

Interdependence of Governance and Financial Performances in Selected Indian Public Sector Undertaking Banks



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Corporate governance considers the multiple issues arising from interaction among senior management, shareholders, board of directors, promoters, institutional investors etc. The threat of accumulation of non-performing assets has become a major challenge for Public Sector Undertaking banks. Thus, it has become imperative for banks to implement sound and efficient corporate governance practices. Objective of the research paper is to analyse the interdependence of corporate governance practices of selected Indian PSU banks and their financial performances. The financial year (2015-16) has been taken into consideration for the research paper. 21 PSU banks are taken into considerations such as State Bank of India, Punjab National Bank, Bank of Baroda, Bank of India, Canara Bank, Union bank of India, IDBI Bank Limited, Syndicate Bank, Central Bank of India, Indian Overseas Bank, Oriental Bank of Commerce, Allahabad Bank, Corporation Bank, UCO Bank, Indian Bank, Andhra Bank, Bank of Maharashtra, Vijaya Bank, Dena Bank, United Bank of India and Punjab & Sind Bank. Net profit is taken as dependent variable. Board size, board independence, net NPA, capital adequacy ratio has been considered as independent variables. Pearson's correlation coefficient and multiple regressions have been used in this study.

Keywords: *governance, non-performing asset, board, capital adequacy, net profit*

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1. Introduction

Governance becomes indispensable as and when the ownership deviates from control that is to say, the particular company or institution is highly concerned with achieving the goals like designing the succession planning, identifying opportunities, facilitating constructive challenges and efficient allocation of scarce resources. Therefore, corporate governance encompasses the several issues arising from interaction among senior management, shareholders, board of directors, promoters, institutional investors etc. The corporate governance mechanism is much more crucial in the banking sector. Banks by virtue of their intermediation function in the allocation of resources play a crucial role in the socio economic growth of the country. Banks exercise a choice in dispensing credit and wrong decisions can have significant consequences in the economy. The threat posed by non-performing assets has been talked about widely and is now familiar to anyone even with a passive interest in the economy. Thus it has become imperative for banks to ensure that the corporate governance practices that they adopt should be sound and efficient. According to Basel III, banks have to maintain at least 11.5% capital adequacy ratio. Simultaneously banks have to pursue their profit maximisation agenda to provide justice to shareholders. The proposed study will examine the relationship between profitability and governance practices of selected PSU banks of India.

2. Survey of Existing Literature

Brahmbhatt et al (2012) conducted a study in order to compare corporate governance practices in public and the private sector banks. The findings of the study revealed the possibility of improvement of corporate governance laws for the betterment of all stakeholders across both the banks. The author collected data from selected Public and Private sector banks (SBI, Bank of India, ICICI, Axis bank etc.) through a survey questionnaire. Parameters based scorecard method was used to conduct the comparative analysis, on the basis of Clause 49. The main findings of the study brought up the score cards and ranking of banks taken in sample. It ranked Bank of India 1, State Bank of India 2, ICICI bank 3, and Axis Bank Ltd 4 and so on for observance of corporate governance within the firm through stringent regulations.

Agarwal (2013) established that corporate governance rating exerted positive impact on financial performance of firms. The study revealed that good governance had fostered better financial performance. Ratings of company along with employees' related and environmental dimensions also had significantly influenced corporate financial performance.

Bijalwan and Madan (2013) indicated that there was significant relationship between transparency, shareholders' rights and firm performance in India. Hence it could be said that these factors were correlated and had impact on each other.

Deb (2013) conducted a study among senior managers of public and private sector banks to determine the corporate governance practices and concluded that banks needed to ensure transparency in financial statements, in order to protect their shareholders. Comparative study across the banks revealed that public banks were more transparent in comparison to its private counterparts.

3. Objective

To analyse the interdependence of corporate governance practices of selected Indian PSU banks and their financial performances

4. Research Methodology

The proposed study is explanatory and empirical in nature and the sources of data are secondary data (inclusive of quantitative and qualitative data) which are collected through websites and annual reports related matter.

- **Period of the study:** The financial year (2015-16) has been taken into consideration for the research paper. So all the data collected is based on the annual reports of this duration only.
- **Samples of the study:** 21 PSU banks are taken into consideration such as State Bank of India, Punjab National Bank, Bank of Baroda, Bank of India, Canara Bank, Union bank of India, IDBI Bank Limited¹⁸, Syndicate Bank, Central Bank of India, Indian Overseas Bank, Oriental Bank of Commerce, Allahabad Bank, Corporation Bank, UCO Bank, Indian Bank, Andhra Bank, Bank of Maharashtra, Vijaya Bank, Dena Bank, United Bank of India and Punjab & Sind Bank.
- **Data Analysis:** Net profit is taken as dependent variable. Board sizes, board independence, net NPA, capital adequacy ratio are considered as independent variables. Pearson's correlation coefficient and multiple regressions have been used in this study.
- **Research hypothesis :**

Hypothesis -1

H₀: There is no relationship among net profit and board size.

