Besides, other public research literature, interview

¹ https://en.wikipedia.org/wiki/Grameen_Bank#History

with past & present IBBL executives, desk-visits and author's personal experience as the IBBL shareholder over thirty years were taken for study.

The study is designed on the following hypothesis and primarily a balance sheet approach was taken. H1: Observed relationships in Financial Performance between Islami Bank Bangladesh Ltd – (IBBL) & Grameen Bank (GB) are reliable & statistically significant i.e. **P-value** is less than 0.05. H2: Observed relationships in Financial Performance between I Grameen Bank (GB) & Rural Development Scheme (RDS) of IBBL are reliable & statistically significant i.e. **P-value** is less than 0.05. Excel Software was employed to calculate P-value & other statistical results throughout this paper.

We have applied the following exchange rate to convert Bangladesh Taka to US Dollar taken from the Annual Reports of Grameen Bank4. As a results all the collected financial data are expressed in terms of dollar value.

Year	Taka for One USD
2009	69.17
2010	70.34
2011	60.60
2012	71.62
2013	77.80
2014	77.53
2015	73.51
2016	68.59
2017	75.98
2018	71.53
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4 Results and Data Analysis

4.1 Liquidity

P value in the hypothesis tests (t-Test results below) reveals that relationship of cash managed between IBBL & GB are statistically significant. Over the period 2009–2018 Grameen Bank with a cash balance of average \$30,364 compared to \$111,881,546 of Islamic Bank Bangladesh managed their banking operation. This phenomenal difference is primarily due to the characteristics of their modus operandi. A commercial bank like (IBBL) requires critical liquidity balance for daily operation. Grameen Bank is a micro financing institution where higher balance is not required for its daily operation. Grameen Bank smartly used this operating advantage and parked a significant portion of its deposits that it received from its members\non- members into fixed deposits to other banks\institutions (over an average of One billion US Dollar per year) as revealed in the Table 3. GB realized that liquidity demand for its daily operation from its members\non-members was minimal. It effectively utilized this unique structural characteristic in generating interest income from deposits (mostly fixed deposits) with other bank/institutions

Year	ISLAMI BANK - IBBL	% Change	GRAMEEN BANK	% Change	Test results
2009	\$35,864,861		\$16,185		
2010	\$53,843,990	48%	\$12,732	-21%	
2011	\$ 76,831,633	45%	\$36,822	189%	
2012	\$88,079,792	15%	\$25,457	-31%	
2013	\$105,145,848	19%	\$27535	8%	
2014	\$99,275,699	-6%	\$23,510	-15%	
2015	\$117,342,775	18%	\$27,848	18%	
2016	\$147,542,592	26%	\$69,729	150%	
2017	\$188,518,813	28%	\$21,002	-70%	
2018	\$207,138,589	10%	\$42,821	104%	
Average	\$111,881,546	23%	\$30,364	37%	
Standard deviation		0.167		0.893	Changes in cash balances are close to expected value in IBBL than in GB
T – Test Two Sample Assuming Unequal Variances P one-tail .0000625					Rejects null hypothesis and Confirms H-1 relationships statistically significant

Table 1. Cash in hand

was on an annual average balance of \$97.5 Million USD (26% of its operating income). At \$ 111.9 million annual average cash in hand (Tables 1, 2 and Fig. 1).

Islami Bank Bangladesh Limited (IBBL) on the other hand creditably managed liquidity balance over the period (2009–2018) and earned customers' confidence. The obvious result was its recognition as the largest commercial bank of Bangladesh several times along with its journey to launch Rural Development Scheme (RDS – discussed later in this article).

4.2 Investments, Total Assets and Growth

A P value in the hypothesis test indicates (Please refer t-Tests below) that relationships of IBBL in this indicator are statistically significant to GB. Investment balances in GB primarily represent loans and advances. The chart above indicates that it posted a progressive growth over the years and the largest outstanding balance in 2018 was \$2.3 billion compared to IBBL's (\$10.6 billion). IBBL's over USD 6.1 billion annual average

	Variable 1	Variable 2
Mean	111881546.4	30363.98169
Variance	3.05386E + 15	270164580.4
Observations	10	10
Hypothesized mean difference	0	
df	9	
t Stat	6.400527457	
P(T<=t) one-tail	0.0000625	
t Critical one-tail	1.833112933	
P(T<=t) two-tail	0.000125195	
t Critical two-tail	2.262157163	

Table 2. t-Test: two-sample assuming unequal variances - cash in hand

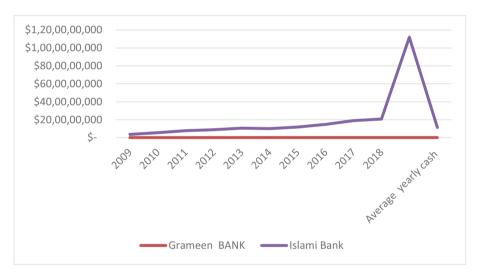


Fig. 1. Cash in hand

investment balances during a decade, were more than fourfold higher than GB's and were very effectively invested in the productive sectors. Needless to mention that this contributed to tremendous economic growth and women employment (empowerment of woman and reduction of poverty). In fact, this continues to represent the impeccable landscaping of the success of Shariah compliant². Banking of IBBL in Bangladesh (Tables 4, 5 and Fig. 2).

