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Felicitous Management of Financial and Insurance Institutions Causes Better Living Standard: A Reference of Bangladesh

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Abstract: ***It is agreed by different corners that significant development of the society depends on the services extended by the banking institutions and insurance institutions. Every development program required resources which may find available in the banking and insurance institutions along with the safety nets of the investors. Banks collect deposit and extend credits to the investors on different investment programs. The market coverage of different packages of services depends on how much the respective institutions inclined to outreach the deserving people. To visualize how things are happening in Bangladesh different data sets are collected and analysis tools such as: building descriptive statistics, estimating relationship by estimating bi - variate correlation coefficients between different variables, building multiple regression models and testing the significance levels in every case. The immediate objectives of the analysis are to point out whether the services from banking institutions and insurance institutions can bring about an effect on better living standard. In this regard the relationships of the income of the institutions with GNI were checked and found very significant. On the other hand, the study checked the relationship of income of the institutions with prospective predictors; the analysis has shown that the changes on predictors jointly or independently as well as significantly influenced the income. The study also attempted to identify the prospective group of predictors and found that QIIP (Quantum Index of Industrial Product), per capita consumption of electricity, number of means of transportation registered in the sample period, amount of available cultivable land, and total credit extended to the society by different types of institutions during the sample period. The estimated results are found very significant that the befitting packages of services can help both types of institutions for contributing to the society for building better living standard increasing their level of market coverage.***

Keywords: Banking services, living standard, Market coverage, and Measuring predictors' influences

1. Introduction

To improve the level of living standard, activities of financial and insurance institutions are required to be made accessible to the people of all income levels. Different banking and insurance institutions are attempting to improve their market coverage with different modalities. In Bangladesh four different types of banking institutions are functioning with different modalities. These are specialized bank, state owned commercial bank, private commercial bank, and foreign banks. Also, there are insurance institutions are functioning under public and private ownerships. The study has been designed to know how the society can be benefited on the outcome of the banking and insurance institutions. It is true that benefit moves forward at the participation of people and financial and insurance institutions functioning with outmost flexibility and sincerity on extension of the services.

Many indicators such as: BASEL –I to BASEL - - III, CAMEL rating, CRR, DRR, etc. are available for evaluating standard of financial and insurance institutions. Albeit, the people belong to different communities are seen suffered for want of resources where they are capable to invest for generating economic activities.

On this situation, it should be a task of researchers to know the highly demanding economic activities that can improve the living standard of a society. This study has been attempted to find indicators which can enhance the living standard of a society with the assistances of banking and insurance institutions. In this regard, income level of banks and insurance institutions regressed on five sets of related data such as: QIIP, total bank credits extended to the investors, number of registered vehicles of different types, consumption of electricity, and amount of available cultivable land to know how they react with the income of banking institutions. On the other hand, it was also attempted to find how the indicator of national accounting model such as GNI related with the income level of banking and insurance institutions.

The estimated results are found very significant to predict that the living standard of the society can be improved if the proper attention is ensured by both the banking and insurance institutions and also beneficiaries of the users of credits.

2. Literature Survey

Amit Gosh (2016) pointed that greater share of loans from non - resident bank reduces both profits and overhead costs in banking industry of host countries. Additionally, the positive effect of bank equity capital found for the full - sample of nations implies that greater capital will encourage more prudent lending, and therefore enhance profits. This is especially relevant when considered in the context of the recent discussions about capital adequacy ratios (Basel III). Banks' profits are also an important source of equity. If banks do not pay out (all of) their profits and keep them as equity capital, such a strategy should lead to safer banks. The negative relationship between diversification and profits

suggests that banks focus on non - interest earning assets suffer relatively greater profit erosion. This supports a view that banks are more profitable when they focus on traditional banking services. The negative effect of OCA (Other current Assets) on bank profits suggests that efficient cost management is a prerequisite to improve the profitability of banks, especially in LICs.

Valentina Palackieene, Kestutis Paleckis (2018) undertaken a research and led to the following broad conclusions: (1) descriptive statistics analysis has shown that the insurance sector development is higher in economically rich countries, such as the UK, Denmark, Finland, Ireland, France and The Netherlands; (2) a positive statistically significant relationship between insurance penetration and economic growth was detected in Luxembourg, Denmark, The Netherlands and Finland. Besides, a negative statistically significant relationship has been identified in Austria, Belgium, Malta, Estonia and Slovakia; (3) Granger test has shown unidirectional causality running from GDP to insurance in Luxembourg and Finland; and unidirectional causality from insurance to GDP in The Netherlands, Malta and Estonia.

