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Factors influencing corporate social responsibility disclosures in Nepalese banks

CSR
disclosures in
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209

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Abstract

Purpose – This paper examines the relationship between selected firm-specific variables and the extent of corporate social responsibility (CSR) disclosures made by Nepalese banks.

Design/methodology/approach – A content analysis approach of the banks' annual reports is applied using a CSR disclosure index based on the Global Reporting Initiative guidelines. The factors identified in this study – bank size, bank age and bank profitability – are analyzed against the extent of CSR disclosures in the Nepalese banks using multiple regression.

Findings – The main finding from the content analysis indicates that the extent of CSR disclosures made by Nepalese banks in their annual reports is mostly descriptive, with charity and donation being the most disclosed items. The main findings from the correlation and regression analyses show that there are positive and significant relationships between both bank size and profitability and the extent of CSR disclosures in the Nepalese banks, while bank age is a partial determinant.

Originality/value – Banks have a significant role in the Nepalese economy. This study offers insights into the CSR disclosure practices of Nepalese banks, examines the potential factors affecting CSR disclosure and expands the pool of CSR knowledge in the developing country context, especially in the banking sector.

Keywords Corporate social responsibility, CSR, Disclosure, GRI, Banks, Nepal

Paper type Research paper

1. Introduction

Corporate social responsibility (CSR) has now been widely accepted as an essential issue for corporations. The relationship of business with the society and the environment has been long discussed since the middle of last century (Turker, 2009; Zhang *et al.*, 2019). Specifically, however, over the previous two decades, CSR advocates have increasingly focused on a wide range of issues: environmental – such as climate change, waste management, water usage, global warming; social – such as poverty, social equality, corruption, human rights, community relations and economic – such as employment, GDP, growth rate (Ioannou and Serafeim, 2019; Bhatia and Makkar, 2019).

There is a growing demand for corporations to transparently measure, report and improve their environmental, social and economic performance (Tsoutsoura, 2004). In line with that, CSR disclosure has been increasing in popularity and acceptance among corporations, academics and practitioners in both developed (Chau and Gray, 2002; Guthrie and Farneti, 2008; McDonald and Lai, 2011; Ong *et al.*, 2016; Ong and Djajadikerta, 2018) and developing nations (Belal and Cooper, 2011; Djajadikerta and Trireksani, 2012; Gunawan *et al.*, 2009; Jamali and Mirshak, 2007; Visser, 2008; Zhang *et al.*, 2018; Sharma, 2019).



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Academic scholars have used different theories to propagate CSR-related issues; for example, stakeholder theory, legitimacy theory, institutional theory and the Triple-Bottom-Line (TBL) approach (Aguilera *et al.*, 2007; Deegan, 2002, 2014; Lu and Abeysekera, 2015). Businesses have a broader approach to corporate responsibilities such as responsiveness, stewardship, social audit, corporate citizenship, environmental responsiveness, ethics and sustainability reporting. Different stakeholders pressure and firm reputations, legitimacy factors and corporate mimicry have also influenced the practice of CSR disclosures (Haniffa and Cooke, 2005; Hrishleifer, 2008).

CSR in developing countries is in a more vulnerable phase due to the gap in social provision and governance. To fill such gaps, some institutions, such as the World Bank, Amnesty International and the United Nations, provide voluntary CSR reporting guidelines on social and environmental issues. This critical period in CSR development leads to a need for more effort to be invested in CSR research in developing countries.

The financial sector is widely known as the backbone of the economy, where CSR plays a vital role. Prior studies investigating CSR disclosure in financial sectors have mainly focused on Western countries (e.g. Branco and Rodrigues, 2008; Gamerschlag *et al.*, 2011; Menassa, 2010) except for a few studies that focus on developing countries (Hossain and Reaz, 2007; Khan *et al.*, 2009).

In several developing countries, banks play a dominant role in their economy. One of these countries is Nepal. Nepal is a landlocked mountainous country located between two emerging economies, China and India. Nepal has a complex geographical environment ranging from high mountains toward China to plain lands towards India. More than 80% of the population engages in agriculture, and the rest of the population is employed in the service and manufacturing sectors.

Banks are the major taxpayers for the government and the major lenders to the private sector in Nepal. Nepalese capital markets are at the infant stage of development, and bank financing is an important source of funding for all kinds of firms (Nepal Rastra Bank, 2016). The development of the Nepalese financial sector has a recent history, starting from the early twentieth century. Nepal Bank Limited, the first commercial bank in the country, was established as a joint venture between the government (51%) and the private sector (49%) in 1937. It was the only bank in Nepal until the formation of the central bank of Nepal (i.e. Nepal Rastra Bank (NRB)) in 1956. Nepal subsequently underwent a process of financial sector liberalization during the 1980s. As a consequence, the number and variety of financial institutions, along with their financial assets and range of instruments, have grown significantly.

To date, the majority of CSR research is focused in non-financial sectors such as mining, energy and production compared to financial sectors such as banking and insurance, due to the significantly lower direct environmental impact. This has been used as an argument to exclude banks and financial companies in studies that analyze the various components of CSR (Branco and Rodrigues, 2008). However, some scholars argued that banks are responsible for whom they lend to and for the purpose behind their lending. Thompson and Cowton (2004) argued that banks could be seen as facilitators of industrial activity that causes environmental damage.

To contribute to the needs for more CSR research within the context of developing countries, and considering the major role of banks in Nepal, this study aims to understand the CSR disclosure in the annual reports of Nepalese banks and the factors that affect the extent of the CSR disclosure. No prior similar research has been found regarding CSR disclosure in Nepalese banks to date. This study offers insights into the CSR disclosure practices of Nepalese banks to contribute to the literature in this area.

In this study, a sample set of 82 banks was selected from the Nepal Stock Exchange for the year 2014. CSR-related information was collected from the annual reports of the sample banks. Content analysis and multiple regression analysis tools were used to test the

developed hypothesis based on literature. Overall, this study finds that bank size and profitability determine the extent of CSR disclosures, while bank age is a partial determinant.

