

Corporate Governance in Financial Institutions in Bangladesh: A Preliminary Study

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Abstract

Corporate governance is an important issue these days. Good corporate governance can lead to a lot of positive effects on financial institutions. Proper implementation of corporate governance has become one the concerning issue in global arena. Considering the current condition of financial institution of Bangladesh it has become important for Bangladesh to focus on it. A lot of research has been carried out to see the effect of corporate governance in financial institutions. Accordingly, this study aimed to explore to find the effect of corporate governance in financial institutions in Bangladesh. In doing so we have summarized the findings of the empirical studies, drawn the conceptual framework, measured corporate governance of financial institution by using data of 15 (fifteen) listed private commercial banks (out of 30) in Bangladesh for the time horizon of 5 years (2009-2014). The variables used in this study to find out the effect of corporate governance in Bangladeshi financial institutions are: average return on equity, average return on assets, average allocative efficiency, average technical efficiency and other variables. In most of the cases positive relationship was determined between the variable discussed.

Keywords: Corporate governance; Average allocative efficiency; Average technical Efficiency; Average cost efficiency; GDP growth rate; ROA; ROE

Introduction

In recent years, the topic, corporate governance has been discussed widely and has sort of become an important issue given some of the major financial crises that has occurred in the past few years. In 2008, the subprime crisis led to a huge problem in the United States and worldwide and led to major financial institutions to bankruptcy and a lot others to the brink of it. This gave rise to the regulators introducing stricter regulations and an overall review of the corporate governance system implemented in financial institutions. A lot of research has been conducted on corporate governance since then and various comparisons have been made between institutions which practice good corporate governance with institutions that have weak corporate governance systems. It has been found that institutions that practice good corporate governance tend to perform better over the long run and have higher profitability [1]. They also tend to be better at allocating resources than one which have weaker systems in place. It has been observed that corporate governance and performance indicators of financial institutions are related and good corporate governance has a positive effect on the performance indicators. But not enough research has been conducted on the causal effect of the performances of the financial institutions on the corporate governance in financial institutions. In this research paper, this has been extended to include both conventional banks and Islamic banks and see how some of those indicators affect the corporate governance in both types of these institutions.

Problem Statement

The problem statement of this research is: "To investigate the effect on corporate governance by changes in average return on equity, average return on assets, average technical efficiency, average allocative efficiency, average cost efficiency, GDP growth rate, annual interest rate and by linking all these together, in both conventional and Islamic banks."

Purpose of the Study

- Focusing on average return on equity and how it affects corporate governance in Islamic and conventional banks.

- Exploring the effect of return on assets on the corporate governance in Islamic and conventional banks.
- Verifying the effect of average technical efficiency on the corporate governance in Islamic and conventional banks.
- Verifying the effect of average allocative efficiency on the corporate governance in Islamic and conventional banks.
- Verifying the effect of average cost efficiency on the corporate governance in Islamic and conventional banks.
- Determining the relationship between GDP growth rate and corporate governance in Islamic and conventional banks.
- Determining the relationship between annual interest rate and corporate governance in Islamic and conventional banks.

Literature Review

Corporate governance in financial institutions

Proper implementation of corporate governance generally helps to mobilize the capital in addition to an efficient use of resources both within the company and the larger economy [1]. If funds can be mobilized easily then it can be allocated to places where it can be used the most effectively and probably can earn positive returns. An efficient use of resources can help to reduce waste and save money which is beneficial for long term competitiveness. As a result of good corporate governance, the domestic and international investors' confidence in the institution can increase and lead to a lower cost investment capital [1]. The investors thus have the perception that the financial institution

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is stable and predictable. There are a lot of channels through which governance may have an effect on performance. A particular focus is on the influence of financial institutions. Mayer [2] states that in countries like UK and the US, many financial institutions have important, sometimes dominant ownership of many corporations. This puts them in a position of influence and ability to dictate how those corporations are run. Secondly Mayer [2] acknowledges that even if the financial institutions cannot influence as dominant shareholders, they can have a major influence as the creditors of the corporations.

