

Impact of Relationship Banking on the Performance of Corporate Firms: A Comparison between Japan and Bangladesh

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Abstract

This paper aims at summarizing the findings of the empirical analysis regarding the impact of relationship banking on the performance of corporate firms of Japan and Bangladesh. In doing so analysis result of the previous studies are used. The findings of the analysis revealed that relationship banking ensures easy access to credit both to Japanese and Bangladeshi corporate firms which are relatively weak and in financial difficulties.

Keywords: impact of relationship banking, empirical analysis, easy access to credit, corporate performance

1. Introduction

Among the Asian economies including Bangladesh, Japan is the role model for relationship banking-based corporate governance system. Accordingly in our previous papers, e. g. , Ahmed and Uchida(2003), Uchida and Ahmed(2004) we have conducted empirical analysis to perceive the

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impact of relationship both in Japan and Bangladesh. The most commonly observed impacts of relationship banking on corporate firms of an economy are summarized in Table 1. On this background, the objective of this paper is to summarize the findings of the empirical analysis papers regarding the impact of relationship banking on the performance of corporate firms conducted by using data of Japan and Bangladesh.

Table 1 Possible impact of relationship Banking

Impacts
Increased availability of credit
Rescuing in financial distress
Reduction of risk for client firms
Higher rates charged on client firms
Corporate growth and profits

2. Summary of the Empirical Analysis Findings

2.1 Impact of Relationship Banking on Corporate Firms of Bangladesh

In Ahmed and Uchida (2003), an empirical analysis is conducted to see the impact of relationship banking on the corporate firms of Bangladesh. The balance sheet data of 174 joint stock companies listed in the Dhaka Stock Exchange in the year 2001 are used. The results of the analysis can be summarized as follows:

a) Findings of t-tests:

T-tests of the differences between two means to find the significance of difference on two financial ratios, viz., *debt-equity ratio (DER)* and *interest expense to loans ratio (IELO)* were calculated for all the sample companies. A

total of 155 Joint Stock companies listed in the Dhaka Stock Exchange 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). Next, we applied t-tests to see whether there was any significant difference in *debt-equity ratio* and *interest expense to loans ratio* between the companies having a single lending bank vis-à-vis companies having relationship with multiple banks¹.

As shown in Table 2, the average *debt-equity ratio* of the companies having borrowing relationship with a single bank 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 a single bank 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.

Table 2 T-tests result for the ratio analysis

	Single Bank (Mean)	Multiple Banks (Mean)	Results of the t-tests
Debt-equity ratio	0.40	-0.14	There is difference in mean value.
Interest expense to loans outstanding ratio	0.57	0.33	There is no significant difference in mean value.

$$^1 \text{Debt-equity Ratio (DER)} = \frac{\text{Total Fixed Liabilities}}{\text{Total Share Holder' Equity}}$$

$$\text{Interest Expense to Loans Outstanding (IELO)} = \frac{\text{Total Interest Expense}}{\text{Total Loans Outstanding}}$$

Thus from the result of the analysis we can conclude that in Bangladesh relationship banking practices are present which results to higher access to credit at comparatively higher cost.

b) Findings of Multivariate Analysis

The balance sheet data of 174 joint stock companies listed in the Dhaka Stock Exchange in the year 2001 are used to construct multivariate models for identifying the most influencing factors deciding the profitability of the corporate firms.

In doing so, logistic regression analysis have been conducted. A hypothetical multivariate model is constructed to determine the factors, which influences the performance of the firms (Profitability) as follows:

Table 3 Descriptive statistics (n=174)

Variable Name	Description	Expected Sign	Revealed Sign
POS	The dependent variable is the profitability of firms (POS=1 if five yearly average is in profit and 0 otherwise).		
TAS	Total assets of the company in million of Taka	+	NSS
TCA	Total capital of the company in million of Taka	+	NSS
SAL	Total sales volume of the company in million of Taka	+	NSS
EQT	Total shareholders equity in million of Taka	?	+
LOA	Total loans taken from financial institutions in million of Taka	?	-
REX	Interest expense of the company in million of Taka	?	NSS
SHA	Percentage of share held by financial institutions	?	NSS
NBK	Number of banks the company maintains lending relationship	?	NSS

Note: NSS denotes *not statistically significant*

$$PRF = f(TAS, TCA, SAL, EQT, LOA, REX, SHA, NBK) \quad [1]$$

The explanation of the variables, expected and revealed relationship sign derived from the multivariate analysis are presented in Table 3. Accordingly, the findings of the study can be summed up as follows:

- 1) Interest expense, share of the financial institutions and number of banks did not show any significant relationship with the profitability of firms. Thus the effect of having multiple borrowing relationships on the corporate profitability cannot be confirmed through this empirical model analysis.
- 2) Whereas, equity exhibited positive and loan showed negative relationship with profitability, which indicates that firms having higher financial leverage are prone to be a losing concern in terms of profitability. Thus firms, which are taking bank loans more, are having comparatively more financial difficulties. Conversely, firms relying on equity capital more are comparatively more profitable.