2. Conceptual discussion and hypotheses development

2.1 CSR in developed, transitional and developing economies

The World Bank has defined CSR as the “commitment of business to contribute to sustainable economic development – working with employees, their families, the local community and society at large to improve the quality of life, in ways that are both good for business and good for development” (Ward, 2004, p. 3). CSR is widely practiced in different forms – such as charity, donation, philanthropic activities, scholarships, health initiatives and employee health and safety – around the globe.

Many scholars have defined CSR based on the context of their study. Heal (2005), for example, defined CSR as the involvement of different actions that reduce the extent of externalized costs or avoid distributional conflicts where social cost is to be shared by corporations and society. As a result, good CSR disclosure functions to improve relations with regulators, generate brand equity, improve employee productivity, create media attention and reduce the cost of capital (Heal, 2005).

Mateescu (2015) examined the CSR disclosure on firm-level and country-level variables by firms in Estonia, Romania, Poland and Hungary. The study revealed a strong positive connection between the country-level variables and the companies’ extent of CSR disclosure. Thus, CSR disclosure is different from country to country, and cultural and country-specific variables affect the extent of CSR disclosure.

The current research on CSR disclosure practices has been criticized as a Western-centric phenomenon (Belal and Cooper, 2011; Visser, 2008; Visser and Macintosh, 1998), primarily focused on practices in the UK, Australia, United States and some developed countries. Transitional economies such as China, India and Indonesia have slowly been focusing on CSR disclosure as those practiced in developed countries (Trireksani and Djajadikerta, 2016). Compared to the practices of CSR in developed and transitional economies, the extent of CSR disclosures in developing countries is inadequate and far behind (Belal and Cooper, 2011; Deegan, 2002; Idemudia, 2011; Khan *et al.*, 2009; Visser and Macintosh, 1998).

The research on CSR in developing countries has primarily focused on industries that are linked mainly to environmental sectors (Visser, 2008). The emergent literature suggests that businesses’ engagement in CSR is lower and non-institutionalized in developing countries (Baughn and McIntosh, 2007) when compared to the CSR benchmarks used in the developed world (Visser, 2008).

There has been some evidence that CSR in developing countries reflects the deep-rooted indigenous cultural traditions of philanthropy, ethics, community involvement and help for a good cause. A study by Visser and Macintosh (1998) found the ethical condemnation of usurious business practices in developing countries that practice Hinduism, Buddhism, Islam and Christianity dated thousands of years back. The region’s religious beliefs are one of the major motivations for CSR (Vives, 2006).

In a cross-country CSR study in Bangladesh and Australia, Quazi and O’Brien (2000) found that managers’ religious values greatly influence their preference for engaging in philanthropy-based CSR initiatives. This finding was supported by studies set in developing countries, including Nigeria (Amaeshi and Crane, 2006), Lebanon (Jamali and Mirshak, 2007) and Bangladesh (Moyeen and West, 2014).

2.2 CSR in financial institutions

A study by Weber (2005) on European banks and financial institutions aimed to find out the extent to which these banks have integrated sustainability into their policies, strategies,

products, services and processes. The study found that the social aspects of sustainability had found their way into the banking sector. [Menassa \(2010\)](#) studied the quality of CSR disclosures in Lebanese banks and found that CSR was one of the best means for banks to communicate with their stakeholders. The activities of banking and financial companies, such as their lending and investment policies, can be considered to be equally environmentally sensitive when compared with the direct impacts of companies in “polluting” industries. For example, Deutsche Bank AG declared that it would not be financing a coal port expansion in Australia near the Great Barrier Reef until it received assurance from the UNESCO and the Australian Environmental Committee that the coal mine expansion would not affect the environment ([Paul, 2014](#)).

Scholars also found that CSR initiatives and the financial crisis are interconnected. A study by [Jacob \(2012\)](#) explores the impact of the financial crisis of 2008 on CSR initiatives and its implications for reputational risk management. The findings indicate that the 2008 financial crisis had a clear impact on CSR initiatives in many companies. A study by [Sigurthorsson \(2012\)](#) discussed the Icelandic banking crisis concerning the notion of CSR. The article explores some conceptual arguments for the position that the Icelandic banking crisis illustrates the broad problem of the indeterminacy of the scope and content of the duties that CSR is supposed to address.

In Nepal, as CSR is a voluntary practice, many Nepalese firms do not disclose CSR in their annual reports with some exceptions. Some joint ventures and foreign multinational companies disclose CSR as the requirement of the parent company. It has also been noticed that CSR disclosures by Nepalese firms have been increasing as compared to the past since Nepal entered the World Trade Organization (WTO). Many Nepalese businesses are now exposed to other countries, and hence they are experiencing increased competition. [Shah \(2012\)](#), however, found that the majority of Nepalese businesses engaged in the philanthropic aspect of CSR with little attention to the environment.

While banks have a leading role in the Nepalese economy, there has not been much research about CSR in Nepalese banks. [Upadhyay-Dhungel and Dhungel \(2012\)](#) emphasize the importance of CSR research in the banking sector in Nepal, where CSR is at an infant stage of development. The World Bank, an international watchdog for the banking sector, also frequently exerts pressure on banks to analyze the social and environmental risks involved in projects to be financed ([Lioui and Sharma, 2012](#)).

2.3 Hypotheses development

Some studies have analyzed factors affecting CSR disclosures in developing countries ([Belal and Cooper, 2011](#); [Chapple and Moon, 2005](#); [Lee, 2011](#); [Mankelov and Quazi, 2007](#); [Visser, 2008](#)). There are some of the common factors identified by these studies, including the size, age and performance of the firms. This study adopts these factors to examine their effects on the extent of CSR disclosure in Nepalese banks.

2.3.1 Bank size. The size of the firm has potential influence over the amount of disclosure information in developing countries, although most of the information is in charitable donations for good causes and community welfare programs. [Bayoud et al. \(2012\)](#) found that larger firms disclosed more CSR information than smaller ones in Libya. Similarly, [Menassa \(2010\)](#) found a strong relationship between bank size and the amount of CSR disclosures in Lebanese banks. She argues that research related to obvious relationships between CSR and size tends to produce more consistent results than studies relating CSR to other factors such as performance, firm age and ownership structure.

[Fortanier et al. \(2011\)](#) found that big firms in developing countries provided more CSR information in their annual reports compared to smaller sized firms. To keep the public trust and assuage any concerns about the business, such firms heavily invest in community programs such as health, employment, education and other philanthropic activities in a

timely manner. [Kiran and Sharma \(2011\)](#) found that CSR disclosures varied with the size of the firm in Indian firms.

