Multiple Banking Practices and its Impact on the Corporate Borrowers

— A Case Study of Bangladesh* —

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Abstract

This paper attempts to verify the existence and impact of multiple banking practices on corporate borrowers of Bangladesh. In doing so we have analyzed multiple borrowing with respect to availability of credit and interest rate charged. As methodology of the study, we have conducted literature survey and empirical analysis. The results of the analysis show that there is widespread practice of multiple borrowing among the corporate borrowers in Bangladesh. Finally, the results of the statistical analysis reveal that such practice enables firms to borrow at comparatively lower interest expense, but to suffer from limited access to credit.

Keywords: multiple banking practice, corporate borrowers, debt-equity ratio, interest expense

1. Introduction

1.1 Multiple Banking and Corporate Finance

In recent days multiple borrowing propensity of corporate firms in Ban-

gladesh is in increasing trend. As a result of this, banks are giving advice to firms as outsiders rather than insiders and have tended to keep away from firms facing financial constraints. Even banks may compel a firm for premature liquidation to protect its own interest (Ahmed, 1997). However, there are also opposite version of this statement. Two theses are competing: one asserts that multiple borrowing results in a desirable sharing of risks; the other, that the parcellization of loans substantially weakens the discipline exercised by the banks and make corporate borrowers more fragile (Fogilia et al., 1998).

In this background the objective of this paper is to verify the impact of multiple banking practices on the financial condition of the corporate borrowers in Bangladesh.

1.2 Objectives

The aim of this paper is to verify whether multiple banking relationships[1] in Bangladesh cause negative impact on the balance sheet of the borrower firms. And the more specific objectives are as follows:

1. To see the extent of interest spread variation of banks having different nature of lending relationship.

2. To verify whether borrowing relationship with a single bank or multiple banks enable firms to get loans easily and vice versa.

3. To review whether firms borrowing from a single bank or multiple banks can borrow at lower interest rates.

1.3 Methodology and Data

In order to verify the effect of single or multiple banking relationships on the fragility of financial standings of corporate borrowers, we have conduct-

ed literature survey to know the current state of multiple banking practices through out the world vis-à-vis Bangladesh. Then conducted numerical and statistical analysis by gathering data from various sources e.g., *Balance Sheet Analysis of Joint Stock Companies,* Statistics Department, Bangladesh Bank 2001, *Bangladesh Bank Bulletin, Economic Trends- Bangladesh Bank and Scheduled Bank Statistics.*

2. Multiple Banking Relationship

There are different studies citing the merits and demerits of multiple borrowing practices by firms. Empirical studies in different countries confirm a significant positive statistical connection between the intensity of the credit relationship, i.e. its relative exclusiveness and duration, and the availability of outside financing to the firm (Foglia et al. 1998). It has been shown that small US businesses with close banking relationships enjoy greater access to credit, but not at lower cost (Peterson and Rajan, 1994 & 1995). Findings relative to small Japanese firms are similar: those with tight credit relationships are more capital-intensive, indicating less cogent liquidity constraints on investment, but not higher profits, owing to their financial costs (Weinstein and Yafeh, 1994). Cole (1998) also concluded that potential lenders are less likely to extend credit to firms with multiple sources of financial services, in support of the theory that the private information, a financial institute generates about a firm, is less valuable when the firm deals with multiple sources of financial services.

While D'Auria, et al. (1998), found that for a given degree of concentration in overall lending relationships, a more intensive relationship with a single bank results in the latter's charging a lower rate. For the firm, a

privileged relationship thus appears preferable, at least until the share of its total borrowing gets so large as to confer a virtual lending monopoly for the bank (on the order of at least 80%). A further advantage of a close relationship with a bank, it has been argued, is less risk of sharp increases in interest rates during periods of tight money (Conigliani et al., 1997).

However, the advantages of multiple banking relationship have also been stressed in some studies. From firms' standpoint, analysts have pointed out the benefits of business relationships with a large number of banks, making it easier to handle a request for repayment by any one lender. In some cases firms have succeeded to lower the average cost of their loan observed empirically by setting the banks in direct competition. Moreover, by exploiting competition between banks, firms may also obtain credit without having to divulge detailed information on their current accounts and future projects (Foglia et al. 1998).

In the backdrop of the literature review we can conclude that, there are both merits and demerits in multiple banking relationship practices. Some of which might be true and some might be irrelevant for the banking system of Bangladesh, which is difficult to answer without any deep insight into the problem under discussion. Thus by taking this literature review as a background, let us now examine the case of Bangladeshi corporate firms in order to see whether or not multiple banking relationship is causing negative impact on the overall financial condition of the firms concerned.