Relation between average ROE and corporate governance

There is a positive and significant relationship between ROE and corporate Governance in financial institution. One accounting based measure of performance in corporate governance research is return on equity (ROE) [3]. The primary aim of an organization's operation is to generate profits for the benefit of the investors. Therefore, return on equity is a measure that shows investors the profit generated from the money invested by the shareholders [4]. It measures the profitability of shareholders' investment and shows the net income as a percentage of shareholders' equity.

The authors criticize the findings of Gompers et al. [5], regarding the relationship between corporate governance and company stock market performance. GIM analyzed company performance over the 1990–1999 periods and found that companies with strong shareholder rights had higher risk-adjusted returns than those with weak rights. According to GIM, the reasons for this anomaly include poor governance causing increased agency costs that are underestimated by investors and poor governance creating stronger protection from a corporate takeover, which leads to a smaller takeover premium and lower risk-adjusted returns [6-10]. To counter these findings, the authors argue that investors should not be surprised by worse operating performance of poor governance companies and lower takeover probabilities for companies with poor shareholder rights. In addition, agency theory suggests that a better-governed firm is expected to have better performance and higher valuation due to lower agency costs.

Relation between average ROA and corporate governance

Corporate Governance is basically concerned with ways in which all parties interested in the well-being of the firm (the stakeholders) attempt to ensure that managers and other insiders are always taking appropriate measures or adopt mechanisms that safeguard the interests of the stakeholders. Such measures are necessitated because of the separation of ownership from management, an increasingly vital feature of the modern corporations. And Return on assets (ROA) is a financial Return on assets (ROA) is a financial ratio that shows the percentage of profit a company earns in relation to its overall resources. Return on assets (ROA) is a financial ratio that shows the percentage of profit a company earns in relation to its overall resources a way to tell at a glance how profitable a company is Consider that companies take capital from investors and turn it into profits, which are in turn returned to the investor in one form or another [11,12].

This study aimed to examine the relationship between four corporate governance mechanisms (such as board size, board independent director, chief executive officer duality and board audit committee) and value of the firm measures (return on asset, ROA and return on equity, ROE). The results provide evidence of a positive significant relationship return on asset and board independent director as well as chief executive officer duality. The results further reveal a positive significant relationship between ROE and board independent

director as well as Executive Chief Officer duality .The study however , could not provide a significant relationship between the value of the firm measures (ROA and ROE) and board size and board audit committee [13-15].

Relation between average technical efficiency and corporate governance

Financial inclusion is important for improving the living conditions of the deprived sections of society including poor farmers, rural non-farm enterprises and other vulnerable groups. Financial exclusion, in terms of lack of access to credit from formal institutions, is high for small and marginal farmers and other social groups. Apart from formal banking institutions which should look at inclusion both as a business opportunity and social responsibility, the role of the self-help group movement and microfinance institutions (MFIs) is important to improve and expand the network of financial inclusion [16].

Relation between average allocative efficiency and corporate governance

Allocative efficiency is a type of economic efficiency in which economy/producers produce only those types of goods and services that are more desirable in the society and also in high demand. According to the formula the point of allocative efficiency is a point where price is equal to marginal cost ($P=MC$) or ($AR=MC$). At this point the social surplus is maximized with no deadweight loss, or the value society puts on that level of output produced minus the value of resources used to achieve that level, yet can be applied to other things such as level of pollution. Allocative efficiency is the main tool of welfare analysis to measure the impact of markets and public policy upon society and subgroups being made better or worse off [17-20].

Relation between average cost efficiency and corporate governance

The group efficiency scores of each industry in each year are obtained from biased-corrected bootstrapping estimation based on group-wise heterogeneous sub-sampling procedure. The bootstrapped weighted mean, median, and standard deviation of efficiency scores, and 95% confidence interval are all presented in the table. The weights of group aggregation are the observed revenue shares, which is based on the theory developed by Jegadeesh [21].

