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Impact of Financial Structure on Firm's Performance: A Study on Financial and Nonfinancial Sector in Bangladesh

Md. Safiuddin* Md. Mohedul Islam Md. Anisuzzaman
School of Business, Uttara University, C-1/ Kha, Section-1, Mirpur Dhaka-1216, Bangladesh
* Email: safiuddindu@yahoo.com, mohedul.islam@gmail.com, komol0709@gmail.com

Abstract
This paper aims to find the effect of financial structure on the performance of the firm in recent years in Bangladesh. The study has used descriptive statistics through SPSS as a technique to analyze what is the effect of financial structure on the performance by applying on 40 firms comprising 20 financial companies and 20 nonfinancial companies for the period of 2008-2012. Annual reports of 2008-2012 for the selected companies which are enlisted under Dhaka Stock Exchange (DSE) have been used to conduct this study. In our study, the banks and NBFIs are very high levered firms whereas the non-financial companies are relatively low levered firm. The Return of common equity (ROCE) of financial companies is 27.54% and it is 17.16% for non-financial companies. In terms of financial companies the shareholders enjoy a high degree of profitability due to financial leverage and SPREAD which is the difference between ROCE and Net Borrowing Cost (NBC). On the other hand, the operating leverage of non-financial companies is very high in comparison to financial companies. But they enjoy low degree of profitability. Any change in financial leverage and SPREAD brings great change in its profitability. Thus the financial leverage of banks and NBFIs has played an important role in profitability measurement. The results of the study conclude that capital structure is strongly associated with firm's performance on our study sample. In addition, the study finds that there is a significant difference on the impact of the financial leverage (FLEV) between high financially levered firms and low financially levered firms on their performance in financial and non-financial companies.
Keywords: Capital Structure, EPS, FLEV, NBC, OLLEV, ROCE, RONA, SPREAD, TLEV

1. Introduction

The capital structure decision of a firm differs from industry to industry. A firm with debt in its capital structure is said to be a levered firm, where as if it doesn't have any debt, only shareholders equity it is said to be an all equity firm. Leverage is a ratio of total debt to shareholders' equity. It works as an important determinant of firm's profitability. As optimal debt ratio influences the market value of the firm, companies examine different level of capital structure to maximize their market value. To determine the optimal capital structure is one of the most fundamental policy decisions of the financial framework of a corporate (Siddiqui,S.S 2012). After publication of the MM Proposition (1959, 1963), this question has got special value in the field of finance. Thus a handful of capital structure theories (MM Theory, Agency Theory, Pecking Order Theory, and Trade off Theory) have been emerged with an aim to help firms determine the optimal capital structure (Siddiqui,S.S 2012). The economy of Bangladesh is extremely focused on the capital market. Financial and non-financial companies play a major role in this respect because they provide a large portion of institutional support to the capital market. It is evident that a prudent capital structure decision can lead a firm to have high profitability and low risk thus increase the value of the firm. So capital structure decision is one of the most important issues in corporate finance (Siddiqui,S.S 2012). Operating profitability can be identified from RNOA and firm profitability can be measured from ROCE. These profitability measures are derived by different variables and among them leverage is an important driver. In finance literature leverage is known as the ratio of obligation and equity. It acts as one of the determiners of risk and return. Leverage can also provide information about profitability and quality of that profitability thus value of the equity (Penman, S. H. 1997). The standard measure of leverage is total liabilities to equity. However, total liabilities are the result of financing activities from bank loans, issuing bonds etc, investing activities from acquiring assets and operating activities from trade payables, deferred revenues, pension and liabilities resulting from transactions with suppliers, customers and employees in conducting operations. In this paper, we have tried to show the relationship between profitability and different types of leverages like Operating leverage (OLLEV), Financial leverage (FLEV), Total leverages (TLEV) and the effect and influence of the leverage on profitability and its quality. For this study, 20 financial companies which include 10 banking financial institutions and 10 non-bank financial institutions (NBFIs) and 20 non-financial companies which comprise 3 Food & Allied company, 4 Fuel & Power company, 4Textiles company, 5 Pharmaceuticals & Chemicals company and 4 Miscellaneous companies have been observed. Financial Market in Bangladesh has been developing at an exponential rate and dedicated research in this field is required. The study utilizes a larger data set in comparison to the earlier studies on Bangladesh and examines additional factors.

