Sustainability of Banking Sectors in Bangladesh: A Study Based on Emerging Role of Corporate Governance, Corporate Social Responsibility and Intellectual Capital Disclosure

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Abstract

Now-a-day's businesses are highly concerned about the operations and how their activities affect the surroundings. Aiming to create better environment for the future generations, a number of steps has been taken by various local and international associations and bodies. Recently three of the components such as Corporate Governance (CG), Corporate Social Responsibility (CSR) and Intellectual Capital (IC) Disclosure has grab the major attention and maintained with an important manner. CG, CSR and IC disclosure are three of the most talkative prospects which have direct effects towards sustainability. Private Commercial banking sector is one of the most popular and growing segments in Bangladesh. Governed and monitored by the Bangladesh Bank, those banks contribute highly towards national economy. As a result, various components of sustainability are effectively maintained by the banks. This paper shows how CG, CSR and IC disclosure affect the sustainable practice of the private commercial banking sector in Bangladesh. It also relates various components and shows ways to improve the sustainable practice in the banking sectors.

Keywords: Sustainability, Corporate governance, Corporate social responsibility, Intellectual capital

JEL Classification: G34, M14, O34

1. Introduction

The business sector has evolved over the last few decades from classical 'profit maximizing' approach to a 'social responsibly' approach, where businesses are not only responsible to its stockholders but also to all of its stakeholders in a broader inclusive sense. Corporate Governance, in the simplest terms is a purposefully built structure of policies, norms and rules which govern corporations so as to make it fully functional in terms of its responsibilities to all its stakeholders. Corporate Social responsibility initiatives have become an integral part of business practice, regardless of the organization's type of markets. The recent mega corporate collapses in several developed countries has heightened the need to review provision of relevant intangible information to investors. The intellectual capital (IC) represents a subset of such assets not recognized in financial statements. Intellectual Capital is intellectual material that has been formalized, captured and leveraged to produce a higher-valued asset and if successfully managed leading to future benefit that does not have a physical or financial embodiment. The primary pupose of this paper is to investigate the extent of CG, CSR and IC dislcoure in the annual reports of listed conventional banks and out of fifty-six scheduled banks in Bangladesh, a sample of thirty banks is selected, and data for the sample is extracted from the annual reports covering a period of 2011 to 2015 are taken into consideration.

2. Objectives

The main objective of this research is to critically examine the adaptation and continuation of Corporate Governance, Intellectual Capital disclosure and Corporate Social Responsibility activities by the Commercial Banks in Bangladesh and relate it to the sustainability of the banking sectors. Specifically this study aims to answer the following questions;

a. To get a broader overview about the Corporate Governance (CG), Intellectual Capital (IC) and Corporate Social Responsibility (CSR).

b. To find the association among CG, IC and CSR for sustainable development.

c. To compare the performance of banks after introducing the CG guidelines, IC disclosure and CSR activities.

d. To find out the influence it holds towards the sustainability on banking sector.

3. Literature Review

In recent years, banking systems have experienced significant transformations driven by deregulation, technological change and the globalisation of goods and financial markets (Wilson et al., 2010), and bank activities have been largely altered as well. Pisano point out that, recent reforms, like the Euro emergency, the financial and economic disaster, spectacular cuts in public budgets etc. seem to advocate that the existing set up of financial markets is no longer sufficient in economic, social, and political stipulations, neither in a short nor in a long-term point of view (Pisano, 2012).

Countries globally were strike, some harder than others, by the permutation of uncertain lending and extremely leveraged investment approaches by Western financial intermediaries that rapidly surrounded the world in an economic and financial emergency between 2007 and 2009. "The emergency pictured the interdependencies, and how we undervalue the widespread worldwide links between economies on reverse sides of the world," observed Teodor Volcov, a board member of Volks Bank in the Ukraine. For financial intermediaries, we must be further guarded in our exercise of economic models, for example, to lead our resolutions on the level of hazards we will presume and the types of investments we will make. Political and economic uncertainty had subsided by then, which the credit rating organizations distinguished by lifting their ratings, generating an increase in foreign direct investment (FDI) inflows. At present, the spotlight shifts to encourage a sustainable improvement, with banks and investment organizations playing an innermost responsibility. Deliberations on pioneering resolutions for weathering the emergency's outcome and guidelines responses geared towards an improvement are at the efforts have put a fresh focus on how banks can get better their governance. In their key tasks in the credit and investment procedure, banks are particularly well-placed to gain from and go ahead efforts to recover corporate governance. Inadequacy in bank corporate governance can undermine the financial structure and construct general threats to the economy. The global financial disaster has confirmed that the standard of responsible finance has not been adequately built-up with banks and with customers. It has now become apparent that the liquidity threat of banks.

The major difficulty is the eminence of loans. Distributing dependable principles of finance is considered to be one of the most important reactions to the financial emergency. A study based on Bangladesh shows the financial intermediaries must play a crucial position in facilitating investment, providing wide-ranging permission to finance and make sure that such outlay is sensitized and associated to Bangladesh's environmental challenges in major parts such as agriculture, energy, transport and business. Simultaneously the demands of Bangladesh's sell overseas associates for socially and environmentally responsible production persist to rise; this put forwards that accomplishment in attracting much needed foreign investment will also be connected to rising anticipations of sustainable industry. For these entire bases, the topic of how the financial structure can best be harnessed to make sure that sustainable expansion for Bangladesh has moved to center stage (Inquiry, IISD, Bangladesh Bank & UNEP, 2015).