[Hamid \(2004\)](#) and [Branco and Rodrigues \(2008\)](#) conducted studies in Malaysian banks and financial institutions and Portuguese banks respectively and concluded that there is a strong relationship between bank size and the amount of CSR disclosures made by the banks. [Hossain](#) (unpublished M.Phil. thesis), cited in [Hossain and Reaz \(2007\)](#), empirically investigated the extent of CSR disclosure by 25 banks in Bangladesh and associations of company size with disclosure level.

This study takes these abundant findings from previous studies, which indicate that the size of a firm is significant in determining its CSR disclosure level. The following set of hypotheses is thus proposed:

- H1a.* There is a positive relationship between bank size and the extent of economic disclosure by Nepalese banks.
- H1b.* There is a positive relationship between bank size and the extent of social disclosure by Nepalese banks.
- H1c.* There is a positive relationship between bank size and the extent of environmental disclosure by Nepalese banks.
- H1d.* There is a positive relationship between bank size and the extent of total CSR disclosure by the Nepalese banks.

2.3.2 Bank age. The extent of a company's CSR disclosure is influenced by its tenure in operation since establishment, i.e. stage of development and growth ([Akhtaruddin, 2005](#)). Companies strive to maintain reputations developed throughout years of existence ([Menassa, 2010](#)). Scholars have linked CSR disclosures and age in a legitimacy theory, which expects that the age of a firm is related to its reputation in the society and its history of involvement in CSR activities ([Hamid, 2004](#)).

Several previous studies have used company age as one of the most important factors that could affect the extent of CSR disclosures. A study by [Bayoud et al. \(2012\)](#) on Libyan firms found that company age has a significant effect on the amount of CSR disclosures. Similarly, [Liu and Anbumozhi \(2009\)](#) found positive relationships between the social and economic disclosures and company age in Chinese listed companies. The following set of hypotheses is accordingly proposed.

- H2a.* There is a positive relationship between bank age and the extent of economic disclosure by Nepalese banks.
- H2b.* There is a positive relationship between bank age and the extent of social disclosure by Nepalese banks.
- H2c.* There is a positive relationship between bank age and the extent of environmental disclosure by Nepalese banks.
- H2d.* There is a positive relationship between bank age and the extent of total CSR disclosure by the Nepalese banks.

2.3.3 Bank profitability. Several previous studies have been conducted to find out the relationship between CSR disclosure and financial performance. [Tsoutsoura \(2004\)](#) found a positive and significant relationship between CSR and financial performance in the S&P 500 firms from 1996 to 2000. [Carnevale et al. \(2012\)](#) also found that the increase in corporate financial performance is positively associated with the increase of the CSR behavior of the firms. [Hassan et al. \(2006\)](#) found a positive association between voluntary disclosure and firm performance in Egyptian firms.

Giner (1997) suggested that managers of higher-performing companies are more likely to provide voluntary CSR disclosures in the annual reports than poor performers to support the continuation of their positions and to boost the levels of current and future compensation. Within the banking context, managers of banks are knowledgeable about CSR issues such as community welfare, charity, donation, environmental protection, responsible lending and microloan.

In the Nepalese context, the relationship between banks' performance and CSR has not been studied in prior research. By referring to the findings from previous studies, it is presumed that profitable Nepalese banks are more likely to provide more CSR information in their annual reports than non-profitable banks. Thus, the following set of hypotheses is proposed concerning CSR and financial performance.

- H3a.* There is a positive relationship between bank profitability and the extent of economic disclosure by Nepalese banks.
- H3b.* There is a positive relationship between bank profitability and the extent of social disclosure by Nepalese banks.
- H3c.* There is a positive relationship between bank profitability and the extent of environmental disclosure by Nepalese banks.
- H3d.* There is a positive relationship between bank profitability and the extent of total CSR disclosure by the Nepalese banks.

3. Methodology

3.1 Sample selection

This study is an exploratory study that examines the status of CSR disclosure in Nepalese banks and finds the factors influencing CSR disclosures in Nepalese banks. All 113 banking institutions listed in the Nepal Stock Exchange (NEPSE) for the year 2014, and a public commercial bank, Rastriya Banijya Bank, are used for the study. The year of data collection was chosen since it was the year when the country had gained significant achievement in stabilizing the political situation since the 1996–2006 conflict, as evidenced by two successful elections in 2008 and 2013 (The Carter Center, 2014), and the significant continuous improvement in its political stability index from –1.89 in 2006 to –0.72 in 2014 (the first time the country reached an index score above –1 since the end of the conflict) [1]. Banks with no available complete annual reports or which were delisted during the sample period were excluded as well as banks that experienced significant mergers or reconstructions. The sample selection process of the banks is provided on Table 1.

3.2 Content analysis

This study employed content analysis as a systematic method of categorizing and analyzing the content of text from the annual reports of sample banks. Content analysis is one of the

<i>Number of listed banks in the Nepal stock exchange (NEPSE) in 2014</i>			113
Excluded (–)	Banks with no available complete annual reports	3	
	Banks involved with significant mergers or reconstruction	29	
<i>Total listed banks included in the study</i>			81
Added (+)	Public commercial bank (Rastriya Banijya Bank)	1	
<i>Final sample of banks in the study</i>			82

Table 1.
Sample selection

most used techniques for analyzing and understanding the collections of text in qualitative research (Bayoud *et al.*, 2012; Branco and Rodrigues, 2008; Gamerschlag *et al.*, 2011; Gray *et al.*, 1995; Menassa, 2010). It is a method of codifying written text into various groups or categories based on selected criteria (Webber, 1988). Prior literature suggests that content analysis provides valid results for CSR disclosures in both developed countries (Deegan, 2008; Gamerschlag *et al.*, 2011) and developing countries (Akhtaruddin, 2005; Belal and Cooper, 2011; Hassan *et al.*, 2006; Khan *et al.*, 2009).

