

Confirmatory Factor Analysis of Construct used to Measure Corporate Governance in Commercial Banks of Nepal

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Abstract

Corporate Governance is a system of laws and approaches through which corporation are directed and controlled with intention of monitoring the action of management and directors and evade the misdeed of corporate officers. After East Asian financial crisis in 1997, both commercial and Industrial sector have become awake on corporate governance. It has been observed from the decade study that, there is a significance advantage from corporate governance on firm performance. There exist many studies of relationship between corporate governance and firm performance in developed countries; however less research has conducted in case of developing countries like Nepal. The recent corporate scandal in some of the financial institutions of Nepal has stimulated the importance of corporate governance practices in Nepalese banking sectors. This study is coined to validate the measure of corporate governance practices of Nepalese commercial banks. The study was conducted with seven constructs having 28 items to measure corporate governance practices. Samples data has been collected from Chairman, CEO, Director, company secretary, manager and shareholders of commercial banks. Confirmatory factor analysis was measured through path analysis using AMOS 20. Modification indices and standardized residual analysis were used as diagnostic measure of CFA.

Keywords: Corporate Governance, Confirmatory Factor Analysis, Residual Analysis, AMOS

Introduction

There must be certain rules and regulations for the smooth operation of the organization. Governance is a system of leadership and controlling that make rules for the enhancement of accountable behavior in organization's working culture. Governance simply states what is right and what is wrong. Governance maintains certain standard by developing standard rules and regulation. Talking about the Nepalese context, need of good governance is foremost in order to develop good corporate working culture. The success of any organization depends

upon the effective management strategy and its implementation with the competitive tools (Pradhan, 2017). Nepalese firm believes that governance simply means running and managing the organization. In general, governance refers the way of governing, directing and controlling a group of people or state. It refers to the set of activities or process of decision making and implementation which is broader concept than government. Governance includes all formal and informal rules under certain principles of accountable, transparency and rule of law and ultimately the quality of the institution will be improved. For this purpose, quality improvement plan should be developed along with the long term strategic plan (Kothari et al., 2017). The concept of corporate governance has been defined by different people in different way, so there is no any universal definition of it (Rezaee, 2009). However, (Jizi et al., 2014; McConomy & Bujaki, 2000; Ng'eni, 2015) has defined corporate governance as a system by which organizations are controlled and directed. The OECD Principles of Corporate Governance states: "Corporate governance involves a set of relationship between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives if the company are set, and the means of attaining those objective and monitoring performance and determined."

Previous study has attempted to find on the relationship between corporate governance and firm performance (Jantadej & Wattanatorn, 2020; Thrikawala et al., 2017).

In the first Corporate Governance (CG) code, the combined code of corporate governance, Sir Adrin Cadbury has stated Bob Ticker as a father of corporate governance due to his first book of CG published in 1984. Sir Adrian Cadbury, (1992) has focus the CG as the balance between "Economic and social goals and between individual and communal goals" and these goals should align as nearly as possible the interests of individuals, corporations and society. Bob Ticker (1984) has stated that "The governance role is not concerned with the running of the company, per se, but with giving overall direction to the enterprise, with overseeing and controlling the executive actions of management and with satisfying legitimate expectations of accountability

and regulation by interests beyond the corporate boundaries." Tricker has often proclaimed 19th century as the entrepreneur's century, 20th century as management's century and 21st as of governance century. By the time 22nd century, corporate power may actually be exercised in a way that ensures both the effective performance and appropriate social accountability and responsibility through good governance system.

Corporate governance is the most often viewed as both the structure and relationships which determine corporate direction, environmental sustainability and performance" (Letza et al., 2008; Peng & Zhang, 2022). Similarly, Fidrmuc et al. (2006) and Pourmansouri et al. (2022) stated corporate governance as the "Governance system is the combination of mechanisms which ensure that the management runs the firm for the benefit of one or several stakeholders. Such stakeholders may cover shareholders, creditors, suppliers, clients, employees and other parties with whom the firm conducts its business" According to Baker & Anderson (2010) "Corporate governance is the way in which a corporation is directed, administered, and controlled concerning the relationships among the various internal and external stakeholders involved." They had focused corporate governance as the processes designed to help a corporation to achieve its goals as well as to reduce or eliminate the principal agent problems by implementing controlling mechanism.

