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# Gender Diversity in the Boardroom and Financial Performance of Commercial Banks: Evidence from Bangladesh

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**Abstract:** In today's corporate world, board diversity is a much talked-about topic and gender diversity is an important aspect of board diversity. Gender diversity refers to the presence of women on corporate boards of directors. In this paper, an effort has been made to examine whether an association exists between the financial performance of commercial banks in Bangladesh and presence of women on the boards of directors of these banks and in order to examine the existence of this association, a non-parametric test, namely Kruskal-Wallis H test has been conducted. But the test has yielded conflicting results at different significance levels.

**Keywords:** Gender diversity, Board of Directors, Financial Performance and Commercial Banks.

#### Introduction

Board diversity or the co-existence of men and women of different nationalities, races, religions and ages on the board of directors is a much talked-about topic in today's corporate world. Gender diversity in the boardroom refers to the presence of women on the board of directors and is an important aspect of board diversity. Corporate boardrooms are not yet much diverse as far as gender is concerned because presence of women on boards of directors is limited worldwide. In Canada, for example, from 2001 to 2003, 51.4 percent companies had no women directors (Catalyst, 2003) and in Britain, in 2004, 31 percent of the FTSE 100 had no women directors (Catalyst, 2005). In addition, according to data from the Ethical Investment Research Service (2004), women board directors were less than 10 percent of the total number of directors of companies headquartered in Australia, the United Kingdom, Germany, France, Singapore, Hong Kong, Spain, Italy, and Japan. Only Norway (greater than 25 percent), where federal legislation requires all boards to have at least two women by 2006 and to have 40 percent women by 2008, and Sweden (almost 20 percent) had percentages of women directors greater than those in the United States (Catalyst, 2005). When women are lagging far behind their male counterparts in the rat race of board directorship in developed countries, their situation in a developing country like Bangladesh beggars description.

But the situation has started changing. The existing literature reveals a slow but steady rise in female presence on boards of directors of companies across the globe. A census conducted by

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Catalyst (2005) reports an average increase of 0.5 percentage points or approximately 21 new board seats for women, per year. A joint survey conducted by Heidrick & Struggles and Women Corporate Directors (2006) reveals that women are continuously making inroads into the boardroom. According to a Heidrick & Struggles analysis of proxy reports of Fortune 500 companies, women hold 18.4 percent of nominating committee seats, as opposed to 15.1 percent of board seats overall. "Progress, however slight, is being made, though. The 15.1 percent of Fortune500 board seats held by women represents an increase of 0.7 percent since 2003" (Catalyst, 2005). A survey conducted by the Women Entrepreneurship Development Project of Dhaka Chamber of Commerce and Industry reveals that the number of women entrepreneurs has risen from a few dozen in the 1980s to more than 5,000 in 2004 in Bangladesh. Most of these women run handicrafts and other businesses and some of them have become so successful that they even command respect in the male dominated society of Bangladesh but when it comes to corporate directorship, men still largely outnumber women.

Researchers assume that gender diversity in the boardroom has certain implications. Using data from countries around the world, a number of studies on the relationship between gender diversity and firm performance have been conducted but, to the knowledge of the authors, not a single study of such genre has been undertaken in Bangladesh. The present study examines whether gender diversity affects the financial performance of commercial banks in Bangladesh, as gender diversity is very common in these financial institutions.

## Nature, Scope and Objective of the Study

The present study is exploratory in nature and it encompasses only the commercial banks operating in Bangladesh. The objective of the current study is to examine whether the existence of gender diversity affects the financial performance of commercial banks in Bangladesh.

#### Literature Review

While significant research has been conducted in the general areas of diversity, corporate boards and firm performance, relatively limited number of gender diversity studies has been undertaken. Studies on the relationship between gender diversity and firm performance have produced conflicting results.

Zahra and Stanton (1998) examined the relationship between gender diversity and firm financial performance. They worked with 100 Fortune 500 firms and they used return on equity (ROE), profit, earnings per share, dividend per share and profit margin on sales as performance variables. Zahra and Stanton did not find a statistically significant relationship between gender diversity and firm financial performance.