3.1 Studies on Corporate Social Responsibility

The primary idea we acknowledged spotlights on why CSR gets started in businesses and how it is or can be well executed. As regards why CSR gets started, a number of instigators dispute that CSR can be seen as either an essential component of the dealing approach and business distinctiveness, or it can be exerciseed as a self-protective strategy, by way of the latter being used further often by corporations embattled by futuristics. The underlying principle for CSR can be based on an ethical dispute, a coherent argument, or a monetary argument (Werther & Chandler, 2006). Campbell (2007) is spokesperson of a set of studies that generate testable intents linked to the circumstances under which corporations will shift in the direction of CSR. He sees organizations' level of social responsibility as being predisposed by aspects such as economic circumstances of the business, health of the financial system, and well-enforced state conventions. Why organizations take on CSR is also talk about in the literature in expressions of the precise inventiveness under which CSR may fall. Ways of explaining these rationales vary, from the more unconvinced sight of cause-related marketing to the other munificent acknowledgment of authentic socially accountable business practices (Kotler & Lee, 2005). To determine how CSR is executed in businesses, a few studies used as developmental structure to show amend in consciousness, approaches, and actions

in due course, and posit stages of CSR from basic to innovation (e.g., Mirvis & Googins, 2006). Jackson and Nelson (2004) take further of a how-to move toward, offering a principle-based structure for mastering what they call the "new rules of the game." Examples of principles comprise connecting modernization for the communal good, putting people at the hub, and scattering monetary prospect. Although there is an extensive distinction in the environment and the coverage of the business approaches replicated in the literature, interest in the landscape seems poised to encourage auxiliary study and to give both researchers and CSR practitioners some precious way for action and indication. Sustainability refers to corporation's actions, usually considered voluntary, that exhibit the adding up of social and environmental concerns in corporate operations and in connections with stakeholders (van Marrewijk & Verre, 2003). Empirical studies of the association between CSR and monetary performance encompass essentially two types. The first, according to Ekatah, Samy, Bampton, and Halabi (2011), uses the event study methodology to review the short-run financial impact (abnormal returns) when firms employ in either socially responsible acts. The results of these studies have been mixed. The second type of study examines the association between some measure of corporate social performance (CSP) and measures of long-term monetary performance, by using accounting or financial measures of profitability. The studies have also produced mixed results. Yet another view, perhaps the most intuition pleasing, is put forth by Bowman and Haire (1975) who disagree that the relationship is manifested by an inverted U-shaped curve, which states that more CSR to a point is good.

3.2 Studies on Corporate Governance

The modern concept of corporate governance, the two buzz words have been commonly used in the English-speaking world since the 1990s due to the series of failures of big corporate houses in western world as a top concern both for the international business community and financial institutions. The issue of corporate governance arises from the agency theory that clearly defines the possession of a corporate body is alienated from its administration and power (Berle & Means, 1932). Corporate governance is the structure of rules, practices and procedures by which an organization is intended for and controlled. Corporate governance fundamentally grips harmonizing the interests of the various stakeholders in an organization - these comprise its shareholders, executives, customers, vendors, financier, government and the community. A corporate governance structure should defend shareholders' right, such as voting right, right to choose board associate, right to get pertinent information, cooperate and commune with the management, evenhanded treatment of all shareholders (Tricker, 1984). Banking industry is highly regulated businesses and oversight by the government and supervisory body. Banks are the vital factors of monetary reforms and growth of the country (Alexander, 2004); reported that finest corporate governance exercises will allow banks to get trouble-free access in the capital marketplace and reduce the cost of capital and defend the rights of minority shareholders including overseas shareholders. A research has disagreed that an entity is exaggerated by the association among the participants in the structure of governance (Kharouf, 2000). Controlling shareholders can radically influence corporate activities. However, all shareholders should able to obtain effective redress for infringement of their rights and forbids insider trading and obnoxious dealing in their own interests.

Destitute corporate governance of banks can compel the market to lose self-confidence in the aptitude of a bank then it leads to financial crisis in a country and persuade systemic risk (Marco & Fernández, 2008). In contrast, good corporate governance reinforces possessions rights; reduce transaction cost and the cost of capital, and directs to capital market growth (Claessens & Fan, 2002). Corporate Governance aims to reduce the likelihood of deception, malpractices, monetary frauds and delinquency of management (Ubha, 2007).

3.3 Studies on Intellectual Capital Disclosure

With competitive benefits and accomplishments in business during the 1990s mainly driven by non-tangible assets for instance IC, capital markets being gradually more fascinated in IC disclosure. A lot of researchers advocate that IC disclosure should perk up capital market effectiveness and contribute to improved corporate governance (Grojer & Johanson, 1999). Organizations have rated IC disclosure amongst the top ten information requirements of investors (Taylor and Associates, 1999) but currently accounting disclosure in annual reports is more appropriate to disclose a firm's physical resources. The insufficiency in disclosure for investor's decision-making is a concern, and accounting supervisory body may need to re-think about disclosure necessities to convene decision-making interests of investors (Sujan & Abeysekera, 2007).

Different study classifies IC differently. However, Low and Kalafut bring to a close that intellectual capital comprises of three elements. The first element is implicit knowledge and innovativeness of the human resources. The second element is infrastructure of employees such as good working environment, innovation and development processes of structural capital and the last element is external associations of the organization such as customers' capital.

3.4 The Link between Sustainability and Finance

Sustainability in the non-government sector is gradually more understood as the construction of not just financial and monetary assessment but also long-standing environmental and social assessment for an extensive assortment of stakeholders together with employees, shareholders, suppliers, customers, communities, and public-sector associates, with particular contemplation for the desires of future generations. The global significance of sustainability is replicated in altering consumer expectations and rising nationwide and worldwide legislation. Organization's chances of working effectively and engaging in worldwide trade depend to a greater extent on their ability to minimize social and environmental uncertainties and to take advantage of on opportunities for innovation. Sustainability has become a vital aspect of competitive benefit and something organizations can no longer disregard. Recognizing this trend, many corporations are looking to incorporate sustainability into their organizations. For many, the first confront is knowing where and how to begin. The next is getting the required inflows of capital to start renovating their businesses. Financial intermediaries, as the suppliers of funding for businesses of all forms and dimensions, have an essential role to play in encouraging sustainability across businesses, regions, and communities. Sustainability also provides enormous potential for financial intermediaries to progress their own products and services.

