



## **Correlation between Debt Financing and Value Maximization in Islamic Banks: A Case Study on the Islamic Banks of Bangladesh**

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### **ABSTRACT**

*The study has been conducted to find the correlation between the debt financing and value maximization of Islamic banking. To answer this question this study goes through the annual report of the financial year 2008-2009 and financial year 2009-2010 of the all seven Islamic banks of Bangladesh. The study has shown that the relation between debts financing to value maximization is positively correlated except for net income, EPS and ROA. For disagreement with the positive relationship is that some Islamic banks recently have converted from conventional banking to Islamic banking.*

**Keywords:** Debt financing, value maximization, Islamic banking, Profit Loss Sharing (PLS).

### **1. INTRODUCTION**

Bank is word derived from France word “Banco”. It is also derived from Germany word “Benco, Banke” which means Bench. It is assumed that the Goldsmith, Indigenous Businessmen and Loan giver person took deposit and gave loan to others sitting on bench. Lombardy community of Italy first generated banking concept in the world. However, the first Bank in the world is called “The Bank of Sunsea” of China. The first central bank is “The Bank of England” in 1694. Banking industry is the most flourishing as well as the most contributing sector of our economy. Banking can be termed as one of the primitive business though its institutional look is not so old. This sector is the driving force of any country for its sustainable development. It is more than truth for a developing country like ours. At present Bangladesh have 57 scheduled commercial banks, 7 Islamic banks, 21 banks having Islamic banking, 4 nationalized commercial banks and some NGOs operating for micro credit expansion.

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Bangladesh is one of the largest Muslim countries in the world. The people of this country are deeply committed to Islamic way of life. Naturally, it remains a deep cry in their hearts to fashion and design their economic lives in accordance with the precepts of Islam. The establishment of Islamic Banking in Bangladesh is the true reflection of this inner urge of its people, which started function, is committed to conduct all banking and investment activities on the basis of interest-free profit-loss sharing system. In doing so, it has unveiled a new horizon and ushered in a new silver lining of hope towards materializing a long cherished dream of the people of Bangladesh for doing their banking transactions in line with what is prescribed by Islam. Above all they are business entities. In such issues, this study will find out the relationship between the debt financing and value maximization and comparable knowledge about the traditional debt financing as well as Islamic debt financing modes the Islamic banks in Bangladesh

## **2. ISLAMIC BANKING**

An Islamic banking and financial system exists to provide a variety of religiously acceptable financial services to the Muslim communities. In addition to this special function, the banking and financial institutions, like all other aspects of Islamic society, are expected to 'contribute richly to the achievement of the major socio-economic goals of Islam' (Chapra M Umer, 1985). The most important of these are economic well-being with full employment and a high rate of economic growth, socioeconomic justice and an equitable distribution of income and wealth, stability in the value of money, and the mobilization and investment of savings for economic development in such a way that a just (profit sharing) return is ensured to all parties involved. Perhaps the religious dimension should be presented as a further explicit goal, in the sense that the opportunity to conduct religiously legitimate financial operations has a value far beyond that of the mode of the financial operation itself.

Islamic banks have been operating in Bangladesh for about three decades alongside with the traditional banks. Like any other traditional commercial banks, they do mobilize deposits and produce loans. However, their modes of operation, based on Shariah, are different from the other traditional commercial banks. Islamic banks can provide efficient banking services to the nation if they are supported with appropriate banking laws, and regulations. This will help them introducing PLS modes of operations, which are very much conducive to economic development. It would be better if Islamic banks had the opportunity to work as a sole system in an economy. That would provide Islamic banking system to fully utilize its potentials. Sarker A Awal showed in his studies that Islamic banks cannot operate with its full efficiency level if it operates under a conventional banking framework, their efficiency goes down in a number of dimensions. The deterioration is not because of Islamic bank's own mechanical

deficiencies. Rather it is the efficiency-blunt operations of the conventional banking system that puts obstructions to efficient operation of Islamic banks. This does not mean that the survival of Islamic banks operating within the conventional banking framework is altogether threatened. Evidences from Bangladesh indicate that Islamic banks can survive even within a conventional banking framework by which over from Profit Loss Sharing (PLS) to trade related modes of financing.