In line with Berger et al. [6], we measure cost efficiency by how close a bank's actual cost is to what a best-practice bank's cost would be to produce the same bundle of outputs. Banks that are cost inefficient are either wasting some of their inputs (technical inefficiency) or are using the wrong combination of inputs to produce outputs (allocative inefficiency), or both [22]. Similarly, profit efficiency is measured by how close a bank's profit is compared with what the best practice bank would produce given the same input conditions. The concept of profit efficiency is derived mostly from the revenue side of the banking business. Although it is affected by costs, it allows banks to offset their additional costs to achieve higher service levels. Hence, for profitability and firm value considerations, profit efficiency is a better concept because it also takes the quality of the outputs into account [23].

Relation between GDP growth rate and corporate governance

Effective corporate governance mobilizes the capital annexed with the promotion of efficient use of the resources both within the company and the larger economy. It also assists in attracting lower cost investment

capital by improving domestic as well as international investor's confidence. Good corporate governance ensures legal compliance and takes impartial decisions for the betterment of the business. The developed countries like U.S., UK, Germany, Hong Kong and etc., have developed different models of corporate governance to make growth in their economy. For the lack of corporate governance if the traders lost a great deal of money cannot immediately invest more in a country. Having lost money may indicate that the trader has bad judgment [24,25]. A bigger fall in asset prices due to worse corporate governance can plausibly trigger a large reduction in the bank's investment position in the entire asset of the country. Weaker corporate governance leads to more capital flight and deeper currency depreciation. So weaker corporate governance will not be good for GDP growth rate [26].

Relation between average annual interest and corporate governance

Corporate governance (CG), broadly defined, is a set of processes, policies and laws affecting the way an organization is directed, administered and controlled. Kraft and Tirtiroglu [27] defined CG as a set of formalized values and procedures implemented by the owners, directors and the management of the business in its various operations as well as its interactions with stakeholders. Macey [28] defined CG as the provision of effective boards, strong shareholder rights, and broad disclosures in managing a business. Corporate governance is the system by which companies are directed and controlled [29-33]. This concept is appropriate for banks, too. Yet for banks and other financial institutions, the scope of corporate governance goes beyond the shareholders to include debt holders [34,35]. Some include the state as stakeholder, but the role of the state is better understood as setting the rules of the game in a regulated industry. Investor confidence in public companies is essential to the functioning of the global economy. At this website, we intend to provide you with key information about our corporate governance policies. These policies provide a framework for the proper operation of our company, consistent with our shareholders' best interests and the requirements of the law.

Conceptual Framework

The conceptual framework is shown in Figure 1.

Research Hypotheses

H_{a_1} : Average return on equity will affect corporate governance in financial institutions.

H_{a_2} : Average return on assets will affect corporate governance in financial institutions.

H_{a_3} : Average allocative efficiency will affect corporate governance in financial institutions.

H_{a_4} : Average technical efficiency will affect corporate governance in financial institutions.

H_{a_5} : Average cost efficiency will affect corporate governance in financial institutions.

H_{a_6} : There is a relationship between GDP growth rate and corporate governance in financial institutions.

H_{a_7} : There is a relationship between annual interest rate and corporate governance in financial institutions.

Research Design

Research design is important as it is the framework or blueprint

for conducting the research project. It details the procedures necessary for obtaining the information needed to structure or solve the research problems. For this particular research project, under the method of data collection, we collected both primary and secondary data. For the primary data, we interviewed 40 boards of director and employees of the financial institutions and for the secondary data; we will be looking at the annual reports of the financial institutions. Our research was an experimental study. The goal of our research is to try to answer the research questions. In this research, the board of directors and the employees was aware of our presence. The time dimension for this particular research was a cross-sectional study as this research will be a one-off project and will not be conducted over a period of time. The topical scope for our research is a statistical study because it is designed for breadth rather than depth. Our survey involved focusing on opinions or factual information [36,37].