For financial intermediaries, sustainability has two elements. One element is managing societal and environmental risk in tactical decision-making and lending. Financial intermediaries can make stronger their portfolio by logically assessing these risks in the lending or investment consideration process. In this technique, they can focus investments on those organizations and Projects with high environmental, social, and monetary performance. Doing so can help safeguard their asset assortment by dropping non-performing loans, thereby rising monetary stability and protecting the bank's status. The other element is recognizing opportunities for inventive product development in fresh areas related to sustainability. This necessitates creating financial products and services that hold up business expansion of products or actions with social and environmental benefits. A rising cluster of these prospects has evolve and includes energy efficiency, renewable energy, cleaner production processes and technologies, microfinance, biodiversity conservation, financial services targeted to women, and low-income housing. Business models that tackle these magnitudes are yielding new clients and markets. They are also helping financial intermediaries to differentiate themselves from competitors, improve their standings among key customers and stakeholders, attract new capital, and generate goodwill and support from stakeholders (International Finance Corporation, 2007).

4. Hypothesis Development

The following hypotheses are taken into consideration for this study:

H_1: *There is a positive association exists between the board characteristics and operating performance of banks. Improved board characteristics including board committees, compositions and size lead to better performance.*

H_2: *There is a positive association between ownership structure and operating performance of banks. Increased managerial ownership, government ownership and foreign ownership improve the operating performance.*

H_3: *Integration of corporate governance, intellectual capital and CSR leads to sustainable business.*

5. Research Design and Methodology

The research was quantitative and based on five years data gathered from audited annual reports of the banks covering the period 2011-2015. The DSE (Dhaka Stock Exchange) companies had been selected for research; keeping in view that most of the listed companies were big enough to develop and exploit CG, CSR and IC disclosure. Moreover, the stratified sample of DSE listed companies cover 30 banks, thus increasing the accuracy of the research outcome. Based on this information, this research aimed to examine various prospects using of independent and dependent variables related to this topic. However this data are used to calculated mean, standard deviation and correlation of all the banks. The data were cross section as well as time series. Finally data had been analyzed and filtered through SPSS Software.

Table 1. Independent and Dependent Variables

| Dependent variables	Independent Variables
Corporate Governance (CG)	1. % of independent directors on board
	2. Is CEO and the chairperson of the board are different person?
	3. Number of audit committee members
	4. Number of board meeting per year
	5. Gender diversity on the board (male-female ratio)
	6. Board size: number of board members
	7. Compliance with International Accounting Standards
	8. Independent director
Corporate Social Responsibility (CSR)	9. CSR expenditure
Intellectual Capital (IC)	10. MVA (market value added)
Sustainability	11. Profit after tax
	12. Total assets
	13. ROA (Return on asset)
	14. ROE (Return on equity)
	15. Percentage of domestic shareholding
	16. Number of employees
	17. Training and development expenditure
	18. Total infrastructural assets
	19. Implementation of ERP
	20. Certifications
	21. Adapted green banking policy
	22. Providing long term incentives and sanctions