**Key Islamic Financial techniques:** Islamic banking and financial institutions have developed a wide range of techniques which allow them to uphold the religious and legal principles while enabling them, at the same time, to offer viable financial products. The following list covers many of them, but must not be considered as exhaustive:

**Mudaraba** (Participation or trust financing): It involves two parties, the managing trustee (Mudarib) and the beneficial owner (Rub-ul-Maal). Usually the investment account holders are the provider of funds, and the Islamic Banks are the managing partner (mudarib). The Islamic Financial Institution may either put up all the funds itself or undertake responsibility for investing in them, or alternately it can provide funds to a customer who then acts as Mudarib. The borrower retains a fixed percentage of profits, the Islamic Financial Institution's reward is a fixed percentage in the balance of the revenue generated by the investments and the remainder goes to the investors. Underlying principle is 'no-pain-no-gain', i.e., no one is entitled to any addition to the principal sum if he does not share in the risks involved. Although profits are shared on a pre-agreed basis, losses are wholly suffered by the Rub-ul-Maal.

**Musharaka** (Equity Financing): It is quite similar to the Mudarabah contract. It involves financing through equity. Here the partners or shareholders for a Project use their capital through a Joint Venture, Limited Partnership to generate a profit. Profits or losses will be split between the shareholders according to some agreed pre-formula depending on the investment ratio.

**Murabaha** (Cost-plus financing): This technique is extensively used to facilitate trade financing activities of Islamic Financial Institutions. The Mudaraba and Musharaka transactions are often seen on the retail liability side of Islamic banks. The asset side whether retail or wholesale is quite risky. The most common such financial instrument is the 'mark-up' structure called Murabaha. It sounds quite similar to a "repo" agreement commonly used in the West.

**Ijara wa iqtina** (Financial Lease): This is a leasing structure coupled with a right available to the lessee to purchase the asset at the end of the lease period (Bay' al Wafa). The lessee agrees to make payments into an Islamic investment account (with right to all profits) to be used in or towards financing the ultimate purchase

of the asset. The instrument has been used increasingly in a range of asset classes including ships, aircrafts, telecom equipment and power station turbines, etc.

**Retail Islamic Banking Products:** At a retail level, Islamic banks provide current, savings, and investment accounts.

**Alwadhiah:** It is equivalent of the current account of the conventional banks, and used for day to day cash management. No return is paid to depositors. Most banks have no charges for such accounts, and provide facilities similar to any conventional bank. Alwadhiah structures are also used for higher return savings account. Banks may sometimes pay the savers a return, depending on their own profitability. Savings accounts also are quite similar except for the absence of interest payments. There may or may not be a service charge incurred. Losses are not, in practice, passed on to depositors and are absorbed through the banks' reserves.

**Term Deposits:** They are considered as investment accounts, and use the Mudaraba format. Deposits are fixed term and cannot be cashed in before maturity. The profit-sharing ratio varies between institutions and could be a function of the bank's profitability or that of the portfolio of end borrowers. In practice there is only profit sharing and no loss sharing for retail investors. The lower risk means a lower profit share.

### **Islamic Banks in Bangladesh**

At present there are seven fully Islamic banks in Bangladesh and 21 banks have their Islamic banking services .The list of Islamic banks are;

1. Shahjalal Islami Bank (SIB)
2. Islamic Bank Bangladesh Limited (IBBL)
3. First Security Islamic Bank (FSIB)
4. ICB Islamic Bank Limited (ICB)
5. Export Import Bank of Bangladesh Ltd. (EXIM)
6. Al-Arafah Islami Bank Limited (AAI)
7. Social Islami Bank Limited (SIBL)