3.3 Unit of analysis

The key issue in content analysis is with the unit of analysis (Gamerschlag *et al.*, 2011). A unit of analysis is an identifiable component of communication through which variables are measured (Krippendorff, 2004). As per the requirement of the analysis, there are several ways of applying content analysis; for instance, by counting words, sentences, sections or paragraphs. The simplest form of content analysis consists of detecting the presence or absence of information in the document (Haniffa and Cooke, 2005), which according to Branco and Rodrigues (2008) is a more appropriate method than counting words, sentences or proportions of pages when the study is from annual reports.

Coding benchmarks, such as GRI guidelines, have already been validated by both industry and academic, and hence a planned process which entails the selection of the content/document to be analyzed, the determination of the selection criteria and measurement unit and the codification of the text as well as the implementation of appropriate measures, could rationalize the validity and reliability of the content analysis results (Menassa, 2010). Hence this study uses words or terms as the unit of analysis consistent with the study by Gamerschlag *et al.* (2011). Searching for specific terms or words in the text is regarded as one of the most reliable forms of content analysis (Abdolmohammadi, 2005).

3.4 Identification of keywords

After finalizing the unit of analysis, identification of keywords is the major task of content analysis. Thus, in line with prior research (Gamerschlag *et al.*, 2011; Guthrie and Farneti, 2008; Holder-Webb *et al.*, 2008), this study derives the keywords for the content analysis from the framework of the *Global Reporting Initiatives* (GRI) G4 guidelines. GRI is regarded as one of the most relevant institutions in the context of CSR disclosure and often referred to as the global standard (Ong *et al.*, 2016).

The GRI guidelines cover all the aspects of CSR – social, economic and environmental. All the disclosing perspectives are voluntary in nature, and firms have flexibility on what information is to be disclosed (Gamerschlag *et al.*, 2011). For instance, manufacturing, energy and mining sectors disclose more information compared to service organizations, potentially due to beliefs that manufacturing firms are creating more adverse effects on the larger community and environment than service organizations. This study incorporates all three aspects of CSR.

3.5 Scoring of disclosure index

The dependent variables for this study are, namely, social disclosure, economic disclosure and environmental disclosure. Those variables are measured by the keywords or terms from the GRI G4 guidelines. A dichotomous approach to scoring the items was adopted, in which an item scores one (1) if disclosed and zero (0) if not disclosed. This procedure is conventionally termed the unweighted approach, and it was adopted for the study as other researchers have used it successfully (Cooke, 1993; Hossain and Reaz, 2007). The benefit of using an unweighted disclosure method is that any mis-ranking of disclosure could be

avoided as all the items are treated equally (Marston and Shrivres, 1991). Thus, the unweighted disclosure method measures the CSR disclosure score of a bank as an additive to each of the disclosing categories, i.e. social, economic and environmental (Cooke, 1992; Hossain and Reaz, 2007) as follows:

$$CSR = \sum_{j=1}^d \frac{d_j}{n}$$

Following the approach used by Reverte (2009), bank size is measured by market capitalization, while bank age is measured by the number of years since establishment and bank profitability is measured by net profit after tax for the year.

3.6 Regression model

This study follows some prior literature (e.g. El-Bannany, 2007; Hossain and Reaz, 2007; Bayoud *et al.*, 2012; Naser and Hassan, 2013; Mateescu, 2015) in using multiple regression as the analyzing method. The regression model is presented to analyze the relationship between the infusing factor and the CSR disclosure level. The data are analyzed using Statistical Progress for Social and Science (SPSS) 22.0. Multiple regression analysis is used to assess the relationships between the dependent variable, CSR and the three independent variables. The following model is developed based on the hypotheses proposed.

$$ECOD = \beta_0 + \beta_1 SIZE + \beta_2 AGE + \beta_3 PROFITABILITY + \varepsilon$$

$$SOCD = \beta_0 + \beta_1 SIZE + \beta_2 AGE + \beta_3 PROFITABILITY + \varepsilon$$

$$ENVD = \beta_0 + \beta_1 SIZE + \beta_2 AGE + \beta_3 PROFITABILITY + \varepsilon$$

$$TOTD = \beta_0 + \beta_1 SIZE + \beta_2 AGE + \beta_3 PROFITABILITY + \varepsilon$$

where,

- (1) ECOD Economic Disclosures made by Nepalese banks;
- (2) SOCD Social Disclosure made by Nepalese banks;
- (3) ENVD Environmental Disclosure made by Nepalese banks;
- (4) TOTD Total disclosure (sum of ECOD, SOCD and ENVD);
- (5) SIZE Bank Size measured by market capitalization;
- (6) AGE Bank Age measured by the number of years in operation;
- (7) PROFITABILITY Bank Profitability measured by net profit after tax.

4. Results and discussion

4.1 Descriptive statistics

Table 2 shows the descriptive statistics of the data. It indicates that the dispersion of variables is at a satisfactory level. Logs of the variables bank size and bank profitability were taken to reduce the skewness and kurtosis (labeled as log bank size and log profitability).

Content analysis results show that the amount of CSR disclosure is satisfactory in the developing country context. Most of the larger-sized banks are national-level banks, whereas regional banks are smaller size banks in Nepal. The size of the banks varies from 4.10 to 11.15, with a mean size value of 7.57. The age of banks varies between 1 and 55, with a mean age of

Table 2.
Descriptive statistics

	Min	Max	Mean	Std. deviation	Skewness		Kurtosis	
					Stat.	Error	Stat.	Error
Economic Disclosure	5	10	8.73	1.33	-0.898	0.266	0.123	0.526
Social Disclosure	2	17	8.93	3.52	0.062	0.266	-0.795	0.526
Environmental Disclosure	1	7	2.83	1.68	0.986	0.266	0.133	0.526
Total CSR Disclosure	9	32	20.49	5.88	0.109	0.266	-0.639	0.526
Bank Size (Log)	4.10	11.15	7.57	1.64	0.135	0.266	-0.726	0.526
Bank Age	1	55	10.63	9.66	2.764	0.266	8.777	0.526
Profitability (Log)	13.82	21.56	18.21	1.64	-0.101	0.266	0.092	0.526

Note(s): $N = 82$

10.63. The maximum value for profitability after tax is 21.56 from Nabil Bank Ltd., where the minimum value of profitability is 13.82 from Makalu Development Bank Ltd. The average profitability of banks is 18.21, and the standard deviation is 1.64.