H₁: There is a relationship among net profit and board size.

Hypothesis-2

H₀: There is no relationship among net profit and board independence.

H₁: There is a relationship among net profit and board independence.

Hypothesis -3

H₀: There is no relationship among net profit and net NPA.

H₁: There is a relationship among net profit and net NPA.

Hypothesis-4

H₀: There is no relationship among net profit and capital adequacy ratio.

H₁: There is a relationship among net profit and capital adequacy ratio.

5. Analysis

To test the hypothesis no. 1-4 as shown above, Pearson's Correlation coefficient and multiple regressions have been used.

¹⁸ IDBI bank has been classified as Private sector bank by the RBI with effect from 21st January, 2019 due to the corporate restructuring where the LIC has acquired 51% of paid up capital of the bank. Prior to that, it was categorised as PSU bank.

Computation of Pearson's Correlation

	Net profit	board size	board independence	NetNPA	CAR
Netprofit	Pearson Correlation	.532*	-.230	-.491*	.240
	Sig. (2-tailed)	.013	.316	.024	.294
	N	21	21	21	21
Boardsize	Pearson Correlation	.532*	-.311	-.116	.362
	Sig. (2-tailed)	.013	.170	.615	.106
	N	21	21	21	21
Boardindependence	Pearson Correlation	-.230	1	.046	.053
	Sig. (2-tailed)	.316	.170	.842	.820
	N	21	21	21	21
NetNPA	Pearson Correlation	-.491*	.046	1	-.681**
	Sig. (2-tailed)	.024	.842		.001
	N	21	21	21	21
CAR	Pearson Correlation	.240	.053	-.681**	1
	Sig. (2-tailed)	.294	.820	.001	
	N	21	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

Findings and Interpretation

The correlation coefficient between net profit and board size as well as net profit and net NPA are significant in nature. The correlation coefficient between net profit and board independence as well as net profit and capital adequacy ratio are insignificant.

$$NP = C + \beta_1 BOD + \beta_2 INDP + \beta_3 NPA + \beta_4 CAR + e$$

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	CAR, boardindependence, boardsize, NetNPA	.	Enter

a. All requested variables entered.b. Dependent Variable: Netprofit

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.766 ^a	.587	.483	23273.73424	1.410

a. Predictors: (Constant), CAR, boardindependence, boardsize, NetNPA.b. Dependent Variable: Netprofit

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12294413604.570	4	3073603401.14249	5.674	.005 ^a
	Residual	8666667284.293	16	541666705.268		
	Total	20961080888.863	20			

Coefficients^a

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
1	(Constant)	118355.809	96027.668		1.233	.236		
	Boardsize	11841.367	3524.654	.640	3.360	.004	.712	1.405
	Boardindependence	195.144	1057.459	.032	.185	.856	.838	1.194
	NetNPA	-12531.551	3708.311	-.771	-3.379	.004	.496	2.016
	CAR	-15935.648	7601.895	-.519	-2.096	.052	.422	2.372

a. Dependent Variable: Netprofit

Collinearity Diagnostics

Mode	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	Boardsize	Board independence	Net NPA	CAR
1	1	4.877	1.000	.00	.00	.00	.00	.00
	2	.080	7.793	.00	.02	.00	.39	.01
	3	.033	12.147	.00	.21	.40	.02	.00
	4	.008	25.346	.09	.74	.60	.01	.11
	5	.002	54.058	.91	.04	.00	.58	.89

a. Dependent Variable: Netprofit

Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-57762.8398	57220.3281	-9349.5714	24793.56127	21
Residual	-38315.65234	42286.17188	.00000	20816.66074	21
Std. Predicted Value	-1.953	2.685	.000	1.000	21
Std. Residual	-1.646	1.817	.000	.894	21

a. Dependent Variable: Netprofit

Interpretations: Adjusted R² is 48.3%. Board Independence is removed as its p value (0.856) is highest.

$$NP = C + \beta_1 BOD + \beta_2 NPA + \beta_3 CAR + e$$

Variables Entered/Removedb

Model	Variables Entered	Variables Removed	Method
1	CAR, boardsize, NetNPA	.	Enter

a. All requested variables entered.