3. Findings

In order to investigate the state of multiple banking practices in Bangladesh, a total of 155 joint stock companies listed in the Dhaka Stock Ex-

change are included in the analysis. Among which 73 were found to be maintaining borrowing relationship with a single bank and the rest 82 were having borrowing relationship with multiple banks (two or more banks). And some companies even maintain borrowing relationship with as many as eleven banks. Thus the propensity of corporate borrowers in Bangladesh to maintain multiple banking relationship is also very high. The more detailed findings of the study can be summarized as follows:
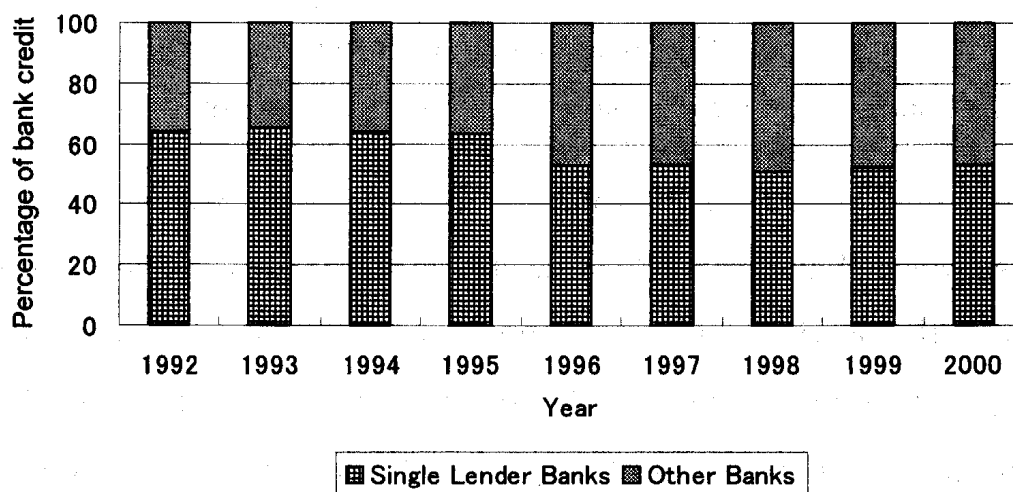

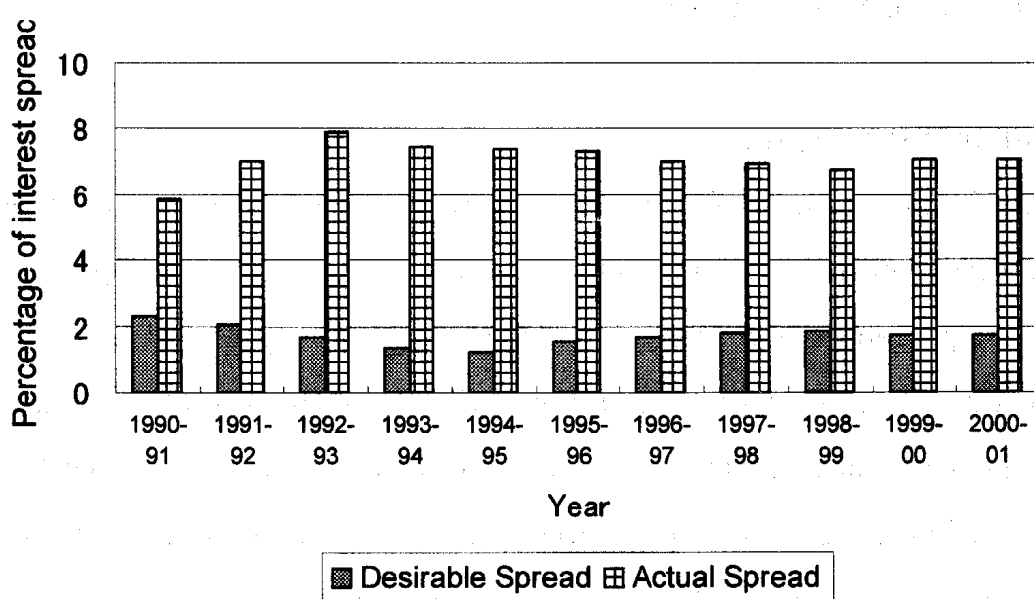Figure1. Share of bank credit: single lending bank vs. other banks
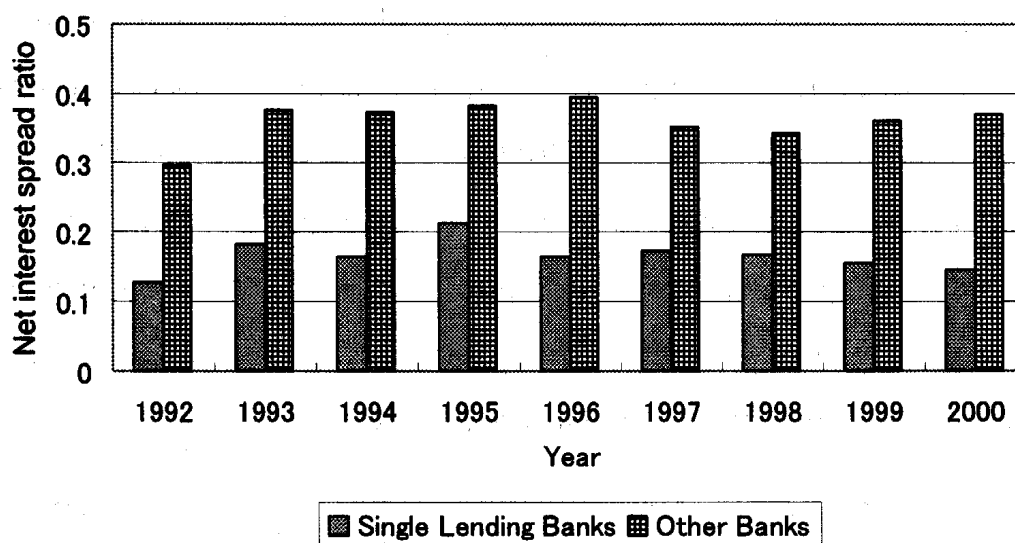