The majority of the banks have disclosed more than 85% of economic and social disclosure items in their annual reports, with mean scores of 8.73 and 8.93 and standard deviations of 1.33 and 3.52, respectively. However, most of the banks are lagging in terms of environmental disclosure, with an average of 2.83 and a standard deviation of 1.68. The findings are consistent with studies by [Belal and Cooper \(2011\)](#) in Bangladesh, [Visser \(2008\)](#) in South American countries and [Idemudia \(2011\)](#) in African countries.

4.2 Correlation analyses

[Table 3](#) shows the Pearson correlations (r) for the disclosure indexes and the independent variables. The correlations between the independent variables do not indicate multicollinearity, as no bivariate correlation exceeds the value of 0.8 ([Gujarati, 1995](#)). Likewise, the highest variance inflation factor (VIF) in the regressions is less than 3 (see [Table 6.5](#)). [Kennedy \(1992\)](#) considers that based on the VIF, multicollinearity is a serious problem if continuous independent variables exceed 10.

Preliminary analyses showed the relationships to be linear and normally distributed. The correlation matrix shows mostly positive and significant interrelations between the independent variables and all the CSR disclosure levels, which is overall consistent with the hypotheses.

Consistent with the first hypothesis, the relationships of bank size with all CSR disclosure categories – economic, social, environmental and total disclosures, are positive and significant at $p < 0.01$. Likewise, the third hypothesis, bank profitability, is positively related to all CSR disclosure categories – economic, social, environmental and total disclosures, at $p < 0.01$. However, for the second hypothesis, bank age is positively related to social and

Variables	Log bank size	Bank age	Log profitability
Log Bank Size	1	0.466**	0.722**
Bank Age	0.466**	1	0.384**
Log Profitability	0.772**	0.384**	1
Economic Disclosure	0.474**	-0.037	0.470**
Social Disclosure	0.576**	0.235*	0.474**
Environment Disclosure	0.673**	0.282*	0.572**
Total CSR Disclosure	0.644**	0.212	0.554**

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

Table 3.
Correlation analyses

environmental disclosures at $p < 0.05$, but it has insignificant relationships with economic and total disclosures.

4.3 Regression analysis

Regression models are applied to test the relationship between bank characteristics in terms of bank size, bank age and bank profitability, and the categories of CSR disclosures in the annual reports. The regression results of the models are provided in Table 4.

Multiple regression analyses show that economic disclosure has $R^2 = 35.5\%$ and adjusted $R^2 = 32.2\%$. That means 35.5% of the variance in the economic disclosure can be predicted by bank size, bank age, ownership structure and bank profitability in Nepalese banks. Similarly, social disclosure has $R^2 = 34.8\%$ and adjusted $R^2 = 31.5\%$ and environmental disclosure has $R^2 = 47.2\%$ and adjusted $R^2 = 44.4\%$. The overall CSR disclosure has $R^2 = 44.9\%$ and adjusted $R^2 = 42.1\%$. The higher R^2 on environmental disclosure may be due to investment in renewable energy mandated by the central bank of Nepal, which likely needs to be investigated further.

Looking at individual predicting factors, bank size is found to be a significant and positive predictor of the extent of all CSR disclosure categories. The findings are overall consistent with prior literature on CSR disclosure (Bayoud *et al.*, 2012; El-Bannany, 2007; Gamerschlag *et al.*, 2011; Khan *et al.*, 2009; Menassa, 2010). The positive and significant findings may be due to industry effects, since, in general, companies with higher market capitalization tend to disclose more information in their annual reports. Larger banks are likely to reveal more voluntary information as they are more exposed to different stakeholders and different reporting regulations and some investment requirements, which are imposed by the central bank. Therefore, it can be concluded that larger Nepalese banks disclose more CSR information than smaller banks.

Variables	Predicted sign	B	SE _B	β	T-statistics
<i>Economic disclosure (F-value = 10.610***; R² = 0.355; Adjusted R² = 0.322)</i>					
Constant		2.725	1.952		1.396
Bank Size (log)	+	0.315	0.127	0.387	2.481**
Bank Age	+	-0.048	0.014	-0.349	-3.360***
Profitability (log)	+	0.231	0.113	0.284	2.044**
<i>Social Disclosure (F-value = 10.291***; R² = 0.348; Adjusted R² = 0.315)</i>					
Constant		-0.878	5.183		-0.169
Bank Size	+	0.939	0.337	0.437	2.784*
Bank Age	+	-0.018	0.038	-0.051	-0.485
Profitability	+	0.184	0.300	0.086	0.614
<i>Environmental Disclosure (F-value = 17.195***; R² = 0.472; Adjusted R² = 0.444)</i>					
Constant		-4.125	2.220		-1.858*
Bank Size	+	0.540	0.144	0.528	3.735***
Bank Age	+	-0.009	0.016	-0.052	-0.549
Profitability	+	0.169	0.129	0.165	1.312
<i>Total CSR Disclosure (F-value = 15.708***; R² = 0.449; Adjusted R² = 0.421)</i>					
Constant		-2.279	7.949		-0.287
Bank Size	+	1.794	0.517	0.500	3.468***
Bank Age	+	-0.075	0.058	-0.124	-1.294
Profitability	+	0.584	0.461	0.163	1.269

Table 4. Multiple regressions results

Note(s): N = 82; *p < 0.10; **p < 0.05; ***p < 0.01
B = Unstandardized regression coefficient; SE_B = standard error of the coefficient and β = standardized coefficient

Bank age is found to be positive and significant to the extent of social and environmental disclosures, but an insignificant predictor of the economic disclosure. The finding on the social disclosure is overall consistent with prior works by [Hossain and Reaz \(2007\)](#) on Indian banking and by [Liu and Anbumozhi \(2009\)](#) on Chinese firms. One of the possible reasons for this finding may be because banks are exposed more directly to the community. Banks that have been operating longer would probably have more social information to disclose in their annual reports. Older banks also invest in renewable energy, as well as protection of biodiversity. The regulations imposed by central banks mandate them to invest in renewable energy. This may have a significant effect on the older banks' environmental disclosure.

