GREEN FINANCING AND BANK PROFITABILITY: EMPIRICAL EVIDENCE FROM THE BANKING SECTOR IN BANGLADESH

Taslima Julia
Salina Kassim[1]

Abstract

Green financing is a relatively new phenomenon in Bangladesh's banking sector following its introduction in 2011 by the Central Bank of Bangladesh. All 56 schedule banks in Bangladesh are required to adopt the green financing policies as part of the effort to promote environmentally friendly practices in their banking operations. The majority of these banks showed eagerness to set up their own green banking guidelines and green unit on time, although the seriousness to implement all the sections of the policy vary, indicating further motivation is needed to ensure actual implementation by all banks. Being a commercial entity motivated by profit, it would be interesting to investigate the relationship between green financing and profitability of the commercial banks. This paper aims to investigate the relation between profitability and green financing based on the experience of 30 sample banks in Bangladesh. Several profitability ratios, namely ROE, ROA, AU and ROD have been used to find the relation with green financing utilized funds for three years 2012, 2013 and 2014. The study finds that there are significant relationships among different banks of Bangladesh such as conventional commercial banks, Islamic commercial banks, state-owned commercial banks and foreign commercial banks in terms of profitability ratios. In particular, the ROA, ROD and AU have significant positive relationships with green financing of the banks, while the ROE showed no significant relationship with green financing of the banks.

[1] Corresponding author.

Keywords: green financing, profitability, green banking practices, banks, Bangladesh

1. INTRODUCTION

In general, the world economy today is facing a huge challenge in dealing with environmental issues and their related consequences. Along with business firms, consumers and the general public are now very much aware of the importance of environmental conservation to ensure ecological sustainability. Consequently, consumer demand has influenced business organizations to modify business activities and strategies to ensure protection of natural resources and the environment. The financial sector, especially the banks, have the potential to play an important role in encouraging ecological sustainability which is one of the most important factors driving the policy-making process of the business community.[2]. Through the coordinated efforts of the government, private sector, and individuals, the current environmental degradation situation, however, can only be improved. Banks and financial institutions are supporting and supplementing these efforts aimed at a greener environment in a variety of ways. In this regard, the central bank of Bangladesh – the Bangladesh Bank – has recently introduced the green banking policy and governance and fostered the implementation of it by all financial institutions and banks, giving high priority for the sustainable growth of the economy.

Green finance brings together both the world of finance and business with ecologically-friendly behavior. Green finance and green banking has made a great contribution to the transition towards resource-efficient and low carbon industries.[3]. Indirectly, banks can have significant influence on production, business and other economic activities through their financing activities by holding a unique position in an economic system. Large banks are currently very concerned about energy and water efficiency and waste

[2] Kanak Tara, Saumya Singh and Ritesh Kumar, "Green Banking for Environmental Management: A Paradigm Shift," *Current World Environment* 10 (3), (2015).
[3] Saritha Bahl, "The Role of Green Banking in Sustainable Growth," *International Journal of Marketing, Financial Services and Management Research* 1 (2), (2012).

reduction. Banks that are particularly concerned about environmentally friendly activities known as “green banks” or “environmentally-responsible banks” could influence socially responsible behavior of other businesses while improving their own standard.

In Bangladesh, the concern and commitment of the country to protect environmental conservation is pressing as the country was ranked fourth as the world’s most populated nation.[4] In the context of banking, the need to ensure sustainable banking practices is well reflected by the comprehensive policy guidelines for green banking established by the Bangladesh Bank. The guideline is to be executed in three phases with each phase with its own time limit ending December 2013 (Circular, 2011, February). All the 56 schedule banks in the country are required to adopt the green financing policies for substantial economic development and promoting environmentally friendly practices in their banking operations. The majority of the banks have shown enthusiasm towards adopting the green financing policies by setting up their own internal green policy guidelines and green unit on time. Despite this, the seriousness to implement the whole policy program varies, indicating a profit motive for pursuing green initiatives is needed to expedite the effort. As the ultimate motive of the banks are to be profitable, although they may have different operational motives, to inspire the bankers to be more thoughtful in applying green policy, this study aims to investigate the relation between profitability and green financing. The study considers 30 commercial banks in Bangladesh and these banks have been selected based on data availability. Several profitability ratios, namely – return on equity (ROE), return on assets (ROA), asset utilization ratio (AU) and return on deposits (ROD) are used to determine their relationships with green financing utilized funds (GUF) for three consecutive years of 2012, 2013 and 2014, following the implementation of the green financing policy by the Bangladesh Bank in 2011. Data has been collected from the annual reports and green reports of each sample bank.