Figure2. Actual and desirable interest spread

Figure3. Comparative interest spread: single lending bank vs. other banks

3.1 Majority Share of the Banks Lending as Single Lender

As shown in Figure1, in Bangladesh, among the banks-Sonali, Agrani, Janata, NBL and IFIC Bank are identified as the banks, which are mainly lending to the sample firms as their sole or single bank[2]. These banks are lending approximately 55-65 percent of the total advances of all banks. Thus banks which are serving more as the single lender to firms are also providing most of the loans in Bangladesh.

3.2 Interest Rate Spread

In the banking sector of Bangladesh, spread between the deposit and lending interest rate is very high. As shown in Figure 2 the actual spread is as high as 7 percent, where the desirable spread is around 2 percent.

However, if we compare the status of the firms under study, we can find that the banks having single lending relationship with these firms have a lower net interest spread as compared to those, which do not have such kind of relationship (see Figure 3). Thus it is interesting to verify from the following analysis that, whether firms borrowing from these single lender banks

can borrow at lower interest rates too.

3.3 Empirical Analysis

3.3.1 Ratios Compared

Finally we have used t-tests of the differences between two means to find the significance of difference on two financial ratios, viz., *debt-equity ratio* and *ratio of interest expense to loans* calculated for all the sample companies by following the steps outlined below:

a) First, we have divided the companies into two categories; one having the borrowing relationship with only a single bank and another having the same relationship with two or more banks.

b) Next, applied t-tests to see whether there is any significant difference in *debt-equity ratio* and *ratio of interest expense to loans* between the companies having a single lending bank vis-à-vis companies having relationship with multiple banks.

The reasons for selecting these two ratios as possible parameters to view the impact of single or multiple banking relationships are discussed below:

(1) Debt-equity ratio (DER): It is the ratio of fixed liabilities to shareholder's equity and calculated as follows:

$$DER = \frac{TFL}{TSHE}$$

Where TFL, TSHE representing total fixed liabilities, total share holders' equity respectively, and fixed liabilities include loan from banks. A higher debt-equity ratio implies the dominance of bank loans as a source of financing. This ratio is also used as a proxy for estimating the strength of bank-firm relationship. A higher debt-equity ratio implies reliance of a firm on bank financing. If the firms are borrowing from a single bank and also have

a higher debt-equity ratio, then it can be concluded that, this close banking relationship resulting from dealings with less banks, makes it easier for a firm to get bank loans.

(2) Ratio of interest expense to loans (IELO): This ratio represents the total interest expense (TIE) to total loans outstanding (TLO) and is calculated as follows:

$$IELO = \frac{TIE}{TLO}$$

It is a direct indication of the effectiveness of close relationship with single or multiple banks. Firms possessing close banking relationship are assumed to be able to borrow at lower rates. As we have also discussed earlier that, for a given degree of concentration in overall lending relationships, a more intensive relationship with a single bank results in charging a lower rate. A further advantage of a close relationship with a bank, it has been argued, is less risk of sharp increases in interest rates during periods of tight money. Whether or not this statement also applies in case of Bangladesh can be proved from this ratio.