2. Literature review

Leverage is traditionally viewed as arising from financing activities. Firms borrow to raise cash for operations but leverage has other effects on profitability. It drives the profitability of stockholders. Standard financial statement analysis distinguishes shareholder's profitability which arises from operations from that profitability which arises from borrowing to finance operations. So, Return on Assets (ROA) is distinguished from Return on Equity (ROE), with the difference attributed to leverage (Nishim and Penman 2003). If it is observed, impact of leverage will be found that it comes from positive spread. Higher spread cause higher profitability if their leverage exists. (Lundholm, R et al. 2012). The study of firm performance in accounting has used the Dupont decomposition as a means of identifying the relative contribution of different firm activities. Such returns are in the form of future dividend flows as well as capital appreciation as reflected by an expected increase in share price. Ward and Price (2006) also state that while leverage is clearly effective, its disadvantage is that as the interest rate increases the positive effect of leverage declines to a point at which it becomes negative. Ward and Price (2006) indicate that an increased debt/equity ratio in a profitable business increases shareholder returns, but also increases risk. Sharma (2006) concludes that there is a direct correlation between leverage and firm value. Lasher (2003) asserts that increased levels of debt finance can result in increased Earnings Per Share (EPS) and Return on Equity (ROE). According to the trade-off theory, there exists an optimal capital structure, despite leverage-related costs may trade off some advantages of debt financing , when the advantages of debt financing like interests tax shields , reducing agency cost of equity, are greater than the various leverage-related costs like debt-issuing costs, bankruptcy costs, agency costs of debt and loss of non-debt tax shields. One can always increase firm values by increasing leverage until the marginal gain from leverage equal to the marginal expected loss from the bankruptcy costs.

In addition to debt financing firms can also take on leverage through various operating decisions. For instance, firms can effectively borrow from suppliers by extending the time they take to pay their accounts payable. Also, firms can advance cash from customers with the obligation to service customers in the future, incurring deferred revenues (Lundholm, R et al. 2012). But does leverage increased with profitability? According to Ward and Price (2006), a profitable business will experience a higher Return on Equity (ROE) as borrowings increase. Ward and Price (2006) also postulate the impact of debt or leverage, since a profitable firm is able to earn at higher rate than it is paying for borrowed funds. Rajan and Zingales (1995) find that the only consistent result across all countries is that leverage decreases with profitability. But leverage has impact on profits and profitability. Operating leverage has impact on operating profitability. Nilsen (2002) reports that for U.S. manufacturing firms, accounts payable averages 13 percent of total liabilities, so trade credit is an important source of funds for many firms. As derived above, the trade credit contribution to ROE is the product of how much operating leverage the firm employs and the spread between the pure return on operating assets and the implied interest rate on the trade credit. Long et al. (1993) posit that trade credit allows the buyer to verify the quality of goods before paying for them, thus resolving some information asymmetry between trade partners. These motives for trade credit are unlikely to be influenced by the availability of domestic credit, and consequently buffer any substitutability or complementarities between financial credit and trade credit caused by the level of available domestic credit. It is likely that these motives for trade credit also differ between large firms and small firms.

Besides, in Bangladesh few researches have been done specially on Capital Structure and performance of financial and nonfinancial companies but it is still a very important issue to take investment and credit decision. Sayla Sowat Siddiqui, 2012 examined the Capital Structure Determinants of Non-Bank Financial Institutions (NBFIs) in Bangladesh. Chowdhury, MU 2004 made a comparison of the capital structure determinants between Japanese and Bangladeshi firms. Lima, M 2009 examined the determinants of capital structure of pharmaceutical companies in Bangladesh. Sayeed, MA 2011 studied on some selected companies irrespective of industry. This article differentiates itself by focusing on the financial and non financial companies in Bangladesh with large sample size. This research will be helpful to understand the recent status of capital structure in financial and non-financial sectors in Bangladesh. This study will also create values not only to the researchers but also to the other stakeholders who are related to this such as financial analysts, investors, creditors, regulatory authorities etc.

3. Objectives

The precise objectives of the study are to observe and measure the nature and extend of capital structure in financial and other non-financial listed companies in Bangladesh and its impact on performance of the firm, understand the nature of heterogeneous capital structure decisions taken by financial and non-financial companies in Bangladesh and measure the influence of capital structure on the quality of profit and the performance of the firm.