Sampling

For our research, we have interviewed 40 boards of directors and employees of the different financial institutions under our consideration. Also, last 5 years of the annual reports of the financial institutions were considered. So the sample units are the boards of directors and employees and annual reports of the 6 financial institutions. The size of the sample is 40 which consist of board of directors and employees of six financial institutions, 3 of which are Islamic banks and 3 are conventional banks. The sample procedure that is used for this research paper is stratified random sampling. This is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics. A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the population. These subsets of the strata are then pooled to form a random sample.

Data Collection Method

We used both primary and secondary data. For the primary data, we interviewed 40 board of directors and employees of the following financial institutions: Brac Bank, Eastern Bank, The City Bank, First Securities Islami Bank, Islami Bank and Shahjalal Bank. For the secondary data, we considered the 2013 and 2014 annual reports of the above mentioned institutions.

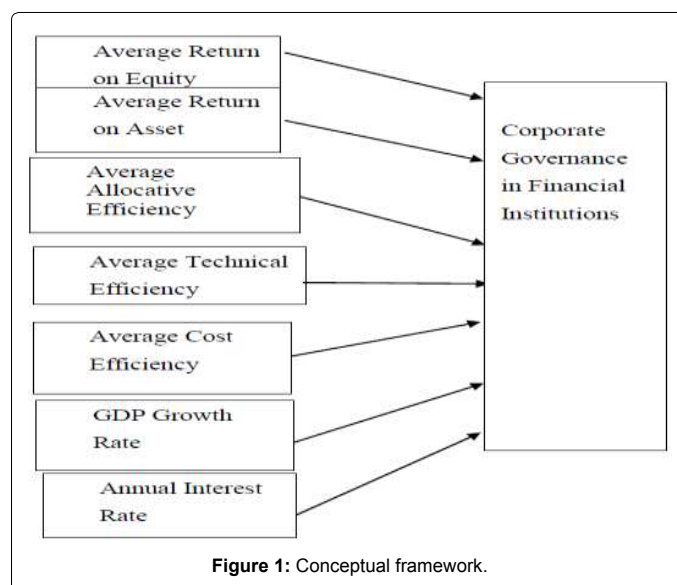


Figure 1: Conceptual framework.

Data Analysis

Average return on equity

Brac Bank: From the annual reports of Brac Bank, the ROE in 2013 was 5.47% while in 2014 it was 11.46%. This increase in ROE has led to the increase in compliance to the codes of Corporate Governance and thus we should reject the null hypothesis and accept the alternate hypothesis.

Eastern Bank: From the annual reports of Eastern Bank, the ROE in 2013 was 14.44% while in 2014 it was 14.44%. The similar figures can be attributed to extreme circumstances such as political factors for which the hypothesis could not be tested properly. But in previous years, it showed an increase and with the increase in compliance to codes of Corporate Governance, we should reject the null hypothesis and accept the alternate hypothesis.

The City Bank: From the annual reports of the City Bank, the ROE in 2013 was 13.7% while in 2014 it was 4.3%. The decline can be attributed to extreme circumstances such as political factors for which the hypothesis could not be tested properly. But in previous years, it showed an increase with stable political scenario and with the increase in compliance to codes of Corporate Governance, we should reject the null hypothesis and accept the alternate hypothesis.

First Security Islami Bank: From the annual reports, the ROE in 2013 was 12.75% while in 2014 it was 13.46%. This increase in ROE has led to the increase in compliance to the codes of Corporate Governance and thus we should reject the null hypothesis and accept the alternate hypothesis.

Islami Bank: From the annual reports of the Islamic Bank, the ROE in 2013 was 13% while in 2014 it was 11%. The decline can be attributed to extreme circumstances such as political factors for which the hypothesis could not be tested properly. But in previous years, it showed an increase with stable political scenario and with the increase in compliance to codes of Corporate Governance, we should reject the null hypothesis and accept the alternate hypothesis.

Shahjalal Bank: From the annual reports, the ROE in 2013 was 13.80% while in 2014 it was 17.01%. This increase in ROE has led to the increase in compliance to the codes of Corporate Governance and thus we should reject the null hypothesis and accept the alternate hypothesis.