6. Conceptual Framework
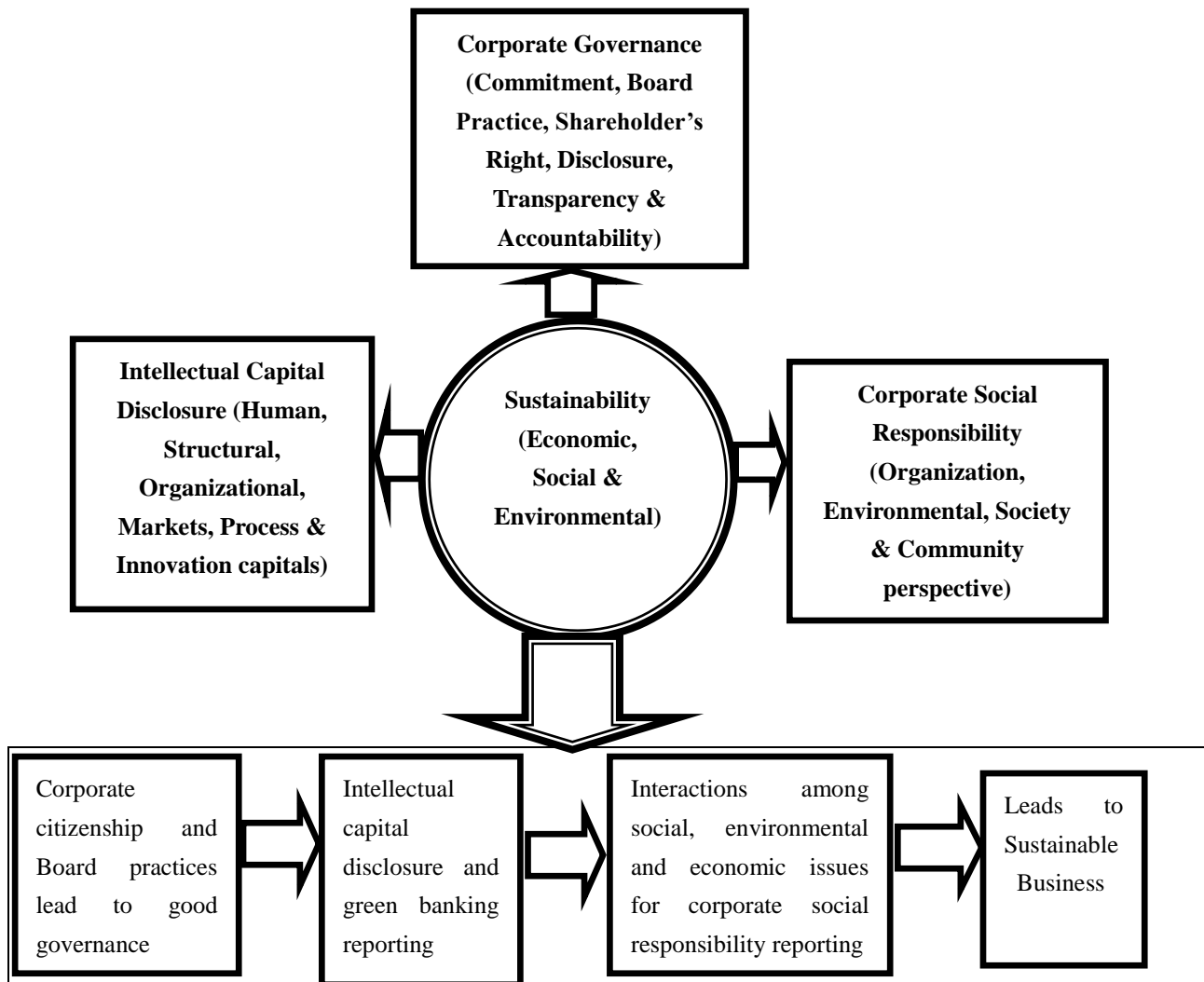
Figure 1. Conceptual Framework

7. Data Analysis and Result

Total 30 private commercial banks have been taken to conduct the analysis among them most of the banks operated in Bangladesh more than 5 years. To get the accurate result some new banks also included in the analysis even though it is widely believe that new banks are very much fluctuate in various dates. To conduct first part of the analysis, total 22 variables has been used to determine the sustainability, CSR, CG and IC disclosure results of those banks. After getting the sectoral results, correlation among these three subjects has been determined to check the relation among sustainability, CSR, CG and IC disclosure. All the required data's have been taken using the annual reports of 30 banks. Some of the variables values are possible to get directly from the annual reports. In the other hands, others variables are not possible to get directly from available sources. Thus scoring basis has been used to measure these variables. Table 1 also shows the 12 variables with the basis of scoring and explanations. In addition, the various statistical formulas have been used in order to determine the components. All the calculations and ranking are based on this table.

7.1 Corporate governance

Table 2. Descriptive Statistics of the variables

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Percentage of independent director	5	.63	1.00	.8380	.16392	-.166	.913
Same as CEO & Chairperson	5	.54	1.00	.8220	.20005	-.669	.913
Audit committee members	5	.63	1.00	.8460	.17199	-.469	.913
Board Meeting/per year	5	.54	1.00	.8200	.19455	-.623	.913
Gender diversity (male-female ratio)	5	.40	1.00	.7460	.25706	-.253	.913
Board Size	5	.23	.67	.5400	.18682	-1.581	.913
Compliance with IAS & IFRS	5	.54	1.00	.7880	.17513	-.448	.913
Independent director	5	.63	1.00	.8380	.16392	-.166	.913
Valid N (listwise)	5						

We first present the descriptive results of corporate governance for five years from 2011 to 2015 (Table 2). Then the operating performances of banks are separately presented (Table 3). From the analysis, we found that there is a positive association between ownership structure and operating performance of banks. Here, the mean value of CG is 0.77 and ranges between 0.54 and 0.84. The mean of ROA is 0.87 per cent and the mean ROE of 9.69 per cent in the period. This demonstrates that there is a moderate increase in banks assets and profitability since some new banks are taken into consideration. Loan to advance ratio also changes significantly during the period.

Table 3. Operating performance of banks

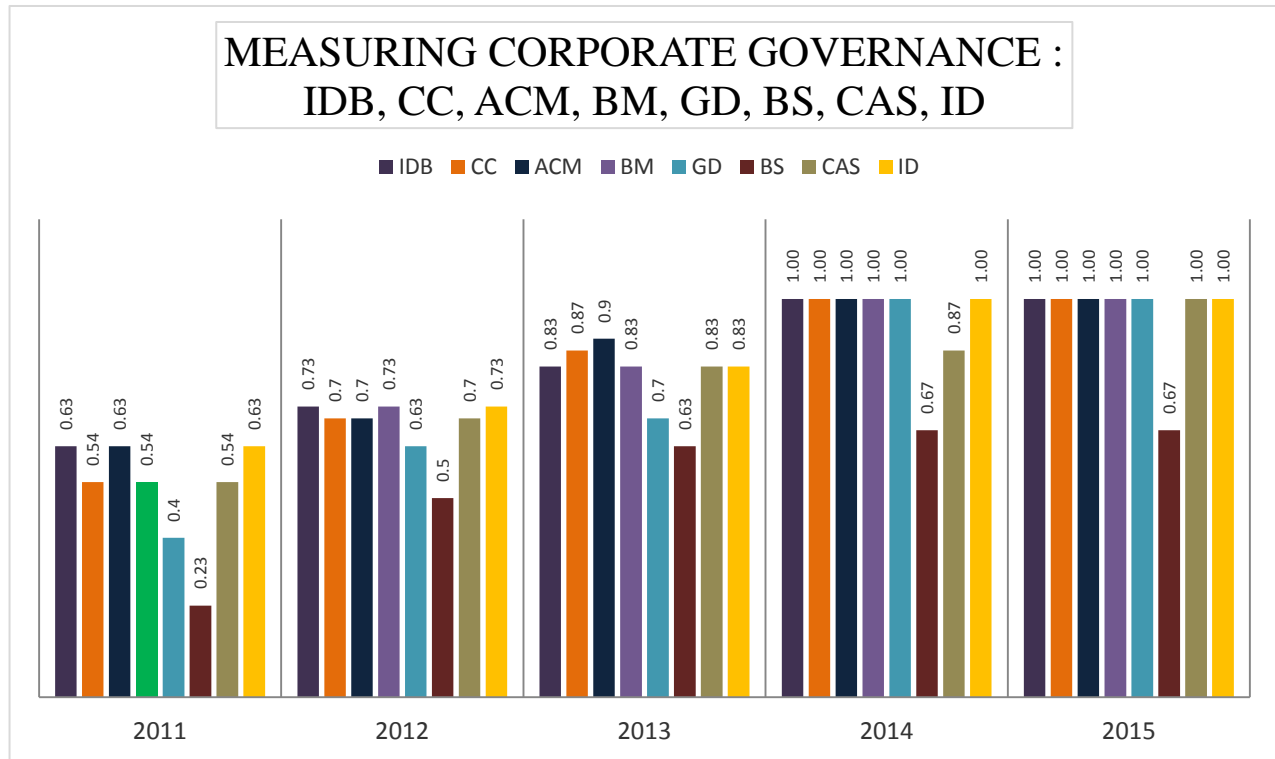|	Profit after tax	Total Assets	ROA	ROE	Loan to deposit ratio
Mean	5092.518	138411.6	.8730666	9.697066	0.663592
SD	864.6019	107593.4	.722202583	5.2296	0.272341
Maximum	4915.64	540786	3.246	19.71	0.93172
Minimum	-19.12	2316	-0.038	0.41	-0.0487
Median	1186.32	130845.1	0.91	9.96	0.76925