Barkat - e - Khuda (2019) has mentioned that banks always contribute considerably in the process of economic growth in Bangladesh. The contribution to be accounted more if the sectors effectively address various challenges such as: weak management, poor governance, lack of strong leadership and non - compliance with ethical standards leading to various types of banking scamps such as money laundering and NPLs. He also recommends that banking sector should be ensured growth in agriculture sector despite significant loss of arable land and threats of natural disasters.

Mitchell Grant (2023) in the article entitled "Financial inclusion: Definition, examples, and why it is important" pointed that financial inclusion refers to efforts to make financial products and services accessible and affordable to all individuals and businesses, regardless of their personal net worth or company size. Financial inclusion strives to remove the barriers that exclude people from participating in the financial sector and using these services to improve their lives.

Ahmed, HU, and Md. Golam Samdani Fakir (2023) recommended in an article that the proper attention on the amount of financing charge, price levels, and active services of beneficiaries can influence microcredit which leads to a positive and higher growth in gross domestic product and eventually improve the living standard of the people.

3. Objectives

The study will attempt to check following postulations:

1) Computation of bi - variate relationships of GNI, income of banking sectors, and insurance institutions.
2) Computation of descriptive statistics of the variables and check their position of normality.
3) Develop a Lin - Log multivariate model regressing income of banking institutions on identified independent variables such as: QIIP, net available cultivable land, per capita consumption of electricity, number of vehicles registered in different periods, and total credit extended to the society and check the significance of the parameters, and
4) Admonish suggestions after performing the analysis.

4. Methodology

(i) Data

Data on income, expenditure, and numbers of employees employed by the state - owned commercial bank, private commercial bank, specialized banks, and foreign countries owned traditional banks functioning in Bangladesh are collected from the publications of central bank. The data on: net available cultivable land, consumption of electricity, quantum index of industrial products (QIIP), amount of credit extended to the people, and registration of motor vehicles of different types happened in Bangladesh have been collected for the period 2003 - 2019 from the publication of BBS.

It may be a question how felicitous services can be insured. To answer this question the discussions on what are the sources of income of banking institutions. The answer will be accepted from all corners that it depends on the deposit and credits extended by the institutions to the investors invest in different ways. Again, the deposit and investment plan of society depends on the savings plan and investment plans. The savings and investment plan of the society comes forward and expedited expectation of living standard and available opportunities of investment. A society can enjoy better living standard if the consumption level measured by CPI found at suitable level compared to the income. Consumption levels again depend on the performance levels of agriculture and industry sectors of the country.

The total income of banking sectors depends on amount of credits can be made available in the society which again independently depends on the investment opportunities as the development of infrastructure proceeds, per capita available of cultivable land, smart investment opportunities on hauling of goods for generating economic activities. Putting strength on this discussion it is expecting that the income depends on: QIIP, per capita consumption of electricity, number of registered vehicles of different types, net available cultivable land, and total amount of credit extended by the banking and insurance institutions. A Lin - log multivariate model as follows is developed by after performing logarithmic transformation of identified independent variables.

(ii) Model

$Y_t = \beta_0 + \beta_1 Lnx_{1t} + \beta_2 \text{ Ln } x_{2t} + \beta_3 Lnx_{3t} + \beta_4 Lnx_{4t} + \beta_5 Lnx_{5t} + \in_t$

t= 1, 2, 3, 4, ……. n, where:

Y_k= Dependent variable (Income of banking Sectors);

k=1, 2, 3, 4

x_{1t} = Quantum index of industrial product;

x_{2t} = Per capita consumption of electricity;

x_{3t} = Number of registered vehicles of different types;

x_{4t} = Net available cultivable land;

x_{5t} = Amount of credit extended by the banking sectors

$\beta_i'^s$= are unknown regression co - efficient; $\in_t$ = Error term, which represents measurement error and/ or omitted factors.