b. Dependent Variable: Netprofit

Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.765 ^a	.586	.513	22602.85497	1.416

a. Predictors: (Constant), CAR, boardsize, NetNPA

b. Dependent Variable: Netprofit

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12275966993.147	3	4091988997.7156	8.010	.002 ^a
	Residual	8685113895.716	17	510889052.689		
	Total	20961080888.863	20			

a. Predictors: (Constant), CAR, boardsize, NetNPA

b. Dependent Variable: Netprofit

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta				Tolerance	VIF
1	(Constant)	122109.927	91142.914			1.340	.198		
	Boardsize	11590.177	3157.500	.626		3.671	.002	.837	1.195
	NetNPA	-12396.871	3530.982	-.763		-3.511	.003	.516	1.938
	CAR	-15558.573	7111.070	-.507		-2.188	.043	.454	2.201

a. Dependent Variable: Netprofit

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	Boardsize	NetNPA	CAR
1	1	3.905	1.000	.00	.00	.00	.00
	2	.080	7.004	.00	.02	.39	.01
	3	.014	16.618	.04	.93	.00	.05
	4	.002	48.362	.96	.04	.60	.95

a. Dependent Variable: Netprofit

Residuals Statisticsa

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-59275.4492	56316.1680	-9349.5714	24774.95408	21
Residual	-37591.28906	43190.33203	.00000	20838.80262	21
Std. Predicted Value	-2.015	2.650	.000	1.000	21
Std. Residual	-1.663	1.911	.000	.922	21

a. Dependent Variable: Netprofit

Interpretations: Adjusted R² is 51.3%. All the variables such as board size, net NPA and capital adequacy ratio are significant. Since Variance Inflation Factor(VIF) is higher than 2, capital adequacy ratio has to be removed to avoid multicollinearity.

$$NP = C + \beta_1 BOD + \beta_2 NPA + e$$

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	NetNPA, boardsize ^b		Enter

a. Dependent Variable: Netprofit

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.685 ^a	0.469	0.410	24867.17453	1.453

a. Predictors: (Constant), NetNPA, boardsize

b. Dependent Variable: Netprofit

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1	9830306241.002	2	4915153120.5	7.948	.003 ^b
Residual	11130774647.861	18	618376369.326		
Total	20961080888.863	20			

a. Dependent Variable: Netprofit

b. Predictors: (Constant), NetNPA, boardsize

Coefficients^a

Model	Unstandardized Coefficients		Std. Error	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error					Beta	Tolerance
1	(Constant)	-59589.700	41317.181		-1.442	0.166		
	Boardsize	8899.330	3199.470	0.481	2.782	0.012	0.986	1.014
	NetNPA	-7061.574	2809.557	-0.435	-2.513	0.022	0.986	1.014

a. Dependent Variable: Netprofit

Collinearity Diagnostics

Model	Eigenvalue	Condition Index	Variance Proportions		
			(Constant)	boardsize	NetNPA
1	2.925	1.000	0.00	0.00	0.01
2	0.065	6.721	0.02	0.10	0.81
3	0.010	16.773	0.98	0.89	0.18

a. Dependent Variable: Netprofit

Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-61484.0938	55965.6055	- 9349.5714	22170.1446	21
Residual	-47344.97656	43540.89453	0.00000	23591.0731	21
Std. Predicted Value	-2.352	2.946	0.000	1.000	21
Std. Residual	-1.904	1.751	0.000	0.949	21

a. Dependent Variable: Net profit

Final Model is NP= -59589.700+8899.330x BOD-7061.574xNPA

6. Conclusion

H_1 is accepted for hypothesis 1. There is a positive relationship between net profit and board size at 5% level of significance. Correlation coefficient between net profit and board size is 0.532. According to the multiple regressions, the relationship between net profit and board size is significant. H_0 is accepted for hypothesis 2. Correlation coefficient between net profit and board independence is insignificant. H_1 is accepted for hypothesis 3. There is an inverse relationship between net profit and net NPA. Correlation coefficient between net profit and net NPA is -0.491. According to the multiple regressions, the relationship between net profit and net NPA is significant. H_0 is accepted for hypothesis 4. Correlation coefficient between net profit and capital adequacy ratio is insignificant. Hence PSU banks should have large board size. Higher NPA results for more provisioning and it reduces profitability of bank. Therefore sound corporate governance practices are necessary conditions for profitability of PSU banks.

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