Corporate governance is the way or method of following rules, regulation, ethics and behavior of a corporation for the effective and efficient performance of business activities. It acts as the base for the company's development. It is generally established to give the guideline how a company is run, and it is the system of practices of rules regulation and process by which a company is directed and controlled.

Corporate governance practices in Nepal

Before the entrance of the joint venture banks and private sector investment, government used to regulate the banking sector according to their needs and requirements. Government established banks for the purpose of checking and controlling the money. There were no any objectives of

government besides this. Nepal Bank Ltd. was established to facilitate the metallic coins exchange and to stabilize the currency between India with Nepal. Stabilizing currency with neighboring country (India) was not easy task. Private sector felt difficult because of no proper direction and unknown market of banking sector. Therefore, government was the sole owners who provide the service to the public as their wish and requirement. As the time passes, government felt the need of monetary management and the issue of currency, and to run the banking system in more systematic way, later on it was established as Central Bank for the purposes of making directives and policy for others bank. It made Comprehensive Act known as NRB Act, 2002. This Act also energized the private investors to established banking sector. They were clear about how to perform operation by fulfilling the requirement of NRB. It was also adopted the liberalization policy by government, and many joint venture banks such as Nepal Investment bank, Standard Chartered Bank were established. They brought new technology along with modern management in operation in banking system. Nepalese investors were interested in investing in the bank sectors because of rapid changes and growth in banking sector in the world. Nepal government, after liberalization policy act as facilitator, supports banking sector's growth. Government led the banking sector run by themselves according to the prescribed directives of NRB Act, 2002. As a result, within 12 years, 12 banks were established. It was the remarkable events for developing the banking sector's growth. NRB set different requirement for the banking operation control for the private banks but due to the political instability and adoption of traditional banking activities, private banking sectors are not able to capitalize their investment in more worth method.

Nepal Rastra Bank Act, 2002 has given full power of authority to Nepal Rastra Bank regarding controlling mechanism of the banks. NRB Act 2060 was known as Comprehensive Act for different banks. According to NRB Act 2060, any person who wishes to open the bank, they have to fulfill the requirement of NRB Reserves criteria, Assets valuation criteria and must be registered under public limited company under existing law of Nepal and

submit the document to NRB for the prior approval with asked documents. The NRB has the full right to give permission to operate and reject the proposal.

The Act prohibits any banks to conducts their operation until the persons/company has the valid license. NRB provides license after satisfying all the require documents. All the banks should update their financial status to NRB time to time. The NRB has the authority to investigate any banks and seize the license at any time. Bank and financial institution Act, (BAFIA) 2017, Company Act 2006, is the yardstick for the operation of the commercial bank. All the commercial banks are operated under this Act. This Act made different rules and regulation for the commercial banks. "Financial reporting standards issued by the experts can also affect the local practices and development of other subsidiary laws." (Adhikari et al., 2013).

In 2017, the government of Nepal has provided new criteria related with merger and acquisition. Recently there are 27 commercial banks operating in Nepal, and some banks are in the progress of merger and this number seems to decrease if NRB set another reserve requirement for commercial banks. In this technological era most of the banks are in the process of innovation by providing new products and trying to enhance global network for their huge coverage service and image development along with the effective implementation of strong corporate governance. NRB supports in banks operation by regulating the banking activities, checking their loop holes and correcting their activities in the timely manner. NRB is continuing its activities towards the financial reformation for the better investment opportunities for the foreigners.

Currently all banks of Nepal are operated under OECD and Basel Committee principles in order to safe guard and stabilized the economy and financial system.