Average return on assets

Brac Bank: From the annual reports of Brac Bank, the ROA in 2013 was 0.35% while in 2014 it was 0.72%. This increase in ROA has led to the increase in compliance to the codes of Corporate Governance and thus we should reject the null hypothesis and accept the alternate hypothesis.

Eastern Bank: From the annual reports of the Eastern Bank, the ROA in 2013 was 1.72% while in 2014 it was 1.68%. This decline can be attributed to extreme circumstances such as political factors for which the hypothesis could not be tested properly. But in previous years, it showed an increase with stable political scenario and with the increase in compliance to codes of Corporate Governance, we should reject the null hypothesis and accept the alternate hypothesis.

The City Bank: From the annual reports of the City Bank, the ROA in 2013 was 2.0% while in 2014 it was 0.6%. This decline can be attributed to extreme circumstances such as political factors for which the hypothesis could not be tested properly. But in previous years, it showed an increase with stable political scenario and with the increase

in compliance to codes of Corporate Governance, we should reject the null hypothesis and accept the alternate hypothesis.

First Security Islami Bank: From the annual reports, the ROA in 2013 was 1.75% while in 2014 it was 1.50%. This decline can be attributed to extreme circumstances such as political factors for which the hypothesis could not be tested properly. But in previous years, it showed an increase with stable political scenario and with the increase in compliance to codes of Corporate Governance, we should reject the null hypothesis and accept the alternate hypothesis.

Islami Bank: From the annual reports, the ROA in 2013 was 1.27% while in 2014 it was 0.96%. This decline can be attributed to extreme circumstances such as political factors for which the hypothesis could not be tested properly. But in previous years, it showed an increase with stable political scenario and with the increase in compliance to codes of Corporate Governance, we should reject the null hypothesis and accept the alternate hypothesis.

Shahjalal Bank: From the annual reports of Shahjalal Bank, the ROA in 2013 was 1.26% while in 2014 it was 1.44%. This increase in ROA has led to the increase in compliance to the codes of Corporate Governance and thus we should reject the null hypothesis and accept the alternate hypothesis.

Descriptive analysis

Descriptive analysis includes numbers that summarize the data with the purpose of describing what occurred in the sample.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	30	75.0	75.0	75.0
	Female	10	25.0	25.0	100.0
	Total	40	100.0	100.0	

Table 1: Frequency of gender.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 30	4	10.0	10.0	10.0
	41-50	8	20.0	20.0	30.0
	51-60	24	60.0	60.0	90.0
	Above 60	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

Table 2: Frequency of age.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Service in Private Sector	40	100.0	100.0	100.0

Table 3: Frequency of occupation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Postgraduate	31	77.5	77.5	77.5
	Undergraduate	7	17.5	17.5	95.0
	Diploma	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

Table 4: Frequency of education.

From Table 1, it can be seen that the total sample size was 40. Among the 40, there were 30 males which accounted for 75% of the total sample and 10 females which accounted for 25% of the total sample size.

From Table 2, it can be seen that the total sample size was 40. Among the 40, there were 4 participants who were below 30 years of age and they accounted for 10% of the total sample. Eight participants were between 41-50 years of age and they accounted for 20% of the total sample. Twenty-four participants were between 51-60 years of age and they accounted for 60% of the total sample. Finally, 4 participants were above 60 years of age and they represented 10% of the total sample.

From Table 3, it can be observed that the total sample size was 40 and 100% of that sample worked in the private sector.

From Table 4, it can be seen that the total sample size was 40. From that figure, 31 participants had a postgraduate degree which accounted for 77.5% of the total sample, 7 participants had finished till an undergraduate degree which accounted for 17.5% of the total sample and 2 participants had completed up to a diploma which accounted for 5% of the total sample.

Reliability analysis

The internal consistency reliability was assessed by calculating Cronbach's alpha. A commonly accepted rule of thumb for describing internal consistency using Cronbach's alpha is as follows:

- $\alpha \geq 0.9$ Excellent
- $0.7 \leq \alpha < 0.9$ Good
- $0.6 \leq \alpha < 0.7$ Acceptable
- $0.5 \leq \alpha < 0.6$ Poor
- $\alpha < 0.5$ Unacceptable

Average allocative efficiency: In Table 5, as per the data analysis, the Cronbach's Alpha is 0.711. Hence, it is a desirable level of reliability for this particular variable.