5. Results and Discussions

Table 1: Performance of four different types of Banks

Bank	Variable	Mean	Std. Deviation	Skewness	Kurtosis
Specialized Bank	Income	1618.042	656.603	- 0.415	- 1.303
	Expenditure	1814.983	796.974	- 0.049	- 1.534
	No. Employees	14506.688	1216.980	- 0.415	- 0.741
State owned Commercial Bank	Income	11765.427	7005.975	0.222	- 1.766
	Expenditure	9496.153	5931.903	0.424	- 1.652
	No. Employees	54941.294	3312.970	- 0.208	- 1.193
Private Commercial Bank	Income	37420.337	26712.323	0.264	- 1.427
	Total expenditure	67483.235	28755.723	0.129	- 1.486
	No. Employees	27479.354	20555.729	0.334	- 1.390
Traditional Foreign Bank	Income	3481.48	1792.39	- 0.047	- 1.440
	Expenditure	1643.07	865.58	- 0.028	- 1.183
	No. Employment	2834.00	966.51	- 0.325	- 1.234

Table 1 is showing the estimated values on average income, average expenditure, and numbers of employees employed under different banks. The table is also showing the turning point of the data such as: mean, standard deviation, skewness, and kurtosis. To compare the performances of the data on average cost - to - income ratio for the sample period were estimated. The values are found at 1.12, 0.81, 1.80, and 0.47 for specialized bank, state owned bank, private commercial bank and foreign owned traditional banks respectively. Thus, it is clearly seen that the highest number on cost –to - income is found in case of private commercial banks and second highest number is observed with specialized bank. For the comparison purposes the ratio of income to number of employees employed in different banks are estimated at 0.11, 0.21, 1.36, and 1.22 respectively. This is an important ratio that roughly measures how much money each employee has generated for the institutions during the sample period. It is mentioned that traditional banking sectors should maintain cost - to - income ratio at 50% to 60% that is every taka of income the expenditure should be in between 50 paisa to 60 paisa. The estimated values are found different in most of the cases. Thus, the persisting practices knocking down the sector for extending felicitous services to the society.

On the other hand, to check the homogeneity, uniformity, and precision levels of the performance series, it is attempted to estimate the values on skewness and kurtosis. The estimated values of skewness are showing certain degree of positive and negative asymmetry. On the other hand, the values of kurtosis are showing that the data sets are skewed and heavily tailed because in most of the cases the kurtosis value is less than - 1 means the curve is too flat that is the curve is platykurtic and therefore the behaviors of series found deviated significantly from the normal distribution. This means that the outcome of performance series has been occurred at irregular frequencies and thus the mean, median and mode occurred at different points. As a result, it can be concluded that the services which is deserved by the society from the banking sectors are found very irregular which may be occurred due to high delinquency rate, imposition of unfriendly interest rate and exclusion of right investor and right investments on right time.

Table 2: Bivariate correlation co - efficient of GNI and income series of different Banks

Correlations							
		SHBINC	SOCBINC	PCMINC	M2	FBINC	GNI
SHBINC	Pearson Correlation	1	.775**	.779**	.688**	.781**	.697**
	Sig. (2 - tailed)		.000	.000	.002	.000	.002
SOCBINC	Pearson Correlation	.775**	1	.989**	.969**	.888**	.958**
	Sig. (2 - tailed)	.000		.000	.000	.000	.000
PCMINC	Pearson Correlation	.779**	.989**	1	.971**	.890**	.975**
	Sig. (2 - tailed)	.000	.000		.000	.000	.000
M2	Pearson Correlation	.688**	.969**	.971**	1	.781**	.993**
	Sig. (2 - tailed)	.002	.000	.000		.000	.000
FBINC	Pearson Correlation	.781**	.888**	.890**	.781**	1	.780**
	Sig. (2 - tailed)	.000	.000	.000	.000		.000
GNI	Pearson Correlation	.697**	.958**	.975**	.993**	.780**	1
	Sig. (2 - tailed)	.002	.000	.000	.000	.000	

NB: **. Correlation is significant at the 0.01 level (2 - tailed). SHBINC, SOCCBINC, PCMINC, FBINC are the income levels of specialized bank, state - owned commercial bank, private commercial bank, and foreign owned traditional bank. M2 is the level of broad money and GNI is the gross national income.