 $^{^2}$ And Allah has made selling lawful, and has prohibited riba." Verses – 2-275 Surah Al-Baqarah – The Noble Quran.

Year	BALANCE	Percent of fixed deposit income to operating income
2009	\$541,907,353	27%
2010	\$675,151,932	22%
2011	\$ 863,794,430	28%
2012	\$888,299,916	33%
2013	\$987,082,360	34%
2014	\$1,211,370,038	34%
2015	\$1,429,558,580	30%
2016	\$1,352,935,885	24%
2017	\$995,246,752	16%
2018	\$1,220,863,714	17%
Total (2009–2018)	\$10,166,210,959	26%
Average yearly	\$1,016,621,096	
Average annual income from fixed deposit	\$97,575,337	

Table 3. Fixed deposits to other banks\institutions by grameen bank

According to The Economist, "Islami Bank was a pioneer in financing Bangladesh's rise as the apparel industry's main production base outside China³." Although annual average outstanding balance of RDS was 16% of GB balance, IBBL implemented its scheme very cost effectively by engaging a labor force of 2,479 compared to 18,105 by GB as at December 31, 2018. This was equivalent to 14% of GB entire labor force. IBBL's total manpower strength inclusive of RDS was 14,608 during the same comparable year and confirms IBB's superior performance. Following tables and charts will indicate the sectoral outstanding balances of both IBBL & GB for the year 2018. It is emphasized again, that GB first time in Bangladesh introduced a collateral free micro financing system institutionally that received worldwide applaud. RDS in its rural development outreach also adopted this collateral free financing and combined it with the traditional investment practices (Table 6 and Figs. 3, 4).

Table 8 indicates that IBBL's 20% investment balance at \$2.2 billion (presented below) as of December 31, 2018 in the three categories was-approximately equal to the entire investment balance of GB (\$2.3 billion) during the same period. As revealed in Table 7 above, GB's investment balances during 2018 comprised mostly (89%) Basic loans, followed by Flexible loans 3%, Education Loans 1%. Given the resource constraint, volume of the investment balances appear to be allocated into too many sectors. However, these are noble efforts and RDS should follow the diversity. RDS, IBBL's instrumentality of rural development emerged more than a decade later than GB. Given

³ https://en.wikipedia.org/wiki/Islami_Bank_Bangladesh_Ltd.

Year	Islami bank (IBBL)	Grameen bank (GB)	RDS	Test results
2009	\$3,102,729,525	\$814,790,068	\$54,246,060	
2010	\$4,141,727,675	\$972,675,262	\$72,647,853	
2011	\$4,750,187,875	\$1,281,176,181	\$116,700,165	
2012	\$4,753,975,934	\$1,160.738,188	\$145,081,123	
2013	\$4,672,337,712	\$1,127,341,485	\$176,489,974	
2014	\$5,584,987,762	\$1,182,036,844	\$224,171,289	
2015	\$6,648,065,589	\$1,375,132,344	\$282,941,096	
2016	\$8,355,039,599	\$1,805,354,917	\$356,340,079	
2017	\$8,735,613,797	\$2,001,109,967	\$374,216,899	
2018	\$10,618,903,317	\$2,280,914,312	\$411,519,642	
Average	\$6,136,356,878	\$1,400,125,957	\$221,435,418	
Standard deviation (Changes in balances)	.12	.14	.16	Outstanding investment balance changes in IBBL were close to expected value than GB while balances in GB were close to the expected value than in RDS
t-TEST (IBBL & GB) P Critical one 0.0000547				Rejects null hypothesis & confirms H.1 relationships statistically significant

Table 4. Outstanding investments balances by year

this fact, together with IBBL's allocation of investment resources towards agro based and women entrepreneurs' scheme, was promising and competitive. However, in order to cater the increasing requirements of rural population, mobilization of voluntary zakat money through RDS (to be reorganized through regulatory approval) will solve the funding issue considerably and will add a new dimension of Shariah model to rural development. However, in the emerging and developed nations where Sharia based banking is non-existent, traditional banks may experiment opening a voluntary charity organ to their main functionality and receive charity to finance poverty alleviation (after obtaining legal approval from the respective regulatory bodies) in line with IBBL experience. This will provide a good opportunity for the researchers to examine further the performance of banks to alleviate poverty both in the rural and urban areas in these countries against the performance that Bangladesh is currently experiencing.