Cronbach's Alpha	N of Items
0.711	4

Table 5: Cronbach's alpha for average allocative efficiency - reliability statistics.

Cronbach's Alpha	N of Items
0.742	4

Table 6: Cronbach's alpha for average technical efficiency - reliability statistics.

Cronbach's Alpha	N of Items
0.712	4

Table 7: Cronbach's alpha for average cost efficiency - reliability statistics.

Cronbach's Alpha	N of Items
0.714	4

Table 8: Cronbach's alpha for GDP growth rate-reliability statistics.

Cronbach's Alpha	N of Items
0.710	4

Table 9: Cronbach's alpha for annual interest rate - reliability statistics.

Cronbach's Alpha	N of Items
0.713	4

Table 10: Cronbach's alpha for annual interest rate - reliability statistics.

Average technical efficiency: In Table 6, as per the data analysis, the Cronbach's Alpha is 0.742. Hence, it is a desirable level of reliability for this particular variable.

Average cost efficiency: In Table 7, as per the data analysis, the Cronbach's Alpha is 0.712. Hence, it is a desirable level of reliability for this particular variable.

GDP growth rate: In Table 8, as per the data analysis, the Cronbach's Alpha is 0.714. Hence, it is a desirable level of reliability for this particular variable.

Annual interest rate: In Table 9, as per the data analysis, the Cronbach's Alpha is 0.710. Hence, it is a desirable level of reliability for this particular variable.

Corporate governance in financial institutions: In Table 10, as per the data analysis, the Cronbach's Alpha is 0.713. Hence, it is a desirable level of reliability for this particular variable.

Spearman's correlation

Spearman's correlation is used to see whether there is any relationship among variables or not. If correlation coefficient or ρ (rho) $\neq 0$ and significance or α (alpha) < 0.05 then, there will be a relationship between variables.

Hypothesis 3: From Table 11, it shows that Spearman's rho between average allocative efficiency and corporate governance in financial institutions is 0.925. This has a double star which indicates it is highly significant as at the 0.01 level. Hence, we should reject our null and accept our alternate hypothesis.

Hypothesis 4: From Table 12, it shows that Spearman's rho between average technical efficiency and corporate governance in financial institutions is 0.597. This has a double star which indicates it is highly significant as at the 0.01 level. Hence, we should reject our null and accept our alternate hypothesis.

Hypothesis 5: From Table 13, it shows that Spearman's rho between average cost efficiency and corporate governance in financial institutions is 0.972. This has a double star which indicates it is highly significant as at the 0.01 level. Hence, we should reject our null and accept our alternate hypothesis.

Hypothesis 6: From Table 14, it shows that Spearman's rho between

Correlations				
			Average Allocative Efficiency	Corporate Governance in Financial Institutions
Spearman's rho	Average Allocative Efficiency	Correlation Coefficient	1.000	0.925**
		Sig. (2-tailed)	.	0.000
		N	40	40
	Corporate Governance in Financial Institutions	Correlation Coefficient	0.925**	1.000
		Sig. (2-tailed)	0.000	.
		N	40	40

** . Correlation is significant at the 0.01 level (2-tailed).

Table 11: Spearman's correlation between average allocative efficiency and corporate governance in financial institutions.

Correlations				
			Average Technical Efficiency	Corporate Governance in Financial Institutions
Spearman's rho	Average Technical Efficiency	Correlation Coefficient	1.000	0.597**
		Sig. (2-tailed)	.	0.000
		N	40	40
	Corporate Governance in Financial Institutions	Correlation Coefficient	0.597**	1.000
		Sig. (2-tailed)	0.000	.
		N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

Table 12: Spearman's correlation between average technical efficiency and corporate governance in financial institutions.