Figure 2. Corporate governance Scores

The interest on managing the Intellectual Capital has caused the development of different methods of measuring it. Companies with a high Maket Value Added (MVA) are attractive to investors not only because of the greater likelihood they will produce positive returns but also because it is a good indication they have strong leadership and sound governance. A simple way of calculating the value of an organisation's intellectual capital is to take the difference between its market value – the number of shares in issue multiplied by the market value of the share – and the net value of its assets. This can be done with a minimum of information and the gap between the two figures, the market-to-book ratio, is often used as an indication that a company has many intellectual capital assets that are not reflected in its financial statements. Intellectual capital has been calculated thorough MVA (Market Value Added) which is considered the most effective measurement and used in other index's. An inverse relationship has been identified with the time and MVA. The highest MVA has been determined in 2011 of all banks and the amount is BDT 99,141.2 million.

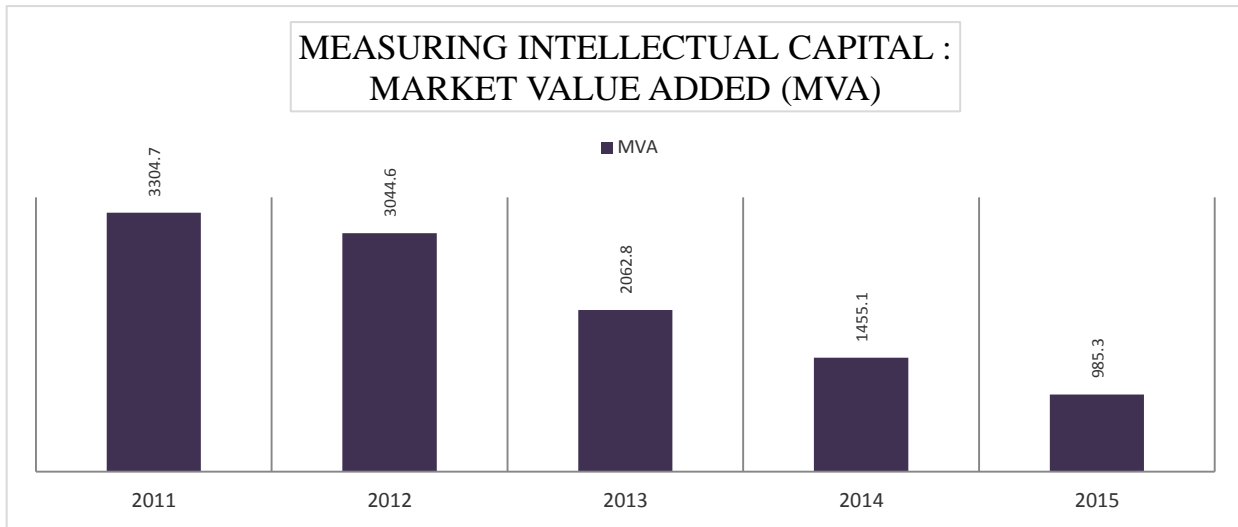*7.2 Intellectual Captial*

Figure 3. Intellectual Capital

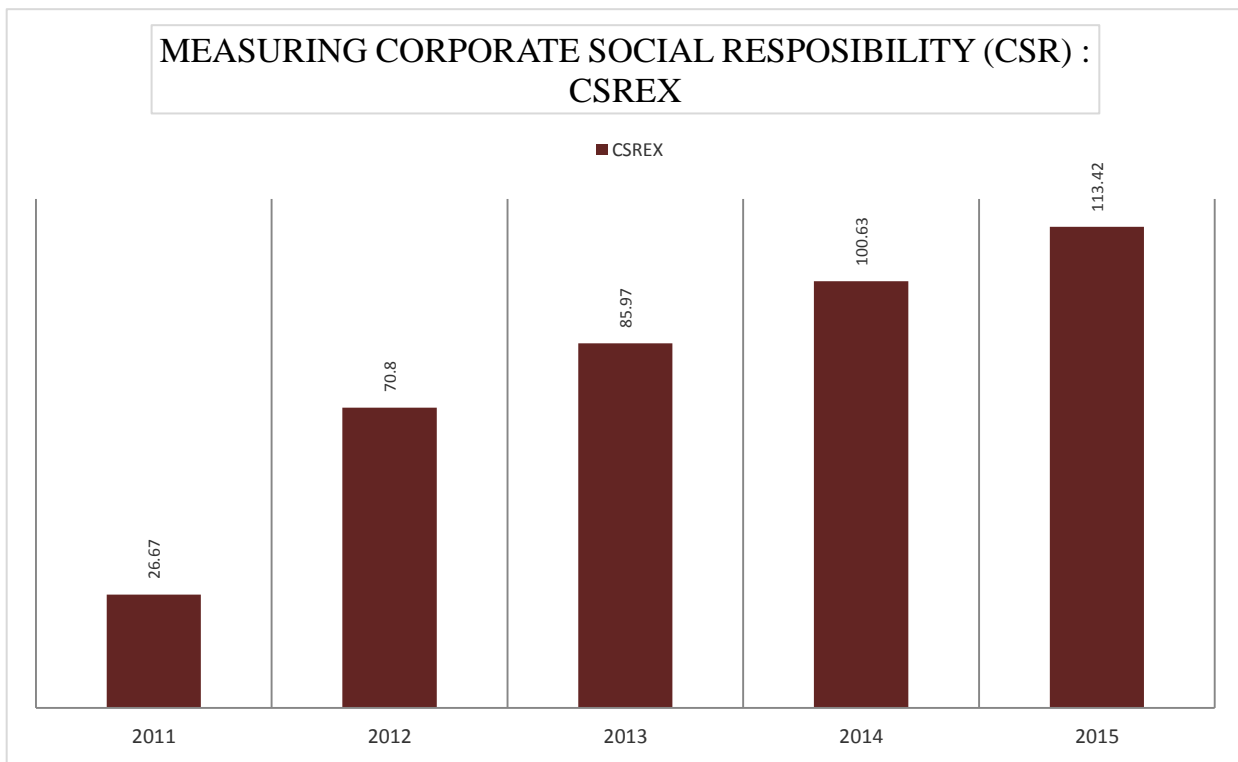*7.3 Corporate Social Responsibility (CSR) Expenditure (in Million)*

Figure 4. Corporate Social Responsibility

On the other hand the CSR expenditure increases over the time period form 2011 to 2015. Banks are willing to invest more in the education, sports, health, and humanitarian & disaster relief.

7.4 CSR expenditure and profit after tax:

Table 4. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Profit after tax	30	-23.00	4233.00	2.0266	1204.78837
CSR expenditure	30	2.00	281.00	59.0000	50.84256
Valid N (listwise)	30				

Table 5. Correlations

		Profit after tax	CSR expenditure
Profit after tax	Pearson Correlation	1	.305
	Sig. (2-tailed)		.101
	N	30	30
CSR expenditure	Pearson Correlation	.305	1
	Sig. (2-tailed)	.101	
	N	30	30

Table 6.Test Statistics

	Profit after tax	CSR expenditure
Chi-Square	.933[a]	7.800[b]
Df	28	26
Asymp. Sig.	1.000	1.000

a. 29 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.0.

b. 27 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.1.

Table 7. One-Sample Test

	Test Value = 0				95% Confidence Interval of the Difference	
	T	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Profit after tax	9.213	29	.000	2026.56667	1576.6913	2476.4420
CSR expenditure	6.356	29	.000	59.00000	40.0151	77.9849

From the above analysis, the corporate social responsibility expense increseses over the time peiod. This is the table that shows the output of the one sample test and whether there is a statistically significant difference between our group means. We can see that the significance value is 0.000 which is below 0.05 and, therefore, there is a statistically significant difference in the mean between Profit after tax and CSR expenditure.

7.5 Training and Development