	Variable 1	Variable 2
Mean	6136356879	1400126957
Variance	5.72167E + 18	2.24507E + 17
Observations	10	10
Hypothesized mean difference	0	
df	10	
t Stat	6.142058741	
P(T<=t) one-tail	0.0000547	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	0.000109458	
t Critical two-tail	2.228138852	

Table 5. t-Test: two-sample assuming unequal variances - investments

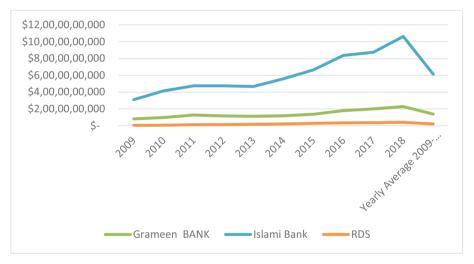


Fig. 2. Outstanding investments balances by year (In USD)

4.3 Total Assets

Assets Growth

A P value in hypothesis test (t-Test results) reveals relationships between Islami Bank Bangladesh Limited (IBBL) & Grameen Bank are (GB) statistically significant. Table 9 and Fig. 5 depict that total assets grew progressively both in GB & IBBL. Since RDS is an operational program of IBBL, total assets of IBBL includes RDS. Similar trends of data dispersion was observed in both IBBL & GB during the period (2009–2018). With 36% higher growth having RDS segment, average annual growth was higher in

Sector	Outstanding balance
Project financing – working capital	\$4,780,343,912
Ready-made garments	\$570,459,947
Textile	\$1,781,701,194
Housing	\$708,262,268
Agro-based industry	\$1,692,408,780
Electricity & Power	\$56,242,136
Transport	\$11,393,821
Pharmaceutical & Health	\$ 63,637,635
Women entrepreneurs investment scheme	\$101,537,816
Cluster based investment	\$92,241,018
Rural development scheme	\$411,519,642
Other welfare oriented investment scheme	\$669,033,972
Total	\$10,938,782,139

Table 6. Outstanding investment balances of IBBL as at December 31, 2018 - by sector

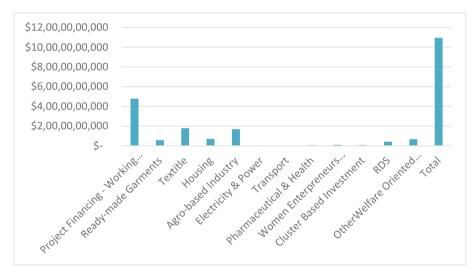


Fig. 3. A sector wise investment balances of IBBL - Dec. 2018

Sector	Outstanding balance
Basic loans	\$2,025,134,487
Flexible loans	\$70,988,508
Housing loans (Members)	\$14,140,556
Education loans	\$29,821,834
Interest free loans - Ayla	\$2,001,471
Business support loan	\$2,383,289
Interest free loans - Disaster	\$1,795,898
Housing loans advances (staff)	\$60,871,873
Household commodities - advances	\$26,027,194
Other loans & Advances	\$47,749,211
Total	\$2,280.914,312

Table 7. Outstanding investment balances of grameen bank as at December 31, 2018-by sector

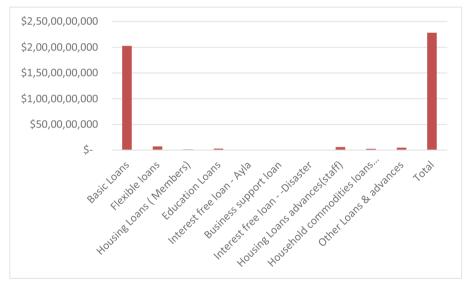


Fig. 4. A sector wise investment balances of IBBL - Dec. 2018 (Source: GB Financial State-ments, 2018)

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Table 8.	Outstanding investment balances of IBBL as at December 31, 2018-by some selected
sectors	

Total	\$2,205,466,238
Women entrepreneurs investment scheme	\$101,537,816
RDS	\$411,519,642
Agro-based industry	\$1,692,408,780
Sector - IBBL	Balance as at December 31, 2018

Year	ISLAMI BANK (IBBL)	% Change	GRAMEEN BANK	% Change	Test results
2009	\$4,023,461,612		\$1,489,160,883		
2010	\$4,699,831,082	17%	\$1,782,726,158	20%	
2011	\$6,425,340,004	37%	\$2,317,512,922	30%	
2012	\$6,739,246,736	5%	\$2,219,383,865	-4%	
2013	\$7,022,613,951	4%	\$2,299,955,989	4%	
2014	\$8,404,223,961	20%	\$2,592,047,612	13%	
2015	\$9,873,052,866	17%	\$3,004,835,306	16%	
2016	\$11,633,278,324	18%	\$3,343,940,873	11%	
2017	\$11,839,946,605	2%	\$3,153,712,219	-6%	
2018	\$13,951,618,944	18%	\$3,684,521,826	17%	
Average	\$8,461,239,962	15%	\$2,588,779,765	11%	
Standard deviation		0.11		.12	Total Assets balances in IBBL were close to expected value than GB
t-Test P-one tail 0.000123					Rejects null hypothesis & confirms H.1 relationships statistically significant