Correlations				
			Average Cost Efficiency	Corporate Governance in Financial Institutions
Spearman's rho	Average Cost Efficiency	Correlation Coefficient	1.000	0.972**
		Sig. (2-tailed)	.	0.000
		N	40	40
	Corporate Governance in Financial Institutions	Correlation Coefficient	0.972**	1.000
		Sig. (2-tailed)	0.000	.
		N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

Table 13: Spearman's correlation between average cost efficiency and corporate governance in financial institutions.

Correlations				
			GDP Growth Rate	Corporate Governance in Financial Institutions
Spearman's rho	GDP Growth Rate	Correlation Coefficient	1.000	0.854**
		Sig. (2-tailed)	.	0.000
		N	40	40
	Corporate Governance in Financial Institutions	Correlation Coefficient	0.854**	1.000
		Sig. (2-tailed)	0.000	.
		N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

Table 14: Spearman's correlation between GDP growth rate and corporate governance in financial institutions.

Correlations				
			Annual Interest Rate	Corporate Governance in Financial Institutions
Spearman's rho	Annual Interest Rate	Correlation Coefficient	1.000	0.913**
		Sig. (2-tailed)	.	0.000
		N	40	40
	Corporate Governance in Financial Institutions	Correlation Coefficient	0.913**	1.000
		Sig. (2-tailed)	0.000	.
		N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

Table 15: Spearman's correlation between annual interest rate and corporate governance in financial institutions.

GDP growth rate and corporate governance in financial institutions is 0.854. This has a double star which indicates it is highly significant as at the 0.01 level. Hence, we should reject our null and accept our alternate hypothesis.

Hypothesis 7: From Table 15, it shows that Spearman's rho between annual interest rate and corporate governance in financial institutions is 0.913. This has a double star which indicates it is highly significant as at the 0.01 level. Hence, we should reject our null and accept our alternate hypothesis.

Pearson's correlation

Pearson's correlation is used to see the strength of relationship between variables. If significance or $p \leq 0$, then null hypothesis (H_0) will be rejected and alternate hypothesis will be accepted. The following table below gives a guide for the correlation or the absolute value of r:

- 0.00-0.19 "very weak"
- 0.20-0.39 "weak"
- 0.40-0.59 "moderate"
- 0.60-0.79 "strong"
- 0.80-1.0 "very strong"

Hypothesis 3: From Table 16, it can be observed that between average allocative efficiency and corporate governance in financial institutions, the Pearson's correlation is 0.941. This has a double star which indicates correlation is highly significant at the 0.01 level. Hence, we should reject our null and accept our alternate hypothesis.

Hypothesis 4: From Table 17, it can be observed that between average technical efficiency and corporate governance in financial institutions, the Pearson's correlation is 0.624. This has a double star which indicates correlation is highly significant at the 0.01 level. Hence, we should reject our null and accept our alternate hypothesis.

Correlations			
		Average Allocative Efficiency	Corporate Governance in Financial Institutions
Average Allocative Efficiency	Pearson Correlation	1	0.941**
	Sig. (2-tailed)		0.000
	N	40	40
Corporate Governance in Financial Institutions	Pearson Correlation	0.941**	1
	Sig. (2-tailed)	0.000	
	N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

Table 16: Pearson's correlation between average allocative efficiency and corporate governance in financial institutions.

Correlations			
		Average Technical Efficiency	Corporate Governance in Financial Institutions
Average Technical Efficiency	Pearson Correlation	1	0.624**
	Sig. (2-tailed)		0.000
	N	40	40
Corporate Governance in Financial Institutions	Pearson Correlation	0.624**	1
	Sig. (2-tailed)	0.000	
	N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

Table 17: Pearson's correlation between average technical efficiency and corporate governance in financial institutions.

Correlations			
		Average Cost Efficiency	Corporate Governance in Financial Institutions
Average Cost Efficiency	Pearson Correlation	1	0.980**
	Sig. (2-tailed)		0.000
	N	40	40
Corporate Governance in Financial Institutions	Pearson Correlation	0.980**	1
	Sig. (2-tailed)	0.000	
	N	40	40

** . Correlation is significant at the 0.01 level (2-tailed).

Table 18: Pearson's correlation between average cost efficiency and corporate governance in financial institutions.