Table 8. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.761[a]	.579	.564	22.07528	1.962

a. Predictors: (Constant), Number of employees

b. Dependent Variable: Training and Development

Table 9. Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	9.1593	103.8899	34.2733	25.43954	30
Residual	-46.77673	45.36214	.00000	21.69133	30
Std. Predicted Value	-.987	2.737	.000	1.000	30
Std. Residual	-2.119	2.055	.000	.983	30

a. Dependent Variable: Training and Development

The value of R=0.761 indicates that there is a high degree of positive correlation among the dependent (Training and development) and independent variables (Number of employees). The value of R Square = .567 means that 57% variation in dependent variables can be explained by the regression models. The value of adjusted R square=.564 suggests that in addition to other independent variables could not make a remarkable contribution in explaining the variations in the dependent variables. Durbin-Watson d = 1.962, which is between the two critical values of $1.5 < d < 2.5$ and therefore we can assume that there is no first order linear auto-correlation in our multiple linear regression data.

7.6 Adopting of Green Banking Policy and Long Term Incentives and Sanctions

Table 10. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.542[a]	.294	.269	1.10623	.294	11.664	1	28	.002	2.021

a. Predictors: (Constant), Longterm incentives and sanction

b. Dependent Variable: Adopted green banking policy

In the above table R = 0.542 so there is a moderate degree of relationship exists. The value of R Square = .294 means that 29% variation in dependent variables (adapted green banking policy) can be explained by the regression models. The adjusted R square is only .269 and the durbin Watson d = 2.021 which indicates there is a average relationship between the variables. In case of coefficients, the significant level of are less than 0.05 indicates that they are significant.

Table 9. Coefficients[a]

| Model | Unstandardized Coefficients | | Standardized Coefficients | | |
	B	Std. Error	Beta	t	Sig.
1 (Constant)	1.316	.451		2.919	.007
Longterm incentives and sanction	.582	.170	.542	3.415	.002

a. Dependent Variable: Adopted green banking policy

7.8 Implemented ERP and Certification

Table 10. Model Summary[b]

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.642[a]	.412	.391	.93063	.412	19.604	1	28	.000	1.578

a. Predictors: (Constant), Certifications

b. Dependent Variable: Implemented ERP

Table 11. Coefficients[a]

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.601	.316		1.902	.068
	Certifications	.596	.135	.642	4.428	.000

a. Dependent Variable: Implemented ERP

The relationship between implemented ERP and Certifications are explained where there is a strong relationship (R = .642). Also Durbin-Watson d = 1.578, which is between the two critical values of $1.5 < d < 2.5$ and therefore we can assume that there is no first order linear auto-correlation in our multiple linear regression data. The significance is .000 which means the model has no predictive value.