Table 2 representing the bi - variate–correlation analysis of different variables selected in the study. The estimated values are showing that GNI is highly correlated with income level of state - owned bank, private commercial bank, specialized bank, and foreign owned traditional bank. The estimated values are also showing that the relationship of GNI with specialized bank (Bank functioning with special function) and foreign owned bank are highly correlated but at low degree compared to the other two types of bank. On the other hand, GNI is found correlated (0.711 at one tailed and 0.01) with performances of insurance institutions. The higher and lower degree of relationship may be the effects of

non - coverage of deserving people deserve assistances but they are somehow excluded from the process.

It is also mentioned that the income levels of banking institutions depend on different factors. To identify those factors a series of variables are selected these are: CPI, QIIP, consumption of electricity, number of registered vehicles, net available cultivable land, and amount of credit extended to the society by banking institutions. The relationship of income levels of individual type of banks with the entire group of variables may have certain level of relationship with the output of banking institutions. The analysis found that the member of the set of variable excepting CPI is correlated. The stronger relationship indicates that it is very difficult to change one without changing other. It is also difficult for the best fitted model to explain the relationship between each independent variable and the dependent variable independently because the independent variable tends to change in unison. As a result, the income level of banking institutions is attempted to regress on the team of correlated independent variables for comparing the performance of banking institutions.

Table 3: Estimated values of the parameters of the models

Parameters	Model I Specialized Bank	Model II Foreign Bank	Model III Private Commercial Bank	Model IV State Owned Commercial Bank
β_0	- 80204.411	- 69021.84	- 797692.998	- 274564.392
Std. error	25742.644	94380.89	392313.459	131822.293
t - values	- 3.118	- 0.731	- 2.033	- 2.083
Sig.	0.010	0.480	0.057	0.051
β_1	7549.914	6636.215	55113.592	24629.140
Std. error	2946.871	10804.19	44909.812	15090.266
t - values	2.562	0.614	1.227	1.632
Sig	0.028	0.552	0.245	0.131
β_2	- 1104.961	- 6690.68	30375.655	- 1187.465
Std. error	1188.468	4357.31	18112.054	6085.880
t - values	- 0.930	- 1.535	1.677	- 0.195
Sig.	0.372	0.153	0.122	0.849
β_3	1122.977	4071.07	15243.929	7364.628
Std. error	500.293	1834.26	7524.459	2561.915
t - values	2.245	2.219	1.999	2.875
Sig.	0.048	0.45	0.071	0.015
β_4	199.402	- 1056.27	- 5086.401	- 2130.057
Std. error	110.039	493.44	1676.978	563.486
t - values	1.812	2.693	- 3.033	- 3.780
Sig.	0.097	0.021	0.011	0.003
β_5	- 89.572	325.31	2049.209	- 2165.865
Std. error	228.983	839.53	3489.665	1172.572
t - values	- 0.392	0.387	0.587	- 1.847
Sig.	0.703	0.706	0.569	0.092
R^2	0.933	0.880	0.991	0.985
Adjusted R^2	0.903	0.826	0.986	0.978
$F_{(Calculated)}$	30.859	16.127	233.386	141.333
$F_{(Critical)}$	0.000	0.000	0.000	0.000
DW	2.031	1.983	1.922	2.399

Table 3 is representing the values of the parameters for all the four models.

Model 1 is representing the estimated values of all the parameters that signifying the changes on the variation of income levels of specialized bank. The estimated results are showing that the independent variables such as QIIP, number of registered vehicles registered in different times and the amount of net available cultivable land independently and significantly influence the changes of income levels of specialized banking. The results are also showing that for one - unit changes on net available cultivable land the income increased of the banks by 75.49 crores taka and for one - unit changes on total credit the income increased by 11.22 crores taka, and for one - unit changes on number of registered vehicles the income increased by 1.99 crores taka. All the predictors jointly and significantly influence the income levels of the specialized banks. Almost, 93.30% of variation is explained by the group of selected predictors. The DW value is showing valid CLRM (Classical Linear Regression Model) assumptions.

Model II is showing the estimated values of the parameters that signifying the changes on the variation of income levels of foreign owned traditional banks. For one - unit changes on total credit the income level is changed to 40.71 crores taka. But for one - unit chances on number of registered vehicles the income of the bank reduced by 10.86 cores taka significantly. The results are also showing that 88% of variation on the income is explained by the predictors. The assumptions of CLRM are also found valid in this case too.