Table 9. Total assets

	Variable 1	Variable 2
Mean	8461239962	2588779765
Variance	1.07379E + 19	4.90614E + 17
Observations	10	10
Hypothesized mean difference	0	
df	10	
t Stat	5.541911011	
P(T<=t) one-tail	0.000123437	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	0.000246873	
t Critical two-tail	2.228138852	

Table 10. t-Test: two-sample assuming unequal variances - total assets

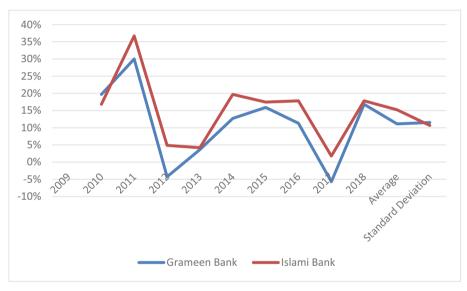


Fig. 5. Changes in total assets by year

IBBL (15%) compared to 11% in GB. Except in the year 2010. The growth in IBBL was consistently larger with a rural development scheme fully operational and expanding (RDS), IBBL's performance was better than a fully specialized bank like GB and is credited to be a role model for emerging economics. It may be noted that IBBL initially invested vigorously, significant of its assets in productive sectors like garment industry that employs over three million people, 85% workers being women⁴ This also suggests

⁴ https://waronwant.org/news-analysis/sweatshops-bangladesh/, 28th Jan 2011/News and analysis.

that if Grameen Bank is the pioneer in women empowerment in Bangladesh, then Islami Bank Bangladesh Limited (IBBL) is its closest ally in this noble journey of effective women emancipation. It is praise worthy to note that IBBL continues successfully to combine its commercial goals with social investment and is achieving a win win situation in its Sharia perspective (Table 10).

4.4 Total Liabilities

Year	Islami Bank (IBBL)	Grameen Bank (GB)
2009	\$4,395,595,776	\$1,391.669,442
2010	\$5,230,999,234	\$2,009,431,016
2011	\$ 5,960,667,481	\$2,256,878,402
2012	\$6,184,910,497	\$2,091,763,551
2013	\$6,506,303,881	\$2,166,353,385
2014	\$7,803,365,489	\$2,454,773,501
2015	\$9,229,703,034	\$2,852,104,130
2016	\$10,919,669,125	\$3,163,949,965
2017	\$11,173,137,852	\$2,965,655,851
2018	\$13,176,187,563	\$3,440,760,134
Annual average balance	\$8,058,953,993	\$2,479,333,938

Table 11. Total liabilities

A P value in hypothesis test (t-Test results) reveals relationships between Islami Bank Bangladesh Limited (IBBL) & Grameen Bank are not (GB) statistically significant. Changes in total liabilities although did vary from year to year due to operational needs in both the institutions, data suggest that ratio of the average liabilities to average assets remained at the same level (96% in GB and 95% in IBBL). IBBL's performance in this area is marginally better than GB (Table 11, 12 and Fig. 6).

4.5 Deposits from Customers

A P value in the hypothesis tests below indicates that relationships between IBBL & GB are statistically significant. Deposits in banking operation either from its customers or members or non- members are its major liabilities and are considered the circulating blood of the institution. Table 13 shows how they evolved in a decade from 2009–2018 for IBBL, RDS and GB (Table 14 and Fig. 7):

During 2018 the total number of GB's members stood at 7.12 million. On the other hand, IBBL had 11.4 million depositors throughout Bangladesh as of December 31, 2018 with a deposit balance of \$11.4 billion (more than 3 times of GB). IBBL had

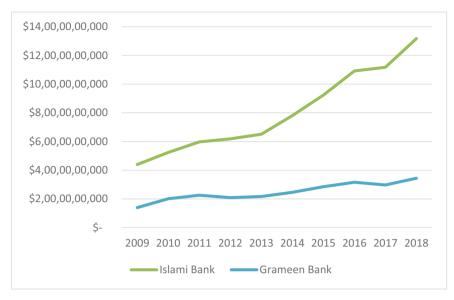


Fig. 6. Liabilities - by year

	Variable 1	Variable 2
Mean	8058953993	2479333938
Variance	8.57881E + 18	3.85621E + 17
Observations	10	10
Hypothesized mean difference	0	
df	10	
t Stat	5.893092608	
P(T<=t) one-tail	7.62347E-05	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	0.000152469	
t Critical two-tail	2.228138852	

 Table 12.
 t-Test: two-sample assuming unequal variances.

a utilization balance ratio of 86% (percent of Investment balance to Deposit balance) which invested in the sectors elaborated in Tables 4, 6 and 8 above. The statistics and experience suggest that both GB & IBBL utilized them effectively. RDS's average annual deposits of \$74 million was not competitive compared to GB (\$ 2198 million). RDS had 1.1 million members at the end of December 2018, equal to 14% of the GB membership. RDS should consider an aggressive drive to increase the membership, which has a huge