7.9 Correlation Matrix among All Variables:

Table 12. Correlation

	PAT	TA	ROA	ROE	PDS	NE	T&D	IA	ERP	CER	GB	I&S	IDB	CC	ACM	BM	GD	BS	CAS	ID	CS	MVA
PAT	1.00	0.50	0.99	0.97	0.87	0.95	1.00	0.85	0.99	0.97	1.00	0.98	0.99	1.00	0.98	0.99	0.94	0.96	0.96	0.99	0.87	-0.99
TA	0.50	1.00	0.62	0.70	0.86	0.21	0.44	0.88	0.63	0.28	0.46	0.30	0.36	0.56	0.65	0.36	0.17	0.73	0.73	0.36	0.01	-0.61
ROA	0.99	0.62	1.00	0.99	0.93	0.90	0.98	0.91	1.00	0.93	0.98	0.94	0.96	1.00	1.00	0.96	0.88	0.99	0.99	0.96	0.79	-1.00
ROE	0.97	0.70	0.99	1.00	0.97	0.85	0.95	0.95	1.00	0.88	0.96	0.89	0.92	0.98	1.00	0.92	0.82	1.00	1.00	0.92	0.72	-0.99
PDS	0.87	0.86	0.93	0.97	1.00	0.68	0.83	1.00	0.93	0.73	0.85	0.74	0.78	0.90	0.94	0.78	0.65	0.97	0.97	0.78	0.51	-0.93
NE	0.95	0.21	0.90	0.85	0.68	1.00	0.97	0.64	0.89	1.00	0.96	1.00	0.99	0.93	0.88	0.99	1.00	0.82	0.82	0.99	0.98	-0.90
T&D	1.00	0.44	0.98	0.95	0.83	0.97	1.00	0.81	0.98	0.99	1.00	0.99	1.00	0.99	0.97	1.00	0.96	0.94	0.94	1.00	0.90	-0.98
IA	0.85	0.88	0.91	0.95	1.00	0.64	0.81	1.00	0.92	0.70	0.82	0.71	0.76	0.88	0.93	0.76	0.61	0.96	0.96	0.76	0.47	-0.91
ERP	0.99	0.63	1.00	1.00	0.93	0.89	0.98	0.92	1.00	0.92	0.98	0.93	0.95	1.00	1.00	0.95	0.88	0.99	0.99	0.95	0.78	-1.00
CER	0.97	0.28	0.93	0.88	0.73	1.00	0.99	0.70	0.92	1.00	0.98	1.00	1.00	0.95	0.91	1.00	0.99	0.86	0.86	1.00	0.96	-0.93
GB	1.00	0.46	0.98	0.96	0.85	0.96	1.00	0.82	0.98	0.98	1.00	0.99	0.99	0.99	0.97	0.99	0.95	0.94	0.94	0.99	0.89	-0.98
I&S	0.98	0.30	0.94	0.89	0.74	1.00	0.99	0.71	0.93	1.00	0.99	1.00	1.00	0.96	0.92	1.00	0.99	0.87	0.87	1.00	0.96	-0.94
IDB	0.99	0.36	0.96	0.92	0.78	0.99	1.00	0.76	0.95	1.00	0.99	1.00	1.00	0.97	0.94	1.00	0.98	0.90	0.90	1.00	0.94	-0.96
CC	1.00	0.56	1.00	0.98	0.90	0.93	0.99	0.88	1.00	0.95	0.99	0.96	0.97	1.00	0.99	0.97	0.91	0.98	0.98	0.97	0.83	-1.00
ACM	0.98	0.65	1.00	1.00	0.94	0.88	0.97	0.93	1.00	0.91	0.97	0.92	0.94	0.99	1.00	0.94	0.86	0.99	0.99	0.94	0.77	-1.00
BM	0.99	0.36	0.96	0.92	0.78	0.99	1.00	0.76	0.95	1.00	0.99	1.00	1.00	0.97	0.94	1.00	0.98	0.90	0.90	1.00	0.94	-0.96
GD	0.94	0.17	0.88	0.82	0.65	1.00	0.96	0.61	0.88	0.99	0.95	0.99	0.98	0.91	0.86	0.98	1.00	0.80	0.80	0.98	0.99	-0.89
BS	0.96	0.73	0.99	1.00	0.97	0.82	0.94	0.96	0.99	0.86	0.94	0.87	0.90	0.98	0.99	0.90	0.80	1.00	1.00	0.90	0.69	-0.99
CAS	0.96	0.73	0.99	1.00	0.97	0.82	0.94	0.96	0.99	0.86	0.94	0.87	0.90	0.98	0.99	0.90	0.80	1.00	1.00	0.90	0.69	-0.99
ID	0.99	0.36	0.96	0.92	0.78	0.99	1.00	0.76	0.95	1.00	0.99	1.00	1.00	0.97	0.94	1.00	0.98	0.90	0.90	1.00	0.94	-0.96
CS	0.87	0.01	0.79	0.72	0.51	0.98	0.90	0.47	0.78	0.96	0.89	0.96	0.94	0.83	0.77	0.94	0.99	0.69	0.69	0.94	1.00	-0.80
MVA	-0.99	-0.61	-1.00	-0.99	-0.93	-0.90	-0.98	-0.91	-1.00	-0.93	-0.98	-0.94	-0.96	-1.00	-1.00	-0.96	-0.89	-0.99	-0.99	-0.96	-0.80	1.00