Carter, Simkins and Simpson (2003) examined the relationship between board gender-diversity and firm value for the Fortune 1000 firms. Using Tobin's Q as a measure of firm value, they found statistically significant positive relationships between the percentage of women on the board of directors and firm value as well as presence of women on the board of directors and firm value.

Shrader, Blackburn and Iles (1997) reported a negative relationship between the percentage of female board members and firm financial performance. They analyzed around 200 Fortune 500 firms. They used return on equity (ROE) and return on assets (ROA) as measures for firm financial performance.

Robinson and Dechant (1997) built a case for the importance of corporate diversity. They believe that diversity affects a firm's financial value in both the short and long run. They postulated that: (a) corporate diversity promotes a better understanding of the marketplace; (b) diversity increases creativity and innovation; (c) diversity produces more effective problem solving; (d) diversity enhances the effectiveness of corporate leadership; and (e) diversity promotes effective global relationships. If one accepts that women add to the diversity of corporate leadership, then the proposed benefits can be reaped by having women in the boardroom.

Fondas and Sassalos (2000) argued that diversity in board composition via greater female representation would lead to improved board governance and top management control.

Investor Relations Business (1999) examined the impact of board diversity on shareholders' value; they argued that even though no direct link between increased board diversity and an increase in shareholder value had yet been documented, diversity was always a part of exemplary corporate governance and improved the professionalism of the board, which "hopefully" translated into a boosted bottom-line.

Anastasopoulos, Brown and Brown (2002) found that gender diversity changed the functioning and deliberative style of the board in clear and consistent ways.

Finally, Heinfeldt (2005) found a positive relationship between the percentage of female board directors and market value added (MVA). He used MVA as a measure of financial performance.

# Methodology

#### Sample and Data

The banking system of Bangladesh is composed of a variety of banks. Presently there are forty-nine scheduled banks including nationalized commercial banks, private banks, foreign banks, specialized banks and development banks. Out of these forty-nine banks, only twenty-five private banks are listed with the Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE). Since foreign banks are not listed with either of the stock exchanges of Bangladesh, necessary financial data of those banks are not available. Multi-period financial data of unlisted banks are not available either. Consequently, the sample for the current study initially included twenty-five private banks listed with the DSE and CSE. But necessary data on ten banks for the period of 2002-2005 were not available. Therefore, the initial sample of 25 turned into a sample of 15 banks.

Financial and non-financial data for the present study have been collected for the period of 2002-2005 from the annual reports of 15 listed banks. Based on the data on board composition, banks have been grouped into two categories: banks with gender diversity and banks without gender diversity; and these two categories have served as two sub-samples. 9 banks have been found to have gender diversity in the boardroom and 6 banks have been found to be homogeneous during the period of 2002-2005. The names of the banks have not been disclosed in order to maintain confidentiality.

#### Measures of Financial Performance

In the present study, return on equity (ROE) and return on assets (ROA) have been used as financial performance measures for banks.

ROE has been calculated for each year from 2002 to 2005 as a ratio of net profit after tax to average shareholders' equity.

ROA has been calculated for each year from 2002 to 2005 as a ratio of net profit after tax to average assets.

## Hypothesis Development

In the light of the existing literature and in line with the objective of the study, the following null hypothesis has been developed:

 $H_o$ : There is no significant difference between commercial banks with gender diversity and commercial banks without gender diversity in terms of financial performance.

In order to test the null hypothesis, non-parametric test Kruskal-Wallis H tests have been conducted at 0.10, 0.05 and 0.01 significance levels.

#### Kruskal-Wallis H Test

The Kruskal-Wallis H test is for use with k independent samples, where k is equal to or greater than 5, and measurement is at least ordinal. The Kruskal-Wallis H test is a non-parametric test for deciding whether k samples come from the same population. Because the samples are independent, they can be of different sizes.