3.3.2 Test Results

Accordingly, DER and IELO ratios calculated for the respective group of companies having single or multiple lending banks are compared by t-test statistics. The equation used for estimating the difference between two means is the following:

$$t = \frac{(\overline{X_1} - \overline{X_2}) - (\mu_1 - \mu_2)}{\sqrt{\dfrac{\sigma_1^2}{n_1} + \dfrac{\sigma_2^2}{n_2}}} \qquad [1]$$

where, $\overline{X}_1$ is the mean of the sample taken from population 1, μ_1 is the mean of population 1, σ_1^2 is the variance of population 1, n_1 is size of the sample taken from population 1, $\overline{X}_2$ is the mean of the sample taken from population 2, μ_2 is the mean of population 2, σ_2^2 is the variance of population 2, n_2 is the size of the sample taken from population 2.[3]

The results of the t-tests are summarized through Table 1 and 2. Table 1 shows the results of the difference of means of *debt-equity ratio* between

Table 1 Debt-equity ratio

	Single Bank	Multiple Banks
Sample Size (valid N)	61	61
Mean	0.40	-0.14
S.D.	1.48	1.21
Median	0.12	0.16
t-test of paired samples:		
Difference in sample means	0.54	
t-Test Statistic	2.63	
P-Value	0.00	
Decision: Reject the null hypothesis		

Table 2 Ratio of interest expense to loans outstanding

	Single Bank	Multiple Banks
Sample Size (valid N)	61	61
Mean	0.57	0.33
S.D.	1.21	0.76
Median	0.18	0.14
t-test of paired samples:		
Difference in sample means	0.24	
t-Test Statistic	1.31	
P-Value	0.19	
Decision: Do not reject the null hypothesis		

companies having single bank vis-a-vis multiple banks. From the table we can see that the sample mean of the companies having single bank is higher than that of the companies having multiple banks.[4] The states of t-statistic and p-value indicates that the difference between these two categories of companies in debt-equity ratio is statistically significant ($p=0.00$), 5% level, and leads us to reject the null hypothesis that there is no difference between them.

On the contrary, the results of the difference of means of *ratio* of *interest expense to loans outstanding* between companies having single bank vis-à-vis multiple banks are summarized in Table 2. From the table we can see that the sample mean of the companies having single bank is higher than that of the companies having multiple banks. The states of t- statistic and p-value indicates that the difference between these two categories of companies in ratio of interest expense to loans outstanding is not statistically significant ($p=0.19$), 5% level, and leads us not to reject the null hypothesis that there is no difference between them.

4. Summary and Conclusion

We have undertaken a modest attempt to check the impact of multiple banking on the corporate borrows of Bangladesh. The results of the study might be summarized and concluded as follows:

(1)   The analysis reveals that comparatively large banks, in terms of the share of individual bank in total lending, have more single banking relationship with firms (see Figure 1). Thus it can be concluded that large banks in Bangladesh seek to develop such kind of closer relationship as they can accommodate firms with the adequate amount of funds to be their sole lending bank. Hence size of the bank also determines

banks' ability to offer different broad range of services to promote long-term relationship in Bangladesh.

(2) Interest spread of the banking sector between lending and borrowing interest rate is as high as seven percent in Bangladesh. While the result of the analysis shows that, banks which have the lending relationship with firms as sole lender possess lower interest spread compared to other banks (see Figure 3). But from the subsequent analysis we have seen that, the interest expense of the firms borrowing from single lending banks is higher than that of the firms borrowing from multiple banks. Thus although the single lending banks are successful in reducing their net interest spread, this is not resulted in reducing interest cost of their borrowers. One reason for this might be that, firms borrowing from single lending banks do not enjoy enough freedom to negotiate the interest rates of loans.

(3) The results of the t-tests showed that, the average *debt-equity ratio* of the companies having borrowing relationship with single banks is higher as compared to that of the companies borrowing from multiple banks. This indicates that multiple banking makes access to credit difficult. On the other hand, the average *interest expense to loans outstanding ratio* of the companies having borrowing relationship with single banks is higher as compared to that of the companies borrowing from multiple banks. This indicates that by exploiting competition between banks, firms borrowing from multiple banks can borrow at lower cost.

Thus from the result of the analysis we can conclude that, in Bangladesh multiple banking practices present to lesser access to credit at comparatively lower cost. However, this area demands more detailed empirical analyses with enough data support for our further research.

Note

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1) Multiple banking relationships imply that the company has borrowing relationship with two or more banks, but single banking relationship does that with only one bank.

2) The term of *single lender banks* is used to refer to banks, which are providing loans to firms as the only lending bank.

3) See Levine et al. (2002).

4) The negative mean value of *Dept-equity ratio* for multiple banks in Table 1 is due to the presence of considerable number of firms having high accumulated loss figures. These loss figures made the total shareholders equity of the respective firms negative, as it includes *ordinary share capital, capital reserves* and *other reserves and retained earnings (positive or negative balance of the profit and loss account)*.

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