Bank profitability is found to be a significant and positive predictor of the extent of all CSR disclosure categories. The findings are consistent with works – in both developed countries ([Branco and Rodrigues, 2008](#); [Gamerschlag et al., 2011](#); [Tsoutsoura, 2004](#)) and developing countries ([Hossain and Reaz, 2007](#); [Menassa, 2010](#); [Visser, 2008](#)). Thus, it can be concluded that more profitable banks disclose more CSR information than less profitable banks in their annual report.

5. Conclusion

As a developing country, Nepal has experienced great changes in corporate social disclosures in recent years due to greater public awareness, better knowledge and rapid growth of communication and technologies. Financial sectors are ahead of other business sectors in Nepal in terms of growth and innovation. Banks are operating via joint ventures with foreign banks to boost investments in different sectors of the Nepalese economy.

In general, the results of this study suggest that the CSR disclosure made by Nepalese banks is mostly descriptive in nature, where most of the banks disclosed primarily on charity, donations, scholarships and health initiatives. The disclosed items in the annual reports of the sample banks are contained in a few paragraphs or less than a page. The extent of CSR disclosure in Nepalese banks is low, which is consistent with CSR disclosure of other developing countries such as Bangladesh ([Khan et al., 2009](#)) and transitional countries such as Indonesia ([Djajadikerta and Trireksani, 2012](#); [Gunawan et al., 2009](#); [Trireksani and Djajadikerta, 2016](#)), India ([Hossain and Reaz, 2007](#)) and China ([McDonald and Lai, 2011](#)).

Quantitative results suggest that Nepalese banks have disclosed more information on economic disclosure compared to other levels of disclosure, followed by social disclosure, in which donations and charity are the most disclosed and employee health and safety and product responsibility are the least disclosed items. Environmental disclosure is the least disclosed category in the annual reports of Nepalese banks. Most of the banks had disclosed renewable energy as per the regulation mandated by the government of Nepal.

Correlation analysis and multiple regression analyses were conducted to predict the relationship between influencing factors and the extent of CSR disclosure. Bank size and bank profitability are found to be significant positive predictors of economic, social, environmental and overall CSR disclosures. It overall indicates that larger and more profitable Nepalese banks disclose more CSR information than smaller banks. Bank size is found to be significant as a positive predictor of social and environmental disclosures.

This study has several implications. Firstly, it supports the growing literature on CSR by documenting the importance of CSR in the financial sector from a developing country perspective. Secondly, in general, the findings of this study provide some insights for the regulators (especially the central bank, NRB), policymakers and bankers in Nepal. NRB is in

charge of monitoring and implementing different rules and regulations toward all the banking institutions in Nepal. It can encourage all the banking institutions to disclose voluntarily on different aspects of CSR. Relevant policymakers could use the findings in their efforts to develop relevant CSR policies. This study can also be a milestone for the Nepalese banks to understand the current status of CSR disclosure and factors that affect their disclosure activities.

This study is subject to some limitations. Firstly, there is an issue of generalization. The samples are only from the commercial and developing banks of Nepal, and hence the findings cannot be generalized to other banking sectors. Secondly, the independent variables – size and profitability – are measured only by market capitalization and net profit after tax, respectively. Bank size and bank performance can be measured in many other ways. Further research may investigate other measures of the extent of bank size and performance, and other potential factors that affect the extent of CSR disclosure in the Nepalese banks.

Note

1. https://www.theglobaleconomy.com/Nepal/wb_political_stability/.

References

- Abdolmohammadi, M.J. (2005), "Intellectual capital disclosure and market capitalization", *Journal of Intellectual Capital*, Vol. 6 No. 3, pp. 397-416.
- Aguilera, R.V., Rupp, D.E., Williams, C.A. and Ganapathi, J. (2007), "Putting the S back in corporate social responsibility: a multilevel theory of social change in organizations", *Academy of Management Review*, Vol. 32 No. 3, pp. 836-863.
- Akhtaruddin, M. (2005), "Corporate mandatory disclosure practices in Bangladesh", *The International Journal of Accounting*, Vol. 40 No. 4, pp. 399-422.
- Amaeshi, K.M. and Crane, A. (2006), "Stakeholder engagement: a mechanism for sustainable aviation", *Corporate Social Responsibility and Environmental Management*, Vol. 13 No. 5, pp. 245-260.
- Baughn, C.C. and McIntosh, J.C. (2007), "Corporate social and environmental responsibility in Asian countries and other geographical regions", *Corporate Social Responsibility and Environmental Management*, Vol. 14 No. 4, pp. 189-205.
- Bayoud, N.S., Kavanagh, M. and Slaughter, G. (2012), "Factors influencing levels of corporate social responsibility disclosure by Libyan firms: a mixed study", *International Journal of Economics and Finance*, Vol. 4 No. 4, pp. 13-29.
- Belal, A.R. and Cooper, S. (2011), "The absence of corporate social responsibility reporting in Bangladesh", *Critical Perspectives on Accounting*, Vol. 22, pp. 654-667.
- Bhatia, A. and Makkar, B. (2019), "CSR disclosure in developing and developed countries: a comparative study", *Journal of Global Responsibility*, Vol. 11 No. 1, pp. 1-26.
- Branco, M.C. and Rodrigues, L.C. L. (2008), "Communication of corporate social responsibility by Portuguese banks", *Corporate Communications: An International Journal*, Vol. 11 No. 3, pp. 232-248.
- Carnevale, C., Mazzuca, M. and Venturini, S. (2012), "Corporate social reporting in European banks: the effects on a firm's market value", *Corporate Social Responsibility and Environment Management*, Vol. 19, pp. 159-177.
- Chapple, W. and Moon, J. (2005), "Corporate social responsibility in Asia: Seven country study of CSR website reporting", *Business and Society*, Vol. 44 No. 4, pp. 415-441.
- Chau, G.K. and Gray, S.J. (2002), "Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore", *The International Journal of Accounting*, Vol. 37 No. 2, pp. 247-265.