Correlations			
		GDP Growth Rate	Corporate Governance in Financial Institutions
GDP Growth Rate	Pearson Correlation	1	0.763**
	Sig. (2-tailed)		0.000
	N	40	40
Corporate Governance in Financial Institutions	Pearson Correlation	0.763**	1
	Sig. (2-tailed)	0.000	
	N	40	40

** . Correlation is significant at the 0.01 level (2-tailed).

Table 19: Pearson's correlation between GDP growth rate and corporate governance in financial institutions.

Correlations			
		Annual Interest Rate	Corporate Governance in Financial Institutions
Annual Interest Rate	Pearson Correlation	1	0.924**
	Sig. (2-tailed)		0.000
	N	40	40
Corporate Governance in Financial Institutions	Pearson Correlation	0.924**	1
	Sig. (2-tailed)	0.000	
	N	40	40

** . Correlation is significant at the 0.01 level (2-tailed).

Table 20: Pearson's correlation between annual interest rate and corporate governance in financial institutions.

Hypothesis 5: From Table 18, it can be observed that between average cost efficiency and corporate governance in financial institutions, the Pearson's correlation is 0.980. This has a double star which indicates correlation is highly significant at the 0.01 level. Hence, we should reject our null and accept our alternate hypothesis.

Hypothesis 6: From Table 19, it can be observed that between GDP growth rate and corporate governance in financial institutions, the Pearson's correlation is 0.763. This has a double star which indicates correlation is highly significant at the 0.01 level. Hence, we should reject our null and accept our alternate hypothesis.

Hypothesis 7: From Table 20, it can be observed that between annual interest rate and corporate governance in financial institutions, the Pearson's correlation is 0.924. This has a double star which indicates correlation is highly significant at the 0.01 level. Hence, we should reject our null and accept our alternate hypothesis.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.989 ^a	0.979	0.976	0.06250

Table 21: Multiple regression analysis. Predictors: (Constant), Annual Interest Rate, Average Technical Efficiency, GDP Growth Rate, Average Cost Efficiency, Average Allocative Efficiency

Regression

R² (square) value represents how much a dependent variable is explained by the independent variables altogether since we are doing a multiple regression analysis and if $p \leq 0.05$, we reject H₀ (null) hypothesis.

From Table 21 Model Summary, it can be observed that R² is 0.979 which means that the dependent variable (corporate governance in financial institutions) is affected by all the independent variables (average allocative efficiency, average technical efficiency, average cost efficiency, GDP growth rate and annual interest rate) together by 97.9%. Hence, we reject null and accept our alternate hypothesis.

Limitations of the Study

Limitations are the shortcomings, conditions or influences that cannot be controlled by the researcher that place restrictions on the methodology and conclusions.

The time limit is our case was short which prevented us from gathering all the literature that we needed to review. The time limit also played a part in the small sample size of 40 that was part of our research. Also, not all the annual reports were readily available. It was done by simulated environment. Extreme circumstances like political factors also prevented from testing the hypotheses properly and led us to gauge some of our conclusions from previous historical trends.

Conclusion

This study was highly significant in a lot ways. Previous research was primarily done to see the effect of corporate governance in financial institutions on average return on equity, average return on assets, average allocative efficiency, average technical efficiency, average cost efficiency, GDP growth rate and annual interest rate [38,39]. Very few to no research was done to see the effect of each of those seven variables on corporate governance in financial institutions and that is exactly what we have succeeded in accomplishing. Through our research, we have learnt the following:

- Average return on equity affects corporate governance in financial institutions
- Average return on assets affects corporate governance in financial institutions
- Average allocative efficiency affects corporate governance in financial institutions
- Average technical efficiency affects corporate governance in financial institutions
- Average cost efficiency affects corporate governance in financial institutions
- There is a relationship between GDP growth rate and corporate governance in financial institutions
- There is a relationship between annual interest rate and corporate governance in financial institutions

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