Model III is showing the estimated values of the parameters that signifying the changes on the variation of income levels of private owned commercial banks. The results are showing that for one - unit changes on net available cultivable land the income increased by 551.14 cores taka. On the other hand, for a unit change on quantum indices of industrial products the income levels of the banks increased by 20.49

crores taka. All the variables jointly and significantly influence the response variable. The predictors can explain 99.10% variation on the dependent variables. In this regard, all the assumptions of CLRM are seen valid.

Model IV is showing the estimated values of the parameters for the income level of state - owned commercial bank. The result is showing that for one unit change on total credit extended by the bank the income level is increased by 73.65 crores taka. On the other hand, for one unit change on number of registered vehicles and quantum indices of industrial products the income of the banks expected to be reduced by 21.30 cores taka and 21.65 cores taka respectively. All the predictors jointly and significantly influence the income levels of state - owned commercial bank for the sample period. The predictors are capable to explain 98.50% of the variation on income levels of the state - owned commercial bank. In this case the assumptions of CLRM are also found sustained.

6. Conclusions

1) The study included sample data for the period 2003 to 2019. The income for the specialized bank, state owned commercial bank, private commercial bank, and foreign owned traditional bank functioning in the country are selected as dependent variable. The analysis includes independent variables for explaining the changes in the dependent variables are quantum index of industrial products, per capita consumption of electricity, number of registration of vehicles occurred in different years, net available cultivable land, and amount of credits extended by the banking institutions in the society. The estimated results have shown that net available cultivable land and number of registered vehicles independently and significantly influence the income levels of specialized banks. These two variables jointly with other two variables included as independent variables influence income levels of this type of banks. The four variables have seen responsible to bring about 93% changes in the income levels.
2) The data on net available cultivable land and number of registered vehicles also showing significant influences on income levels of state - owned commercial bank, private commercial bank, foreign owned traditional bank.
3) The behavior of these two variables pointed at (ii) have shown that they are capable to explain 93.33%, 82.6%, 99.1%, and 98.5% of changes on income levels of the specialized bank, traditional foreign bank, private commercial bank, and state - owned commercial banks respectively.
4) To explain the percentage of changes on income levels of the banks at the contribution of independent variables Ln - Log model was attempted to fit the data.
5) Bi - variate relationship was estimated as and where it was needed such as: independent variables of the model with GNI, M2 money, because, this was necessary to build up models to explain the changes happening on income levels of the banking institutions.

7. Recommendation

The banking and insurance institutions extend support to the society for improving the income levels of the society. On the other hand, the income levels of the banking and insurance institutions influenced by the variables such as: QIIP, amount of net available cultivable land, per capita consumption of electricity, number vehicles registered during the year for the transportation of goods and services, and the total amount of credits extended to the society by these types of institutions. As a result, the institutions should be very careful while extending credits giving attentions on delinquency rate, overlapping, leverage loan, and speculative loans. These will help the institutions to avoid liquidity risks, credit risk, asset and liability risk, and market risk and extending credits on effective projects and programs defined by the society. These practices increase the incomes levels of the credit users and ultimately increase the living standard of the society.

References

[1] Valentina Palackieene, KestutisPaleckis (2018): The relationship between insurance and economic growth: evidence from the European Union countries, *Journal of economic research*, Volume 32, Issue 1.
[2] Amit Ghosh (2016): Banking sector globalization and bank performance: A comparative analysis of low - income countries with emerging markets and advanced economies, *Review of Development Finance*, volume 6, Issue 1, Pages: 58 - 70.
[3] Barkat - e - Khuda, 2018, Economic Growth in Bangladesh and the role of Banking sector, paper presented at the Annual Banking Conference held in Dhaka, 7 - 8th November.
[4] Ahmed, HU, and Md. Golam Samdani Fakir (2023): Role of Microcredit on Poverty Reduction: A Measurement on Present On - going Process, *International Journal of Science and Research (IJSR)*, Volume 12, Issue 5, May 2023, pp - 294 - 297.
[5] Mitchell Grant (2023): Financial Inclusion, Definition, Examples and Why it is Important from
[6] https: /www.investopedia. com.