Year	Islami Bank (GB)	Grameen Bank (GB)	RDS	Findings
2009	\$3,494,960,687	\$1,204,723,646	\$21,523,348	
2010	\$4,107,961,227	\$1,493,076,495	\$25,242,678	
2011	\$5,593,898,975	\$,1,939,214,099	\$38,621,287	
2012	\$5,775,315,609	\$1,832,903,030	\$46,390,952	
2013	\$6,015,325,365	\$1,909,331,030	\$56,271,979	
2014	\$7,172,238,952	\$2,192,716.552	\$73,870,115	
2015	\$8,295,279,294	\$2,582,022,147	\$94,312,202	
2016	\$,9,848,679,657	\$2,913,062,545	\$115,944,598	
2017	\$8,864,098,257	\$2,742,137,617	\$122,844,301	
2018	\$11,436,776,497	\$3,167,432,889	\$146,300,853	
Average	\$7,160,453,451	\$2,197,662,004	\$74,132,231	
Standard deviation (Change in Balances)	.110	.123	.129	Deposit balance changes in IBBL were close to expected value than GB while changes in GB were close to the expected value than in RDS
t-Test (IBBL& GB) P-one-tail 0.0000881				Rejects null hypothesis & confirms Relationships statistically Significant

Table 13. Deposits from Customers - Members & Non Members

potential given the fact that IBBL commands 90% of Islamic banking assets and deposits in Bangladesh where 90.4% of the population are Muslims in 2011.

It is further emphasized that according to CGAP (2008) "72% of people living in Muslim majority countries do not use formal financial services, even when financial services are accessible" (page 4 Scaling up Islamic Microfinance in Bangladesh through the Private Sector: Experience of Islami Bank Bangladesh Limited IBBL).

It is noted that average deposit balance to average investment balance ratio was 117% in IBBL followed by 64% in GB and 33% in RDS. The essential finding is that if IBBL can increase the membership in RDS significantly it will also be able to expand its rural development scheme and be competitive to GB (Grameen Bank).

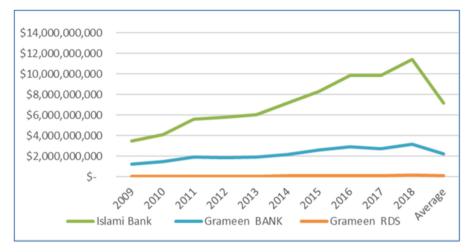


Fig. 7. Deposits by year

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	Variable 1	Variable 2
Mean	7160453452	2197662005
Variance	6.94986E + 18	4.06868E + 17
Observations	10	10
Hypothesized mean difference	0	
df	10	
t Stat	5.786070518	
P(T<=t) one-tail	0.0000881	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	0.00017627	
t Critical two-tail	2.228138852	

A further analysis in Table 15 suggests that the average rate of return from deposits in IBBL, the depositors receive 5% compared to 9% in GB (primarily GB depositors are its members) assuming that the depositors in RDS receive the same as in IBBL customers. This is clearly a disincentive on the part of RDS depositors. The possible remedy will be to allow RDS depositors the average dividends that IBBL shareholders receive. For last several years it was 10%. This will act a definite incentive in order to make RDS more attractive and competitive to Grameen bank.

A serious policy note is to remember that several studies showed that under microfinance the extreme poor are not its major beneficiary. (Please refer Page 6, UNDP- 2017 Scaling up Islamic Microfinance in Bangladesh through the Private Sector: Experience of Islami Bank Bangladesh Limited (IBBL). They cannot afford to make deposit. Under these situations, alleviation of poverty is merely a slogan and not a reality." To overcome this grave situation, RDS should instead of primarily becoming financier should take the role of custodian. As a model that will be the prime component of Shariah system of microfinancing. Take deposit from the public who volunteer to get their Zakat (monetary obligation for every Muslim upon whom zakat is obligated religiously) distributed through RDS. IBBL should address this area seriously and immediately and take necessary regulatory approval from the government and incorporate zakat distribution a routine functionality of RDS.

Year	Deposits in IBBL	Profit from Deposits (IBBL)	% Profit From Deposit (IBBL)	Deposits in Grameen Bank (GB)	Profit from Deposits (GB)	% Profit from Deposits (GB)
2009	\$3,494,960,687	\$189,055,870	5%	\$1,204,723,646	\$102,183,601	8%
2010	\$4,107,961,227	\$246,371,994	6%	\$1,493,076,495	\$157,095,215	11%
2011	\$5,593,898,975	\$303,650,463	5%	\$,1,939,214,099	\$175,536,843	9%
2012	\$5,775,315,609	\$361,217,889	6%	\$1,832,903,030	\$167,619,566	9%
2013	\$6,015,325,365	\$397,175,830	7%	\$1,909,331,030	\$175,241,561	9%
2014	\$7,172,238,952	\$394,594,834	6%	\$2,192,716.552	\$193,569,903	9%
2015	\$8,295,279,294	\$390583,639	5%	\$2,582,022,147	\$217,949,309	8%
2016	\$,9,848,679,657	\$427,695,546	4%	\$2,913,062,545	\$221,321,709	8%
2017	\$8,864,098,257	\$413,965,193	4%	\$2,742,137,617	\$208,759,968	8%
2018	\$11,436,776,497	\$531,064,873	5%	\$3,167,432,889	\$240,906,331	8%
Average	\$7,160,453,451	\$365,537,613	5%	\$2,197,662,004	\$186,018,401	9%
Standard deviation (Profit of Deposits)			0.009			0.010