If  $n_i$  (i=1,2... k) represents the sample sizes for each of the k groups (i.e., samples) in the data and R represents the sum of the ranks for group i, then the Kruskal-Wallis test statistic is:

$$H = \frac{12}{n(n+1)} \sum_{i=1}^{k} \frac{R_1 2}{n_1} - 3(n+1)$$

where n represents the total size of all samples taken together, i.e.,  $n=n_1+n_2+...+n_k$ .

#### Results

The Kruskal-Wallis H test has yielded conflicting results. There is mixed support for the hypothesis developed in the present study.

Year Value of H Significance Levels  $\alpha = .05$  $\alpha = .10$  $\alpha = .01$ 2002 3.55 **Critical Value** 2.17 64 2003 84 2004 6.13 2005

Table - 1: Effect of Gender Diversity on ROA

Table 1 provides the results for the Kruskal-Wallis H test for examining the effect of the gender diversity on the ROA. The results indicate that the null hypothesis may be rejected at the 0.10 significance level for 2002 and at both 0.05 and 0.10 significance levels for years 2004 and

2005. But the null hypothesis may be accepted at the 0.01 significance level for years 2002 through 2005 and at all three significance levels for the year of 2003.

Year Value of H Significance Levels  $\alpha = .10$  $\alpha = .05$  $\alpha = .01$ 2002 3.55 Critical Value 2003 3.55 6.64 84 8.00 2004 2005 3.55

Table-2: Effect of Gender Diversity on ROE

Table 2 provides the results of the Kruskal-Wallis H test for examining the effect of the gender diversity on the ROE. The results indicate that the null hypothesis may be rejected at the 0.10 significance level for years 2002 through 2005 but it may be accepted at both 0.05 and 0.01 significance levels for years 2002, 2003 and 2005. Only for 2004, the null hypothesis may be rejected at the three significance levels.

#### Conclusion

In the present study, a paradoxical relationship between gender diversity in the boardroom and financial performance of commercial banks in Bangladesh has been found to exist. But since the present study suffers from certain limitations, e.g., small sample size and unavailability of data for a period longer than 2002-2005, the finding needs to be interpreted with some caution. There is scope for further research on the same topic by taking a larger sample consisting of firms from different industries and by using other performance variables such as profit, earnings per share, dividend per share and profit margin on sales.

#### References

Anastasopoulos, V., D. Brown and D. Brown (2002), "Women on Boards: Not just the right thing ... but the 'bright' thing," *The Conference Board of Canada, Report*, 341-402.

Annual Reports of DSE (Dhaka Stock Exchange) and CSE (Chittagong Stock Exchange) Listed Commercial Banks for FY 2001-02, 2002-03, 2003-04, 2004-05 (surveyed from the library of The Securities and Exchange Commission and DSE).

Carter, D. A., B. J. Simkins and W. G. Simpson (2003), "Corporate Governance, Board Diversity, and Firm Value," Financial Review, 38: 33-53.

Catalyst (2003), "2003 Catalyst Census of Women Board Directors of Canada," New York: Catalyst, available at www.catalystwomen.org, accessed on 25.10.2006.

Catalyst (2005), "2005 Catalyst Census of Women Board Directors of the Fortune500," New York: Catalyst, at www.catalystwomen.org, accessed on 25.10.2006.

Fondas, N. and S. Sassalos (2000), "A Different Voice in the Boardroom: How the Presence of Women Directors Affects Board Influence over Management," *Global Focus*, 12: 13-22.

Investor Relations Business (1999), "More Board Diversity Tied to Increased Shareholder Value," Staff Report, available at www.catalystwomen.org, accessed on 25.10.2006.

Robinson, G. and K. Dechant (1997), "Building a Business Case for Diversity," *Academy of Management Executive*, 11: 21-30. Shrader, C. B., V. L. Blackburn and P. Iles (1997), "Women in Management and Firm Financial Value: An Exploratory Study," *Journal of Management Issues*, 9: 355-372.

http://www.eiris.org/ (Last access on November 01, 2006).