- Cooke, T.E. (1992), "The impact of size, stock market listing and industry type on disclosure in the annual reports of Japanese listed corporations", *Accounting and Business Research*, Vol. 22 No. 87, pp. 229-237.
- Cooke, T.E. (1993), "Disclosure in Japanese corporate annual reports", *Journal of Business Finance and Accounting*, Vol. 20 No. 4, pp. 521-535.
- Deegan, C. (2002), "Introduction: the legitimising effect of social and environmental disclosures—a theoretical foundation", *Accounting, Auditing and Accountability Journal*, Vol. 15 No. 3, pp. 282-311.
- Deegan, C. (2008), "Environmental costing in capital investment decisions: Electricity distributors and the choice of power poles", *Australian Accounting Review*, Vol. 18 No. 1, pp. 2-15.
- Deegan, C. (2014), "An overview of legitimacy theory as applied within the social and environmental accounting literature", in Jeffrey, U., Jan, B. and Brendan, O.D. (Eds), *Sustainability Accounting and Accountability*, Routledge, New York, NY, pp. 248-272.
- Djajadikerta, H.G. and Trireksani, T. (2012), "Corporate social and environmental disclosure by Indonesian listed companies on their corporate web sites", *Journal of Applied Accounting Research*, Vol. 13 No. 1, pp. 21-36.
- El-Bannany, M. (2007), "A study of determinants of social disclosure level in UK banks", *Journal of Corporate Ownership and Control*, Vol. 5 No. 1, pp. 120-138.
- Fortanier, F., Kolk, A. and Pinkse, J. (2011), "Harmonization in CSR reporting", *Management International Review*, Vol. 51 No. 5, pp. 665-696.
- Gamerschlag, R., Moller, K. and Verbeeten, F. (2011), "Determinants of voluntary CSR disclosure: empirical evidence from Germany", *Review of Managerial Science*, Vol. 5, pp. 233-262.
- Giner, I. (1997), "The influence of company characteristics and accounting regulation on information disclosed by Spanish firms", *European Accounting Review*, Vol. 6 No. 1, pp. 45-68.
- Gray, R., Kouhy, R. and Lavers, S. (1995), "Constructing a research database of social and environmental reporting by UK companies", *Accounting, Auditing and Accountability Journal*, Vol. 8 No. 2, pp. 78-101.
- Gujarati, D.N. (1995), *Basic Econometrics*, McGraw Hill, New York, NY.
- Gunawan, J., Djajadikerta, H.G. and Smith, M. (2009), "An examination of corporate social disclosure in the annual reports of Indonesian listed companies", *Asia-Pacific Centre for Environmental Accountability Journal*, Vol. 15 No. 1, pp. 13-36.
- Guthrie, J. and Farneti, F. (2008), "GRI sustainability reporting by Australian public sector organizations", *Public Money and management*, Vol. 28 No. 6, pp. 361-366.
- Hamid, A. (2004), "Corporate social disclosure by banks and finance companies: Malaysian evidence", *Corporate Ownership and Control*, Vol. 1 No. 4, pp. 118-130.
- Haniffa, R.M. and Cooke, T.E. (2005), "The impacts of culture and governance on corporate social reporting", *Journal of Accounting and Public Policy*, Vol. 24, pp. 391-430.
- Hassan, O.A., Giorgioni, G. and Romilly, P. (2006), "The extent of financial disclosure and its determinants in an emerging capital market: the case of Egypt", *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 3 No. 1, pp. 41-67.
- Heal, G. (2005), "Corporate social responsibility: an economic and financial framework", *Geneva Paper I-Iss P*, Vol. 30 No. 3, pp. 387-409.
- Holder-Webb, L., Cohen, J., Nath, L. and Wood, D. (2008), "A survey of governance disclosures among US firms", *Journal of Business Ethics*, Vol. 83 No. 3, pp. 543-563.
- Hossain, M. and Reaz, M. (2007), "The determinants and characteristics of voluntary disclosure by Indian banking companies", *Corporate Social Responsibility and Environment Management*, Vol. 14, pp. 274-288.
- Hrshleifer, D. (2008), "Managerial reputation and corporate investment decisions", *Financial Management*, Vol. 22 No. 2, pp. 145-160.

- Idemudia, U. (2011), "Corporate social responsibility and developing countries: moving the critical CSR research in agenda in Africa forward", *Progress in Development Studies*, Vol. 11 No. 1, pp. 1-18.
- Ioannou, I. and Serafeim, G. (2019), "The consequences of mandatory corporate sustainability reporting", in McWilliams, A., Rupp, D.E., Siegel, D.S., Stahl, G.K. and Waldman, D.A. (Eds), *The Oxford Handbook of Corporate Social Responsibility: Psychological and Organizational Perspectives*, Oxford University Press, Oxford, pp. 452-489.
- Jacob, C.K. (2012), "The impact of financial crisis on corporate social responsibility and its implications for reputation risk management", *Journal of Management and Sustainability*, Vol. 2 No. 2, pp. 259-275.
- Jamali, D. and Mirshak, R. (2007), "Corporate social responsibility (CSR): theory and practice in a developing country context", *Journal of Business Ethics*, Vol. 72 No. 3, pp. 243-262.
- Khan, M.H.U.Z., Halabi, A.K. and Samy, M. (2009), "Corporate social responsibility (CSR) reporting: a study of selected banking companies in Bangladesh", *Social Responsibility Journal*, Vol. 5 No. 3, pp. 344-357.
- Kennedy, P. (1992), *A Guide to Econometrics*, Blackwell, Oxford.
- Kiran, R. and Sharma, A. (2011), "Corporate social responsibility: a corporate strategy for new business opportunities", *Journal of International Business Ethics*, Vol. 4 No. 1, pp. 10-17.
- Krippendorff, K. (2004), "Reliability in content analysis", *Human Communication Research*, Vol. 30 No. 3, pp. 411-433.
- Lee, M.D. (2011), "Configuration of external influences: the combined effects of institutions and stakeholders on corporate social responsibility strategies", *Journal of Business Ethics*, Vol. 102 No. 2, pp. 281-298.
- Lioui, A. and Sharma, Z. (2012), "Environmental corporate social responsibility and financial performance: disentangling direct and indirect effects", *Ecological Economics*, Vol. 78, pp. 100-111.
- Liu, X. and Anbumozhi, V. (2009), "Determinant factors of corporate environmental information disclosure: an empirical study of Chinese listed companies", *Journal of Cleaner Production*, Vol. 17 No. 6, pp. 593-600.
- Lu, Y. and Abeysekera, I. (2015), "What do stakeholders care about? Investigating corporate social and environmental disclosure in China", *Journal of Business Ethics*, Vol. 144 No. 1, pp. 169-184.
- Mankelov, G. and Quazi, A. (2007), "Factors affecting SMEs motivations for corporate social responsibility", *Journal of Business Ethics*, Vol. 6 No. 7, pp. 2367-2374.
- Marston, C.L. and Shrive, P.J. (1991), "The use of disclosure indices in accounting research: a review article", *The British Accounting Review*, Vol. 23 No. 3, pp. 195-210.
- Mateescu, R.A. (2015), "Corporate governance disclosure practices and their determinant factors in European emerging countries", *Journal of Accounting and Management Information Systems*, Vol. 14 No. 1, pp. 170-192.
- McDonald, L.M. and Lai, C.H. (2011), "Impact of corporate social responsibility initiatives on Taiwanese banking customers", *International Journal of Bank Marketing*, Vol. 29 No. 1, pp. 50-63.
- Menassa, E. (2010), "Corporate social responsibility: an exploratory study of the quality and extent of social disclosures by Lebanese commercial banks", *Journal of Applied Accounting Research*, Vol. 11 No. 1, pp. 4-23.
- Moyeen, A. and West, B. (2014), "Promoting CSR to foster sustainable development: attitudes and perceptions of managers in a developing country", *Asia-Pacific Journal of Business Administration*, Vol. 6 No. 2, pp. 97-115.
- Naser, K. and Hassan, Y. (2013), "Determinants of corporate social responsibility reporting: evidence from an emerging economy", *Journal of Contemporary Issues in Business Research*, Vol. 2 No. 3, pp. 56-74.