Table 15. Rate of return on deposits by year

4.6 Shareholders' Equity, Net Income

Table 16 indicates that average (2009–2018) return on shareholders' equity in IBBL is 20% higher than GB. Further- more with lower standard deviation in IBBL 0.04 compared t0 0.06 in GB, the indicator confirms the relative strength of IBBL in this indicator. GB distributes significantly higher profits to its depositors who are the shareholders of GB also and thus compensated therein. Our findings are that since RDS depositors (who are members of that operation but not shareholders of IBBL should be given preferential status to receive at least reasonable return on their deposits especially given the roles played by depositors in RDS in rural poverty alleviation. Net profit (which is predominantly the funds available for appropriation – Table 16) is a good bottom line result of an

Year	Shareholders Equity (IBBL) Balance	Profit (IBBL)	Profit on Shareholders Balance (IBBL)	Shareholders Equity (GB) Balance	Profit (GB)	Profit on Shareholders Balance (GB
2009	\$342,280,284	\$49,205.608	14%	\$97,491,411	\$5,371,879	6%
2010	\$333,375,060	\$63,768,551	19%	\$125,348,656	\$10,765,444	9%
2011	\$ 455,672,523	\$76,313,427	17%	\$134,018,483	\$11,279,931	8%
2012	\$554,336,238	\$78,424,371	14%	\$127,620,313	\$20,313,532	16%
2013	\$562,836,425	\$64,978,948	12%	\$133,602,604	\$17,132,375	13%
2014	\$600,858,472	\$51,172,667	9%	\$137,274,110	\$5,623,775	4%
2015	\$643,349,832	\$42,856,302	7%	\$152,731,176	\$331,079	0.2%
2016	\$713,609,199	\$65,305,997	9%	\$179,990,909	\$20,307.961	11%
2017	\$666,808,752	\$88,611,378	13%	\$188,056,368	\$29,945,974	16%
2018	\$775,431,381	\$88,218,694	11%	\$243,761,692	\$48,724,849	20%
Average	\$564,855,816	\$66,885,594	12%	\$151,989,572	\$16,979,680	10%
Standard deviation			0.04			.06

Table 16. Profit/(Shareholders' Fund)

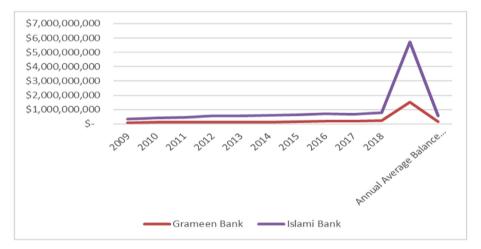


Fig. 8. Shareholders' fund balance

ongoing entity that measures the financial success. The underlying volume and visibility of both the banks in this area are graphically reflected in the above chart. GB achieved an impressive performance (10%) in the earnings to equity ratio (Average Annual Net Profit to Average Annual Shareholders' equity) while at 12% IBBL's profound performance in this area is extraordinary (Fig. 8).

4.7 Operating Income and Expenses

From the Table 17 & t-test below, it is evident that relationships in operating revenues between IBBL & GB are statistically significant. The financial statements of GB & IBBL indicate (Please see Table 17 and 19 below) that with 122% of GB's total expense (IBBL's expense \$ 1.7 billion compared to GB's \$1.4 billion during 2009–2018), IBBL generated 191% revenue of GB's (Revenue \$7.3 billion in IBBL compared to \$3.8 billion in GB over the period 2009–2018). Of the total revenue of GB (\$3.8 billion) 25% came from Fixed deposits & 67% from Interest income from Loans & advances.GB charged a 20%

Year	Islami Bank Bangladesh Ltd. (IBBL)	Grameen Bank (GB)
2009	\$367,266,980	\$209,590,155
2010	\$513,854,907	\$252,226,401
2011	\$635,719,909	\$351,889,017
2012	\$701,118,777	\$349,758,328
2013	\$722,063,687	\$349,788,418
2014	\$748,921,755	\$374,343,468
2015	\$772,369,169	\$426,496,005
2016	\$894,694,079	\$468,224,738
2017	\$888,873,705	\$463,646,413
2018	\$1,092,913,584	\$551,811,979
Average	\$733,869,655	\$379,777,492
Standard deviation	203,890,225	102,456,601
Interest income from fixed deposits (2009–2018)	\$975,753,374	-0-
t-test 0.000143		Rejects null value and confirms H.1 that relationships are statistically significant
Interest income from loans & Advances	-0-	\$2,561,560,010
Investment income (2009–2018)	\$6,206.305,881	-0-
Dividends/Others (Income from shares & securities, commission, exchange &brokerage) (2009–2018)	\$1,132,390,672	\$260,461,538
Profits paid on deposit (2009–2018)	\$3,655,376,131	\$1,860,184,006
% Profits paid to the Depositors to Total Revenue (2009–2018)	50%	49%