4. Limitation

We have considered only twenty financial and twenty nonfinancial companies listed with the stock exchanges. The information of other industries like real states, shipping industry , state owned commercial banks, state-owned specialized development banks and foreign commercial banks have not been considered due to lack of time. Findings of the analysis could be affected if the data of these institutions were incorporated.

5. Methodology

The study has used descriptive statistics as a technique to examine what is the effect of financial structure on the performance by applying on 40 firms comprising 20 financial companies composing of 10 Bank and 10 Non-Bank Financial Institutions (NBFIs) and 20 nonfinancial companies consisting of 3 Food & Allied, 4 Fuel & Power, 4 Textile, 5 Pharmaceuticals & Chemicals and 4 Miscellaneous companies for the period of 2008-2012. Annual reports of 2008-2012 for the above mentioned companies which are enlisted under Dhaka Stock Exchange (DSE) have been used to conduct this study. The data for this study was gathered from the audited annual financial reports of listed Financial and Non-financial Institutions. Accounting for Capital Market Development (ACMD) is also a major source of data collection. Different bi-variant tables have been used to observe different factors and their effects. Descriptive statistics with the help of SPSS have also been used to understand and summarize different variables. Afterwards it has been concluded that capital structure has impact on the performance of a firm. To understand the effects ROCE and RNOA have been decomposed according to studied formula and then the impact of the capital structure on those performance measures has been separated and observed to understand the impact of capital structure. Lastly, there is a comparative analysis between financial companies and non-financial companies on year basis in terms of mean of ROCE, RNOA, ROA, Financial leverage, and Operating leverage, Spread1, Spread11 and Spread12 to measure the level of leverage from one year to another.

6. Capital structure and firms performance measurement

6.1 Capital structure and financial institutions

The classification of operating assets, operating liabilities, financial assets and financial obligations depends on the nature of business: whether it is a financial company or non-financial company. Financial institution is an establishment that focuses on dealing with financial transactions, such as investments, loans and deposits is called a financial institution. Conventionally, financial institutions are composed of organizations such as banks, trust companies, insurance companies and investment dealers. Thus the classification of operating assets and financial assets for a financial institution varies from that of a non-financial institution. Operating assets of a financial institution consist of Investments, Loans and advances, fixed assets, Non-banking assets, other assets. Financial assets of a financial institution comprise Cash, Balance with other banks & financial institutions, Money at call & Short notice, Non-Banking asset etc. Operating liabilities of a financial institution consist of deposits and other accounts, current and other accounts, bills payables, saving bank deposits, fixed deposits , other deposits etc Other liabilities. Financial obligations of a financial institution are borrowings from other banks & financial institutions, subordinated Bond etc.

6.2 Capital Structure and non financial institutions

Non-financial institution does not engage in investment, loans and deposit activities. Rather it generates revenues by producing and selling tangible goods to the customers or providing services to the customers. Operating assets are those assets which are acquired for or used in the income generating operations of the business. The operating assets of a non-financial institution consist of inventory, prepaid expenses property, plant and equipment capital work-in-progress. Operating liabilities are those which are short-term liabilities and long-term liabilities resulting from the primary business operations of a firm. They are non-interest bearing and comprise of accounts payable, accrued expenses, Income tax payable, provision for taxation, Liabilities for expenses, Long-term provisions for employee benefits, Pension fund, Gratuity scheme, General provident fund, Deferred tax liability. Operating liabilities are deducted from operating assets to determine the net operating assets. Financial Asset of a non-financial institution include Cash, Equity instrument of another entity, contractual right, receiving cash or another financial asset from another entity, exchange of financial assets or financial liabilities with another entity under conditions that are potentially favorable to the entity, contract that may be settled in the entity's own equity instruments , non-derivative resulting in receiving a variable number of the entity's own equity instruments, derivative that may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of entity's own equity instruments. Financial Liability of a non-financial company includes contractual obligation to deliver cash or another financial asset to another entity or to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavorable to the entity, contract that may be settled in the entity's own equity instruments. Leverage is a