Correlation analysis helps to identify the relationship between dependent variable and each independent variable. From the above table, Sustainability has been calculated for private commercial banks for the five years (2011-2015). It has been identified that private commercial banks gradually increasing sustainability or tend to be more sustain in the market as per the analysis result. All the variables such as Profit after tax, Total asset, Infrastructural asset, ROA, ROE, Percentage domestic shareholding, Number of employees and Training & Development expenses are gradually increases year by year. The combine result shows a positive indication of sustainability among the commercial banking sector of Bangladesh. The variable that has taken to conduct scoring has also given the similar result. Implementation of ERP, Certifications, adaptation of green banking policy and long term incentives & sanctions are rising upward among the focused timeframe. Correlation matrix shows except MVA, all the variables are positively related. That means CG and CSR are affecting the components of suitability positively. In the other hand, ICD and the component of sustainability are inversely related. This mismatch is the result of limited practice of ICD in the private commercial banking sector of Bangladesh.

8. Recommendations and Study for Future Research

- Standard authority and accountability should ensure to the independent directors. Number of independent directors should match with the efficiency level.

- Banks should identify and explore the possible improvements and provides priority based suggestions to improve corporate governance practices.

- It is recommended to encourage the financial institutions more in CSR by announcing different benefits like awards, removing the ceiling in CSR, inclusion in company law, progressive tax exemption rate etc. Government should encourage banks towards CSR acts by provides tax rebate and tax exemptions.

- Government needs to establish regulatory bodies that will monitor the social responsibility of corporate organizations, in order to oversee the compliance of CSR policies and prosecute organizations that are socially irresponsible also.

- Initiatives from Bangladesh Bank are needed to ensure proper disclosure of Intellectual capital. Also for private commercial banks is to develop strategic and tactical initiatives that provide for voluntary disclosure of intellectual capital. These initiatives may initially be used for internal management purposes only.

- For intellectual capital disclosure, this study only focuses on MVA. Other models can be used for measuring intellectual capital disclosure for future research.

9. Conclusion

This study foscuses on how CG, CSR and ICD affect the private commercial banks to achieve sustainability. Prior analysis and information from related papers helps to develop the projections of hypothesis. In terms of sustainability, it has been identified that private commercial banks are gradually increasing sustainability or tend to be more sustain in the market as per the analysis result. CG practices have been increasing among the private commercial banks. That also means private commercial banks are more focused on maintaining the CG practices. The CSR outcome also consistent such as the above component but an inverse relation has been identified with the time and ICD. So this study conclude with the statement that Private commercial banks are achieve higher sustainability and CG and CSR helps banks to get higher sustainability. ICD is not properly maintained in our private commercial banking sector. Even ICD has not properly disclosed in the annual reports or any others sources. There is no evidence that ICD has garnered any traction for private commercial banks in Bangladesh. The results also support the ICD trends in prospects of Bangladesh. Organisations can create a set of indicators that visualise their performance in terms of corporate governance, intellectual capital management and corporate social responsibility. Users should be able to look at these and assess how well the company is fulfilling its objectives. There is no predefined set of measures and the set chosen can include indicators that measure effects, activities or the resource mix but to measure the sustainable business it now forms a material component of how value is created and communicated.

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APPENDICES:

a. (List of Banks for sample size)

Serial No	Bank Name	Serial No	Bank Name
1	Eastern Bank Limited	16	Mercantile Bank Limited
2	Bank Asia Limited	17	Dhaka Bank Limited
3	Dutch Bangla Bank Limited	18	AB Bank Limited
4	IFIC Bank Limited	19	The City Bank Limited
5	Mutual Trust Bank Limited	20	Prime Bank Limited
6	Jamuna Bank Limited	21	One Bank Limited
7	BRAC Bank Limited	22	United Commercial Bank Limited
8	Pubali Bank Limited	23	Standard Bank Limited
9	Premier Bank Limited	24	Meghna Bank Limited
10	Uttara bank Limited	25	Midland Bank Limited
11	South East Bank Limited	26	South Bangla Agriculture and Commerce Bank Ltd.
12	NCC Bank Limited	27	NRB Bank Ltd.
13	National Bank Limited	28	Modhumoti Bank Ltd.
14	Trust bank Limited	29	NRB Global Bank Ltd.
15	Bangladesh Commerce Bank Ltd.	30	N.R.B. Commercial Bank Ltd.

b. CHECKLIST FOR INDEPENDENT AND DEPENDENT VARIABLE

Corporate Governance (Scoring System)			
	Criteria set by SEC	**Comply**	**Do not Comply**
% of independent directors on board	At least 1/5th	1	0
Is CEO and the chairperson of the board are different person?	Should be different individuals	1	0
Number of audit committee members	At least 3 members.	1	0
Number of board meeting per year	Should be 20 and more	1	0
Gender diversity on the board (male-female ratio)	Should be a diversify board	1	0
Board size: number of board members	Board members should not be less than 5 and more than 20	1	0
Compliance with International Accounting Standards	Compliance with IFRS & IAS	1	0
Independent director	At least 1/10th i.e. minimum one	1	0
Corporate Social Responsibility			
CSR expenditure			
Intellectual Capital			
MVA			
Sustainability			
Profit After Tax			
Total assets			
ROA			
ROE			
% of domestic shareholding			
No of employees			
Training & development expenditure			
Total infrastructural asset			
Sustainability (Scoring System)	**Criteria**	**Comply**	**Do not Comply**
Implementation of ERP	Already implemented Enterprise Resource Planning (ERP)	1	0
Certifications	Certify by National & international awarding bodies	1	0
Adopted green banking policy	Already adopted green banking policy guided by Bangladesh Bank	1	0
Providing long-term incentives & sanctions	Providing low interest loans and other long term benefits	1	0