Table 17. Total operating revenue	Table 17.	Total	operating	revenue
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	Variable 1	Variable 2
Mean	733869655.3	379777492.2
Variance	4.15712E + 16	1.04974E + 16
Observations	10	10
Hypothesized mean difference	0	
df	13	
t Stat	4.907140039	
P(T<=t) one-tail	0.000143217	
t Critical one-tail	1.770933396	
P(T<=t) two-tail	0.000286434	
t Critical two-tail	2.160368656	

Table 18. t-Test: two-sample assuming unequal variances - total operating revenues.

Table 19. Total expenses

Year	Islami Bank Bangladesh Ltd. (IBBL)	Grameen Bank (GB)
2009	\$65,721,764	\$81,381,643
2010	\$86,823,502	\$96,731,842
2011	\$120,324,342	\$117,576,430
2012	\$122,121,008	\$103,284,595
2013	\$142,222,894	\$104,559,995
2014	\$156,110,789	\$113,620,005
2015	\$183,647,234	\$137,552,669
2016	\$258,446,602	\$197,585,481
2017	\$247,395,250	\$190,303,013
2018	\$271,261,294	\$212,732,926
Average	\$165,407,468	\$135,532,860
Salaries & Wages (2009-2018)	\$1,034,528,621	\$938,215,200
Provision for Bad Debt (2009–2018)	\$509,521,895	\$470,616,243
Zakat (2009–2018)	\$53,151,630	-0-
Taxes (2009–2018)	\$822,393,307	-0
Percent of Bad Debt to Revenue (2009–2018)	7%	12%

interest against loans of income generating activities, 8% on Housing loans & 5% on student loans (after study period expired)⁵. IBBL charged no fixed interest rate and generated 86% of total operating income on the basis of shared income from its investing partners who operated Shariah compliant activities. The remainder 14% came primarily from shares, securities, commission, exchange & brokerage activities (Table 18).

An in-depth analysis indicates during 2009–2018 (GB's total operating Expense was \$1.4 billion) salary & wages accounted 69% of GB's total expenses while IBBL's share of salaries & wages was 63% of total operating expenses (IBBL's Total operating expense was \$1.7 billion during the period 2009–2018).

During the comparable periods IBBL operated a relatively cost effective operation compared to GB. Zakat being a part of operating expenses in IBBL, accounted 3% of the total expenses during the period 2009–2018 which is non-existent in GB. Provision for bad debt & taxes are not included in total operating expenses and shown as a separate line item. Net incomes are net of these two items. However, with 7% bad debt provision to total income compared to 12% in Grameen Bank confirms that IBBL operated an efficient financial operation than Grameen bank which is often criticized for its rate of delinquency.

The above analysis and discussions confirms that IBBL operations were relatively more cost efficient (similar conclusion was made in the study of Akkas-96 against other traditional banks) than GB. As a tax exempt entity, GB paid no taxes while IBBL paid the following balances of taxes & zakat during 2009–2018 were as follows (Table 20 and Fig. 9):

Year	Taxes	Zakat
2009	\$45,021,055	\$2,492,795
2010	\$56,927,952	\$3,136,818
2011	\$91,316,301	\$4,338,769
2012	\$92,438,280	\$4,534,666
2013	\$79,068,503	\$4,958,238
2014	\$84,642,006	\$5,494,457
2015	\$80,195,393	\$5,731,369
2016	\$86,771,153	\$7,216,382
2017	\$99,401,404	\$6,838,262
2018	\$106,611,260	\$8,409,875
Total	\$822,393,307	\$53,151,630

Table 20. Zakat & Tax Expenses of IBBL

It was a distinguishing characteristics of IBBL operations that it contributed to the State exchequer \$822 million during the period 2009–2018 & made \$53.1 million charity

⁵ Grameen Bank Annual Report – 2018.

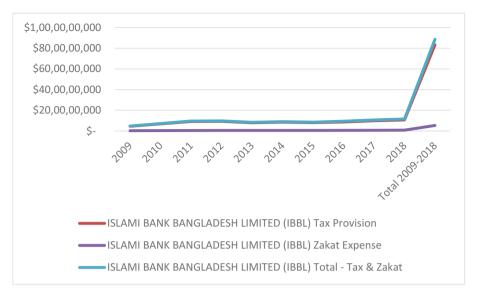


Fig. 9. Tax & Zakat provision of IBBL by year in USD

outlays and confirms that IBBL generated considerable government revenue & zakat outlays which was equivalent to 23% operating revenue of Grameen Bank over a decade 2009–2018.

5 Interesting Facts and Findings

2017-UNDP study disclosed an interesting finding which goes as follows "over 20,000 NGOs and MFIs are registered with the Bangladeshi Department of Social Affairs and have been working in poverty alleviation since the independence of Bangladesh in 1971.