2.2 Impact of Relationship Banking on Corporate Firms of Japan

In Uchida and Ahmed (2004) and Ahmed and Uchida (2005), a hypothetical multivariate model based on conceptual relationship was constructed to determine the factors, which influenced the performance of the corporate firms (Profitability). The objective was to observe how relationship banking was affecting the performance of the corporate firms. As data source three yearly time series balance sheet data (March 2002-March 2004) of 98 exchange listed SMEs in Japan were used. As a parameter to represent profitability time series mean of return on assets (ROAs) of the companies are used. The model consists of variables that are hypothetically assumed to

have an influence on profitability of a corporate firm and are summarized by the following conceptual model:

$$\text{Profitability (ROAs)} = f(\text{TCA, SAL, DER, SHA, NBK, FCF, ROE}) \dots [2]$$

The explanation of the variables, expected and revealed relationship sign are presented in Table 4. Accordingly, the findings of the study can be summed up as follows:

- 1 Percent of shareholding by banks showed positive relationship with ROA indicating that relationship banking does count in improving the profitability performance of the firms.
- 2 Whereas, the negative relationship between debt-equity ratio (DER) and profitability (ROA) indicates that firms having higher financial

Table 4 Variables and descriptive statistics (n = 79)

Variable Name	Description	Expected Sign in Regression Model	Revealed Sign in Regression Mode
ROA	The dependent variable is the time series mean of return on assets		
TCA	Total capital of the company in million yen	+	NSS
SAL	Time series mean of the total sales volume of the company in million yen	+	-
DER	Debt-equity ratio of the company	?	-
SHA	Percentage of share held by financial institutions	?	+
NBK	Number of banks the company maintains business relationship	?	NSS
FCF	Time series mean of financing cash flows in 100 million yen	?	NSS
ROE	Time series mean of return on equity	+	+

Note: NSS denotes *not statistically significant*

leverage (loan capital) are prone to be a losing concern in terms of profitability. Thus firms, which are taking bank loans more, are having comparatively more financial difficulties. Conversely, firms relying on equity capital more are comparatively more profitable.

3. Summary and conclusion

The findings of the empirical studies can be summarized through Tables 5 and 6.

1. As shown in Table 5, relationship banking is providing positive impact to the Japanese corporate firms in the form of *increased availability of credit, rescuing in financial distress* and thus in turn *reducing the risk of the client firms*. The claim that *higher rents are charged* can not be proved from the analysis. Whereas, relationship banking in the form of *corporate shareholding* is influencing positively and *easy access to credit* is influencing negatively towards the firms growth and profitability (see Tables 2 and 3).
2. In case of Bangladesh, relationship banking is providing positive impact to the corporate firms in the form of *increased availability of credit* and thus in turn *reducing the risk of the client firms*. Whereas, regarding negative impact, the claim that *higher rents are charged* is proved to be true. But the contribution of relationship banking *in rescuing from financial distress* and impact of *corporate shareholding* on profitability can not be verified from the analysis. *Easy access to credit* is influencing negatively towards the firms growth and profitability (see Table 4).

Based on the empirical analysis results and the on going discussion, the comparative status of relationship banking in Japan and Bangladesh can be

summarized as in Table 6. The negative relationship between credit availability and corporate profitability can be explained by the fact that, relatively weak firms rely more on relationship banking as it is hard for them to raise

Table 5 Empirical Findings on Impact of Relationship Banking in Japan and Bangladesh

Impacts	Japan		Bangladesh	
	Direction of Impact	Evaluation Mark	Direction of Impact	Evaluation Mark
Increased availability of credit	+	○	+	○
Rescuing in financial distress	+	△	?	?
Reduction of risk for client firms	+	△	+	△
Higher rates charged on client firms	?	?	-	○
Corporate growth and profits:				
Corporate shareholding	+	○	?	?
Easy access to credit	-	○	-	△

Note: ○ = Yes, △ = Moderate, X = No, and ? = Not confirmed

Table 6 Comparative Status of Relationship Banking in Japan and Bangladesh

	Japan	Bangladesh
1. Nature of financial system	Bank based	Bank based
2. Shape of relationship banking	Principal lender, corporate shareholding, Management advisory services	Principal lender
3. Positive impact of relationship banking	Easy access to credit, Rescuer in financial distress, Corporate growth & profit	Easy access to credit
4. Negative impact of relationship banking	Weak firms rely more on relationship banking	Higher rents charged
5. Future trend	Relationship banking is flourishing by changing shape from main bank system	Underdeveloped capital market paving the way for the growth of relationship banking

funds through capital markets. Thus relationship banking ensures easy access to credit both to Japanese and Bangladeshi corporate firms which are relatively weak and in financial difficulties.

References

- Ahmed, S. U. and S. Uchida(2003) Multiple banking practices and its impact on the corporate borrowers. *Journal of Business and Economics*, Vol. 83, No. 3, pp.245-257.
- Ahmed, S. U. and S. Uchida(2005) Contemporary strategic aspects of relationship banking in Japan. *Annual Review of Economics*, Vol. 21, pp.49-59.
- Uchida, S. and S. U. Ahmed(2004) The role of relationship banking on the performance of Japanese firms: an empirical study on small and medium enterprises. *Annual Review of Southeast Asian Studies*, Vol. 46, pp.13-22.