The banking systems of Nepal are operated through the Bank and Financial Institution Act (BAFIA) 2017. The banking systems were also regulated through company act 2006 and the Nepal Rastra Bank Act (2002) which was amendment at 2006. Nepal Rastra Bank is also called as Bank of the Bank in Nepal. Other bank and financial institutions were established under its permission. So, it has

issued policies and directives to regulate the banking system of these bank and financial institutions. In the process, each bank and financial institution has to deposit certain percentage of amount of total deposit as cash reserve ratio. In the research of (Frias-Aceituno et al., 2013), it was derived that the “financial reporting standard issued by professional bodies will affect the local practices and the development of adequate laws and regulations”. Besides the national acts, another influencing factor is the level of exposure of the international banking regulations. In this regard, the banks with foreign ownership have more advance governance practice. After the agreement in WTO in the year 2010, the foreign bank branches are allowed to perform the wholesale banking system, which ultimately pressure to adopt the regulations formed by the organizations like organization for economic cooperation and development (OECD, 2004) and Basel committee of Bank Supervision (BCBS). So, the banks of Nepal should be governed by the national and international governance frameworks. Under the Bank and Financial Institution Act (BAFIA) 2017, Nepal Rastra Bank Limited has developed NRB Act (2002). Company act 2063 has given directives to the companies and other regulation and supervisions. In this basis researcher want to be ascertain that how far the construct used to measure the corporate governance construct are valid in the Nepalese banks. Many researchers have used different construct to measure corporate governance but, in this study, researcher has used the construct developed by GC, S.B. (2016) having 7 constructs and its validity measured using confirmatory factor analysis. The following is the conceptual framework used in this study.

Results and discussion

Demographic characteristics of respondent

Position of respondent	Number	Percent	Cumulative percent
Chairman	2	1.0	1.0
Non-Executive Director	3	1.6	2.6
CEO	3	1.6	4.2
Executive Director	5	2.6	6.8
Company secretary	5	2.6	9.4

Conceptual Framework



Methodology

This study aimed to validate the measure of corporate governance practices in Nepalese commercial banks on the basis of survey of stakeholders. To get the answer of the research question, research adopted questionnaire survey from the stakeholder of the banks. For the purpose of questionnaire survey, there were seven constructs with 28 items. 192 samples were collected from different financial institution of stakeholders like chairman, executive directors, CEO, non-executive directors, company secretary, senior manager and shareholders (who have more than 2 percent share). Analysis has done by using SPSS 20.0 and AMOS 20.0 was used for confirmatory factor analysis (CFA). Modification indices and standardized residual analysis were used as diagnostic measure of CFA.

Position of respondent	Number	Percent	Cumulative percent
Senior Manager	121	63.0	72.4
Shareholder	53	27.6	100.0
Total	192	100.0	
Gender of Respondent	Frequency	Percent	Cumulative Percent
Male	156	81.3	81.3
Female	36	18.7	100.0
Total	192	100	
Educational Level	Frequency	Percent	Cumulative Percent
Bachelor Level	48	25.0	25.0
Master Level	141	73.4	98.4
Mphil or Ph.D.	3	1.6	100.0
Total	192	100.0	
Experience	Frequency	Percent	Cumulative Percent
Less than one year	12	6.3	6.3
One to Five year	36	18.8	25.0
Five to Ten years	84	43.8	68.8
Over ten years	60	31.3	100.0
Total	192	100.0	

Out of 192 stakeholder's, majority of the respondents are senior manager. As manager was the most responsible person in branch of the banks. Chairman, CEO and non-executive directors were less than 2 percent. Majority respondents on top position of banks were male (81.3 percent) where as 18.7 percent were female. Most of the

respondent's education qualification were master level passed, whereas, only 1.6% have MPhil or Ph.D. Regarding experience of stakeholder, around one third has experience more than ten years and around 44 percentage of respondent had experience five to ten years.