### **3. LITERATURE REVIEW**

Debt is an important instrument to discipline managers and reduce agency costs. Brealey, Richard A., Stewart C. Myers, and Franklin Allen (2008) states that Modigliani and Miller's theorem, which justifies almost unlimited financial leverage, has been used to boost economic and financial activities and increase the value of the firm. To the contrary the failure to repay implies the transfer of control from the manager to the creditors. Debt holders are tough on managers

after default because they are conservative (they have a concave objective) (Dewatripont, M., and J. Tirole., 1994). Again, in good times control should go to shareholders, who like risk (they have a convex objective). According to Jensen's free cash flow theory, debt increases the probability of default and the manager works hard to avoid it. Leveraged buyouts (LBO) where managers purchased firms and finance it with debt may have similar effects. Proposed as mechanisms that ensure some payment of the debt, are reputation (Diamond, D., 1989), and the threat of liquidation in the event of default (Hart, O., 1995). Moreover the manager does not choose a good project because most returns will go to debt holders (Myers, S., 1977), and excessive incentive to take risk (Jensen, M., 1986). Furthermore, a bank with monopoly power may extract rents from firms with high loan rates. The evidence shows that public debt is not used much, whereas bank debt is used more. LBOs (which should be seen as a temporary financing tool) reduce agency costs that take the form of excessive size and diversification (conglomerates). There is also some evidence that debt improves productivity (Nickell, S., D. Nicolitsas, and N. Dryden., 1997). Perhaps the most important weakness of the argument that debt is important for ensuring effective governance in corporation is the fact that retained earnings are the most important source of finance for corporations (Mayer, Colin., 1988). Typically, large corporations do not have a problem meeting their debt payments.

#### **4. METHODOLOGY OF THE STUDY**

To draw the conclusion on the topic only the secondary source of information has been analyzed. This includes annual reports, articles on this issue etc. The analysis is done by content analysis which is widely being used in a social science research which involves reading the annual report and picking up both qualitative and quantitative information. So this technique has been used for this empirical study.

Study population and sample size: The study was targeted to collect data from annual report of the financial year 2008-2009 and financial year 2009-2010 of the all seven Islamic banks.

##### **4.1 Operational Definition of Variables**

This study was designed to examine the relationship between the debt financing and value maximization based on debt to assets ratio, EPS, profit margin, net income, assets turnover, investment income, ROA, price earnings ratio. Here only debt to assets is independent variable and others are dependent variables.

## 4.2 Analysis of Data

Data collected from questionnaires were analyzed by using various statistical tools. Descriptive as well as statistical analysis was done in this report. Mean, standard deviation, hypothesis and frequency distribution were used by SPSS software.

## 5. ANALYSIS & FINDINGS

By using the SPSS software and MS Excel, the study had gone through the annual report of the financial year 2008-2009 and financial year 2009-2010 of the all seven Islamic banks. In order to find out the relationship between debt financing and value maximization of the Islamic banks, the study focus on the EPS, profit margin, net income, assets turnover, investment income, ROA (Return on Assets), price earnings ratio etc. for the purpose of determining value maximization of the firm.

Before going to correlation test, all the value of EPS, profit margin, net income, assets turnover, investment income, ROA (Return on Assets), price earnings ratio, debt to assets ratio etc. are derived from the annual report of financial year 2008-2009 and financial year 2009-2010 by using MS Excel, then the growth rate is derived through the growth rate = (rate of 2010 - 2009)/ result of 2009\*100. The results are shown in the following Table 1. Finally study goes through the correlations test between each of the dependent variable with the independent variable debt to assets ratio.

Table 1: Percentage of growth rate Increase or decrease of all the variables over the Financial Year 2008-2009 and Financial Year 2009-2010

Name	Investment Income	Net Income	EPS	Price Earnings ratio	Profit Margin	Assets Turnover	ROA	Debt to Assets
AAI	3.17	106.88	107.00	17.90	-99.56	-32.17	38.61	-9.11
EXIM	17.90	105.19	102.65	137.24	74.04	-13.11	61.64	-3.58
IIBL	15.89	31.14	31.15	3.26	13.16	-2.44	9.70	0.60
SIBL	26.22	49.02	49.31	46.45	18.06	-8.53	14.90	2.71
SIB	16.02	93.46	93.29	7.11	44.88	-13.25	44.71	-0.83
ICB	42.39	-34.14	-32.26	204.98	-53.75	45.14	49.79	6.05
FSIB	27.56	67.85	64.08	13.19	31.59	-3.80	21.15	0.16

Source: Authors own creation from survey data.

**Hypothesis study:** The study assumes that if the debt to assets ratio increased over the period, then the value (dependent variables) of the firm will be increased.