However, the degree of success of those NGOs and MFIs in poverty alleviation through socio-economic means has been somewhat debatable. The sustainability of microfinance NGOs mainly depends on foreign grants and to some extent government grants. However due to funding fluctuations, high administrative and operational costs, NGO and MFIs, including Grammen Bank, tend to charge high interest rates, ranging from 20–35%, forcing the poor to dispose any assets they may have in order to repay their loans." (Page 7, UNDP-2017 Scaling up Islamic Microfinance in Bangladesh through the Private Sector: Experience of Islami Bank Bangladesh Limited (IBBL).

Although IBBL's financial performance was better than GB in the majority of the indicators discussed above, one indicator at least, proved GB's edge. That is average profit distribution to depositors. As discussed above difference between average payout of 5% in IBBL compared to 9% in GB is significant. As IBBL is committed to provide welfare oriented and Shariah based services, the depositors in RDS should be given special status for their part as the players of rural development for IBBL Along with its cost effective operation as discussed above it will change trajectory of IBBL for better.

6 Limitations

The study focuses primarily on the historical financial performances of IBBL & GB & selected segments of RDS. Comprehensive research is therefore required to compare and contrast the detailed performance evaluation of GB & RDS in each of the areas general, operational & financial. For example, it is reported that" dropout rates for Grameen Bank, BRAC and ASA and other conventional MFI is in Bangladesh between 10, 15% per annum" - RichardL. Meyer, (2017 – UNDP page 6 Scaling up Islamic Microfinance in Bangladesh through the Private Sector: Experience of Islami Bank Bangladesh Limited IBBL). but no such study has been conducted for RDS.

7 Recommendations for Future Research

A case study (conducting survey with a reasonable sample size) is recommended to examine the effectiveness of poverty reduction program of both IBBL & GB in order to provide:

- (1) Important policy insight to be used by the Governing agencies.
- (2) To adjust necessary changes in mode of operation.
- (3) Further improvement for future planning and monitoring.

8 Conclusion

The lessons learnt from the study suggest that Shariah based market mechanism⁶ is more conducive to growth than "Democratic capitalism" of Grameen Bank. It further suggests that if Islami bank can organize a custodian responsibility through "RDS" (which is very likely) by mobilizing the functionality of Zakat distribution, it will be able to add a new dimension to alleviate rural poverty especially to serve the extreme poor which deserves policy attention in majority of the emerging economies including advanced industrial countries.

References

- 1. Verses 2–275 Surah Al-Baqarah The Noble Quran
- 2. Audited Annual Financial Statements IBBL (2009-2018)
- 3. Annual Report Islami Bank Bangladesh Limited (2009-2018)
- 4. Annual Report Grameen Bank (2009–2018)
- 5. Audited Annual Financial Statements Grameen Bank (2009–2018)
- 6. Third Islamic summit conference 25-28, January 1981
- United Nations Development Program UNDP -2017 Scaling up Islamic Micro finance in Bangladesh through the Private Sector: Experience of Islami Bank Bangladesh Limited (IBBL)
- 8. Chakraborty, J.: Financial performance analysis of islamic banks in bangladesh: a case study on islami bangladesh limited (IBBL). Int. J. Econ. Finance Manag. Sci. **3**(2), 99–106 (2015)

⁶ "Thus We have appointed you a middle nation, that you may be witnesses over mankind, and that the messenger may be a witness over you" (Surat Al-Baqarah: 143, The Holy Quran).

- Mohammad, K.H., Md Abdus, S., Tarun, S.: Measurement of Financial Performance of a Commercial Bank from Varied Perspectives: A Case Study of Islami Bank Bangladesh Limited, June 2019
- Hossain, S.A., Mahmud, M.S., Islam, K.A.: Evaluation of financial performance of commercial banks in bangladesh: comparative study based on CAMEL approach. Millennium Univ. J. 2(1), 54–77 (2017)
- Islam, M.M., Roknujjaman, M.: A comparative operating performance analysis of islamic bank bangladesh limited and dutch-bangla bank limited using hypothesis test. International Journal of Innovative Science and Research Technology vol. 3, no. 9, September 2018
- Hossain, M.S.: Analysis of financial performance of islamic banking in bangladesh: a study on islami bank bangladesh limited (IBBL). International Journal of Ethics in Social Sciences vol. 5, no. 1, June 2017. ISSN No:-2456–2165–29
- Hamid, A.: Presented a paper at the international conference on Islamic Economics in the 21st century (held) in Malaysia from 09 to 12 August 1999 entitled Islamic Banking in Bangladesh Ltd: Expectation and realities (1999)
- Moreno, A.M.: Grameen Microfinance: An Evaluation of the Successes and Limitations of the Grameen Bank - University of Pennsylvania Scholarly Commons Honors Theses Philosophy, Politics and Economic (2010)
- 15. Habib, A.: Financing Microenterprises: An Analytical Study of Islamic Microfinance Institutions (2002)