Type of financial institution

State of ownership	Frequency	Percent	Cumulative Percent
State owned Bank	8	4.2	4.2
Private Bank	152	79.2	83.4
Joint venture Bank	32	16.6	100.0
Total	192	100.0	

The study was done on the commercial banks of Nepal. Among 192 respondents around one fourth was from private banks and only 4.2 percentages were from state owned

banks. The representation of joint venture banks respondent was 16.6 percentages.

CFA of CG Framework

Item	Description	MLE			
1	The bank has policy to adopt best corporate governance practices.	0.64			
2	The bank complies with all regulatory provisions.	0.76			
3	Clear division of responsibilities exists.	0.78			
4	Memorandum and articles of association provide corporate governance structure and processes that go beyond regulatory requirements.	0.62			
Obtained Fit Indices					
	2/df	RMSEA	IFI	TLI	CFI
	5.505	0.072	.929	.78	.927

Since four items were taken under the construct CG framework. While conducting CFA on this construct, the Maximum likelihood estimate of all four items showed the acceptable condition that these items can be undertaken

under the CG framework. The RMSEA is also greater than 0.05 and 0.08 represent the validity of the construct. Similarly, IFI, TLI and CFI also indicate the strong validity of this construct.

CFA of CG Responsibility and Accountability of Board

Item	Description	MLE			
1	The board acts with due diligence and care in best interest of shareholders	.54			
2	The board treats all shareholders fairly	.52			
3	The board applies high ethical standards	.62			
4	The board exercise objective judgment.	.52			
5	Fulfills key board functions effectively	.51			
Obtained Fit Indices					
	2/df	RMSEA	IFI	TLI	CFI
Final	.905	0.082	.9019	.826	.911

In the same way five items were selected for the construct CG responsibility and Accountability of Board. In this case of responsibility and accountability of board also the Maximum likelihood estimates are more than 0.5 which

indicates the good validity. The RMSEA is also greater than 0.05 and 0.08 represent the validity of the construct. Similarly, IFI, TLI and CFI also indicate the strong validity of this construct. This indicates the good fit of these five

items under these constructs. In the same way five items were selected for the construct CG responsibility and Accountability of Board. In this case of responsibility and accountability of board also the Maximum likelihood estimates are more than 0.5 which indicates the good

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CFA OF BOARD STRUCTURE AND COMPOSITION

Item	Description	MLE
1	The board has sufficient number of independent directors.	0.62
2	Board composition (competencies/skill mix) is adequate for its oversight duties	0.79
3	The board has sufficient committees to address special technical topics.	0.75

Obtained Fit Indices				
2/df	RMSEA	IFI	TLI	CFI
1.721	0.084	.967	.95	.967

The construct Board and composition has three items and every item has MLE more than 0.6 indicates the good validity. RMSEA, IFI, TLI and CFI all are in acceptable

condition to make the construct a fairly valid. So these items fairly represents the board structure and composition.

CFA OF RIGHTS OF SHAREHOLDERS

Item	Description	MLE
1	Shareholders can participate in fundamental decisions.	0.48
2	Shareholders can obtain relevant and material company information.	0.50
3	Exercise of ownership rights facilitated	0.43
4	Shareholders participate effectively in AGM	0.51

Obtained Fit Indices				
2/df	RMSEA	IFI	TLI	CFI
1.551	0.023	.940	.841	.921

The construct Rights of shareholder consists of four items and the MLE for the item 3 is 0.45 and item first is 0.48. Although these two items have MLE slight less than 0.5 but RMSEA, IFI, TLI and CFI all are in acceptable condition to

make the construct a fairly valid. So these four items fairly represents the construct rights of shareholders.