From Table 2 to Table 8, the result shows that the correlation between the independent variable and dependent variables is strongly positive except for net income, EPS and ROA for all the seven banks.

The disagreement with the assumption is raised due to new journey in the Islamic banking from conventional banking by some Islamic banks; it is mentionable that among the all Islamic bank only IBBL is the oldest one.

Table 2: Correlations Study between Debt to Assets and Investment Income

<b>Correlations</b>			
		Investment Income	Debt to Assets Ratio
Investment Income	Pearson Correlation	1	.905**
	Sig. (2-tailed)		.005
	N	7	7
Debt to Assets Ratio	Pearson Correlation	.905**	1
	Sig. (2-tailed)	.005	
	N	7	7

\*\* . Correlation is significant at the 0.01 level (2-tailed)

Source: Authors own creation from survey data

Table 3: Correlations Study between Debt to Assets and Net Income

<b>Correlations</b>			
		Net Income	Debt to Assets Ratio
Net Income	Pearson Correlation	1	-.848*
	Sig. (2-tailed)		.016
	N	7	7
Debt to Assets Ratio	Pearson Correlation	-.848*	1
	Sig. (2-tailed)	.016	
	N	7	7

\*. Correlation is significant at the 0.05 level (2-tailed)

Source: Authors own creation from survey data

Table 4: Correlations Study between Debt to Assets and EPS

<b>Correlations</b>			
		Earnings per Share	Debt to Assets Ratio
Earnings per Share	Pearson Correlation	1	-.854*
	Sig. (2-tailed)		.014
	N	7	7
Debt to Assets Ratio	Pearson Correlation	-.854*	1
	Sig. (2-tailed)	.014	
	N	7	7

\*. Correlation is significant at the 0.05 level (2-tailed)

Source: Authors own creation from survey data

Table 5: Correlations Study between Debt to Assets and Price Earnings Ratio

<b>Correlations</b>			
		Price Earnings Ratio	Debt to Assets Ratio
Price Earnings Ratio	Pearson Correlation	1	.421
	Sig. (2-tailed)		.347
	N	7	7
Debt to Assets Ratio	Pearson Correlation	.421	1
	Sig. (2-tailed)	.347	
	N	7	7

Source: Authors own creation from survey data



Table 6: Correlations Study between Debt to Assets and Profit Margin Ratio

<b>Correlations</b>			
		Profit Margin Ratio	Debt to Assets Ratio
Profit Margin Ratio	Pearson Correlation	1	.206
	Sig. (2-tailed)		.657
	N	7	7
Debt to Assets Ratio	Pearson Correlation	.206	1
	Sig. (2-tailed)	.657	
	N	7	7

Source: Authors own creation from survey data

Table 7: Correlations Study between Debt to Assets and Asset Turnover

<b>Correlations</b>			
		Asset Turnover	Debt to Assets Ratio
Asset Turnover	Pearson Correlation	1	.849*
	Sig. (2-tailed)		.016
	N	7	7
Debt to Assets Ratio	Pearson Correlation	.849*	1
	Sig. (2-tailed)	.016	
	N	7	7

\*. Correlation is significant at the 0.05 level (2-tailed)

Source: Authors own creation from survey data

Table 8: Correlations Study between Debt to Assets and Return of Assets

		<b>Correlations</b>	
		Return On Assets	Debt to Assets Ratio
Return On Assets	Pearson Correlation	1	-.216
	Sig. (2-tailed)		.641
	N	7	7
Debt to Assets Ratio	Pearson Correlation	-.216	1
	Sig. (2-tailed)	.641	
	N	7	7

Source: Authors own creation from survey data

## 6. CONCLUSION

Bangladesh is a very potential market for Islamic banking due to its religious sentiment is in favor of them. So value maximization through its financial mechanism it's all about time, because here financial modes are based profit and loss sharing basis which is not present in the conventional banking sector. Moreover positive growth of the Islamic banking is demanding increased number of both of fully Islamic bank or Branch of Islamic bank from the conventional banking. And it is logically hope that further study of this issue over the period 5 to 10 years from now will bring an interesting neutral or positive result about correlation between external financing and value maximization of the firm.

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