---

[4] World Health Organization, “Dirtiest Cities of the World,” *The Daily Star*, May 9, 2014.

2. LITERATURE REVIEW

Numerous researches have been conducted all over the world for the last three decades showing increasingly clear correlation between corporate profitability and environmental performances. Empirical studies have established that pursue objectives that are in line with the environmental criteria realized stronger financial returns than the overall market and weaker return earned companies scored poorly.[5] In a study considering over 100 South African carbon disclosure projects (CDP) undertaken by companies on the Johannesburg Stock Exchange (JSE), it was found that there was a positive direct correlation between profitability and the companies 'green investment'.[6]

An empirical study on 652 US manufacturing firms investigating the relationship between profitability and high environmental performances found that there are associations between low carbon pollution with higher firms valuation, with firms fixed characteristics and strategic positions contributing to the association.[7] Similarly, a study by Iwaka and Okada on 268 Japanese manufacturing firms over the period of 2004-2008 showed that waste emission has significant positive impact on the financial performance of the firms, whereas greenhouse gas reduction has positive relation to ROE of the firms.[8] Earnhart and Lizal conducted a study to find out the links from the environmental performance of firms that are operational in transitional economy to revenues, costs, and profits using an unbalanced panel of Czech firms over the period of 1996 to

---

[5] Christopher J. Murphy, "The Profitable Correlation Between Environmental and Financial Performance : A Review of the Research" a research commissioned by Light Green Advisors, Inc. accessed file:///C:/Users/User/Desktop/P&GF folder/pc (1).pdf

[6] Fortune Ganda, Collins C. Ngwakwe, & Cosmas M. Ambe, "Profitability as a Factor that Spurs Corporate Stock Exchange (JSE) Listed Firms" *Managing Global Transitions* 13 (3), (2013).

[7] Andrew A. King, & Michael J. Lenox, "Does It Really Pay to be Green ? An Empirical Study of Firm Environmental and Financial Performance" *Journal of Industrial Ecology* 5 (1), (2001).

[8] Hiroki Iwata, & Keisuke Okada, "How Does Environment Performance Affect Financial Performance? Evidence from Japanese Manufacturing Firms" *Ecological Economics* 70 (9), (2011).

1998.[9] Their results specified strongly that better environmental performance increases profitability by driving down costs more than it drives down revenues, depending on the considerable regulatory inspection exercised by ecological agencies and the main pollution control method applied by firms during the period of study. This result is inconsistent with the common perception that cost increases during the initial period of transition to environmental friendly business from traditional business pattern.

A literature review has been conducted by Brouwers, Schoubben, Hulle and Uytbergen which basically focuses on the literatures that inspected the impact of corporate contamination as well as corporate creativities to lessen pollution keeping both within a controlled and an intended structure.[10] The study discloses that regulation has failed to improve the association between environmental and financial performance. Governmental bodies legislative action simply creates awareness among stakeholders as well as set a benchmark against good and bad environmental performance. It is the stakeholders who can truly force the firms to approve more sustainable business models. It means that the initiatives to be environmental friendly should be initiated by the firm's stakeholders themselves to be sustainable in nature.

A study on the impact of the environmental performance on financial performance in the Indian banking sector found that though there are significant relationship between net income and profitability, no relationship has been observed between green banking and profitability of banks. One of the reasons for the insignificant relationship between the two is the infancy stage of green banking and environmental initiatives in the Indian banking sector. The study suggests that a big push is required to reap the

---

[9] Dietrich Earnhart, & Lubomir Lizal, "Does Better Environmental Performance Affect Revenues, Cost, or Both? Evidence from a Transition Economy." In William Davidson Institute Working Paper Series 856, (William Davidson Institute: University of Michigan, 2007).

[10] Roel Brouwers, Frederiek Schoubben, Cynthia Van Hulle, & Steve Van Uytbergen, "The Link between Corporate Environmental Performance and Corporate Value: A Literature Review" *Review of Business and Economic Literature* 58 (4), (2014).