CFA OF EQUITABLE TREATMENT OF SHAREHOLDERS

Item	Description	MLE
1	All shareholders are treated equally.	0.57
2	The bank prohibits insider trading	0.60
3	Boards and management disclose interests .	0.77
4	Minority shareholders right is protected .	0.57

Obtained Fit Indices

2/df	RMSEA	IFI	TLI	CFI
1.551	0.073	.940	.864	.932

Four items were used to measure the equitable treatment of shareholders. Maximum likelihood estimate for these items were more than 0.57 indicates the fair validity. RMSEA,

IFI, TLI and CFI all are in acceptable condition to make the construct a fairly valid. So, these four items can be a good item for the construct equitable treatment of shareholders.

CFA OF PROTECTION OF STAKEHOLDER'S INTEREST

Item	Description	MLE
1	Rights of stakeholder arerespected.	0.67
2	Whistleblower protection mechanism exists	0.62
3	Stakeholders have opportunity of obtain redress for violation of their rights.	0.78

Obtained Fit Indices

2/df	RMSEA	IFI	TLI	CFI
0.313	.000	.912	.839	.900

With three construct protection of stakeholder's interest, maximum likelihood estimate of these items were more than 0.62 indicates the fair validity. RMSEA, IFI, TLI and

CFI all are in acceptable condition to make the construct a fairly valid. So, these four items can be a good item for the construct protection of stakeholder's interest.

CFA OF DISCLOSURE AND TRANSPARENCY

Item	Description	MLE
1	The bank maintains high disclosure standards.	0.59
2	The bank adopts international standards of accounting and audit	0.67
3	The bank maintains independence of external audit.	0.58
4	The bank carries out fair and timely dissemination of information.	0.60

Obtained Fit Indices				
2/df	RMSEA	IFI	TLI	CFI
0.256	0.063	.919	.859	.930

Four items were used to measure the disclosure and transparency. Maximum likelihood estimate for these items were more than 0.58 indicates the fair validity. RMSEA, IFI, TLI and CFI all are in acceptable condition to make the construct a fairly valid. So these four items can be a good item for the construct disclosure and transparency.

The above data indicates that the seven constructs for measuring the corporate governance index are valid in the context of Nepal. To observe the significance difference in the three types of banks of these seven construct ANOVA is used. The table below shows the CG scale and score obtained with mean and standard deviation with significance difference.

Score Comparison of CG Scale

State of ownership	State Owned Bank	Joint Venture Bank	Private Bank	Total			
	Mean	Mean	Mean	Mean	Std. Deviation	F Stat	Significance
Effective Corporate Governance Framework	14.00	15.05	13.25	15.75	2.58	17.97	.000
Responsibility and Accountability of Board	18.60	19.45	16.25	19.25	2.15	27.97	.000
Board Structure and Composition	9.60	10.50	7.15	9.25	2.40	17.39	.000
Right of Shareholders	11.60	13.53	9.13	13.00	2.77	48.78	.000
Equitable treatment of shareholder	11.00	10.53	11.00	10.00	1.39	2.37	.082
Protection of Stakeholders Interest	10.50	10.82	11.25	10.00	1.02	1.14	.150
Transparency and Disclosure	19.00	20.97	16.13	19.75	3.55	14.94	.000

The above table indicates that except protection of stakeholder's interest and equitable treatment of shareholders other five construct are significantly different among the three types of banks. Except in Protection of Stakeholders Interests, the private sector bank has lowest score of CG constructs and firm performance. The evidence shows the significant variation in CG constructs of the different types of banks of Nepal.

Conclusion:

The purpose of this study is to validate the measure of corporate governance practices in Nepalese commercial banks on the basis of survey of stakeholders. The seven construct with 28 items were used to measure the corporate governance. On the basis of 192 samples collected from different stakeholders of different financial institution.

Confirmatory factor analysis (CFA) was used for testing validity of the constructs with modification indices and standardized residual analysis. The information shows the strong validity the constructs. The analysis also indicates that there is significant variation in the different construct of corporate governance in the different types of banks of Nepal. The construct can be utilized to measure the corporate governance practice by the financial institution of Nepal.

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