- Nepal Rastra Bank (2016), "Annual report 2016/2017", available at: https://www.nrb.org.np/contents/uploads/2019/12/Annual-Report-2073_2074.pdf (assessed 20 July 2018).
- Ong, T. and Djajadikerta, H.G. (2018), "Corporate governance and sustainability reporting in the Australian resources industry: an empirical analysis", *Social Responsibility Journal*, Vol. 16 No. 1, pp. 1-14.
- Ong, T., Trireksani, T. and Djajadikerta, H.G. (2016), "Hard and soft sustainability disclosures: Australia's resources industry", *Accounting Research Journal*, Vol. 29 No. 2, pp. 198-217.
- Paul, S. (2014), "Deutsche Bank won't fund Australia coal port expansion near reef", available at: <https://www.reuters.com/article/australia-coal-deutsche-bank/deutsche-bank-wont-fund-australia-coal-port-expansion-near-reef-idINKBN0E300G20140523> (accessed 18 August 2018).
- Quazi, A.M. and O'Brien, D. (2000), "An empirical test of a cross-national model of corporate social responsibility", *Journal of Business Ethics*, Vol. 25 No. 1, pp. 33-51.
- Reverte, C. (2009), "Determinants of corporate social responsibility disclosure ratings by Spanish listed firms", *Journal of Business Ethics*, Vol. 88 No. 2, pp. 351-366.
- Shah, K.K. (2012), "Corporate social responsibility in Nepal", *Academic Voices: A Multidisciplinary Journal*, Vol. 2 No. 1, pp. 33-37.
- Sharma, E. (2019), "A review of corporate social responsibility in developed and developing nations", *Corporate Social Responsibility and Environmental Management*, Vol. 26 No. 4, pp. 712-720.
- Sigurthorsson, D. (2012), "The Icelandic banking crisis: a reason to rethink CSR?", *Journal of Business Ethics*, Vol. 111 No. 2, pp. 147-156.
- The Carter Center (2014), *Political Transition Monitoring in Nepal, 2009-2014*, available at: <http://aceproject.org/ero-en/regions/asia/NP/nepal-final-report-political-transition-monitoring> (accessed 28 August 2015).
- Thompson, P. and Cowton, C.J. (2004), "Bringing the environment into bank lending: implications for environmental reporting", *The British Accounting Review*, Vol. 36, pp. 197-218.
- Trireksani, T. and Djajadikerta, H.G. (2016), "Corporate governance and environmental disclosure in the Indonesian mining industry", *Australasian Accounting Business and Finance Journal*, Vol. 10 No. 1, pp. 18-28.
- Tsoutsoura, M. (2004), "Corporate social responsibility and financial performance", Working Paper, 1 March, University of California Berkley, California.
- Turker, D. (2009), "Measuring corporate social responsibility: a scale development study", *Journal of Business Ethics*, Vol. 85, pp. 411-427.
- Upadhyay-Dhungel, K. and Dhungel, A. (2012), "Corporate social responsibility reporting practices in the banking sectors of Nepal", *Banking Journal*, Vol. 3 No. 1, pp. 61-78.
- Visser, W. (2008), "Corporate social responsibility in developing countries", in Crane, A., McWilliams, A., Matten, D., Moon, J. and Siegel, D.S. (Eds), *The Oxford Handbook of Corporate Social Responsibility*, Oxford University Press, Oxford, pp. 473-479.
- Visser, W. and Macintosh, A. (1998), "A short review of the historical critique of Usury", *Accounting, Business and Financial History*, Vol. 8 No. 2, pp. 175-189.
- Vives, A. (2006), "Social and environmental responsibility in small and medium enterprises in Latin America", *Journal of Corporate Citizenship*, Vol. 21 No. 12, pp. 39-50.
- Ward, H. (2004), *Public Sector Roles in Strengthening Corporate Social Responsibility: Taking Stock*, World Bank, Washington, DC.
- Weber, O. (2005), "Sustainability benchmarking of European banks and financial service organizations", *Corporate Social Responsibility and Environmental Management*, Vol. 12, pp. 73-87.
- Zhang, J., Djajadikerta, H.G. and Zhang, Z. (2018), "Does sustainability engagement affect stock return volatility? Evidence from the Chinese financial market", *Sustainability*, Vol. 10, p. 3361.

Zhang, J., Djajadikerta, H.G. and Trireksani, T. (2019), "Corporate sustainability disclosure's importance in China: financial analysts' perception", *Social Responsibility Journal*, Vol. ahead-of-print No. ahead-of-print, Online first, available at: <https://www.emerald.com/insight/content/doi/10.1108/SRJ-10-2018-0272/full/html> (accessed 28 December 2019).

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