financial term that refers to borrowing. The degree to which an investor or business is utilizing borrowed money. Companies that are highly leveraged may be at risk of bankruptcy if they are unable to make payments on their debt; they may also be unable to find new lenders in the future. The higher the degree of leverage, the higher the degree of risk and rate of return will be. That is, leverage is the use of assets and liabilities to boost profits while balancing the risks involved. Operating Leverage is caused due to fixed operating expenses in a firm. It is the firm's ability to use fixed operating costs to magnify the effects of changes in sales on its earnings before interest and taxes. Operating leverage occurs at any time a firm has fixed costs that must be met regardless of volume. Financial Leverage is defined as the potential use of financial costs to magnify the effects in EBIT on the firm's Earning per share (EPS). Financial leverage involves changes in shareholders' income in response to changes in operating profits, resulting from financing a company's assets with debt or preferred stock. Similar to operating leverage, financial leverage also can boost a company's returns, but it increases risk as well. Combined or Total Leverage is the two types of leverage explored so far can be combined into an overall measure of leverage called total leverage. Operating leverage is concerned with the relationship between sales and operating profits, and financial leverage is concerned with the relationship between profits and earnings per share. Total leverage is therefore concerned with the relationship between sales and earnings per share. Specifically, it is concerned with the sensitivity of earnings to a given change in sales.

6.3 Measures of performance

Return on Asset (ROA): Return on Assets is calculated by dividing net profit by total assets.

$$ROA = OI/OA$$

Where, ROA = Return on assets, OI = Operating Income, OA = Operating Assets.

Return on Net Operating Assets (RNOA): Return on net operating assets is calculated by dividing the net profit by Net Operating Assets.

$$RNOA = OI/ NOA$$

Where, RNOA = Return on Net Operating Assets, OI = Operating Income, NOA = Net Operating Assets.

Decomposition of RNOA (for the operating liability leverage)(Nissim and Penman 2003).

$$RNOA= OI/ NOA = (OI+X)/NOA – (X/NOA)$$

[Where, X is the implicit cost of OL]

$$= \{(OI+X)/OA * (OA/NOA)\} – \{(X/OL)* (OL/NOA)\}$$
$$= \{ROOA (1+OL/NOA)\} – \{(\theta * OL/NOA)\}$$
$$= ROOA + \{(OL/NOA) (ROA- \theta)\}$$

RNOA= ROOA+ (OLLEV* OLSPREAD)

RNOA = ROOA+(OLLEV*SPREAD11)

Here, OLLEV = OL/NOA, X/OL = θ, OLSPREAD= ROOA- θ, OA/NOA= 1+OL/NOA

[Where, OLLEV = Operating Liability Leverage, RNOA = Return on Net Operating Assets, OI= Operating Income, ROOA = Return on Operating Asset]

And, $\Delta RNOA = \Delta ROOAt + OLLEVt (\Delta ROOAt - \Delta\theta t) + \Delta OLLEVt (ROOAt-1- \theta t-1)$

Here, ΔRNOA represent the change in RNOA for the change of time period.

Return on Common Equity (ROCE): Return on Common Equity is calculated by dividing the net profit by Common Equity. To measure the profitability we calculate ROCE, RNOA and ROA by following formula-

$$ROCE = CNI/CSE$$

Where, ROCE = Return on Common Equity, CNI = Comprehensive net Income, CSE = Common Stock Equity.

Decomposition of ROCE (for the financial leverage)

$$ROCE = OI/NOA+ \{(NFO/CSE) * (OI/NOA - NBC)\}$$

ROCE=RNOA + Financial Leverage × Spread

ROCE=RNOA + Financial leverage × Spread1

Here, ROCE = Return On Common Equity, RNOA= Return on Net Operating Assets, RNOA= OI/NOA, Financial Leverage = NFO/CSE, Spread = RNOA – NBC, NBC = NFE/NFO.

And, $\Delta ROCE = \Delta RNOAt + FLEVt (\Delta RNOAt - \Delta NBCt) + \Delta FLEVt (RNOAt-1 - NBCt-1)$

Here, Δ ROCE represent the change in ROCE for the change of time period.

Decomposition of ROCE (for the total leverage)

$$ROCE = ROOA + [TLEV*(ROOA-TBC)]$$

Where, ROCE = Return on Common Equity, ROOA= Return on Operating Assets, TLEV= Total leverage, TBC = Total borrowing cost.

Total borrowing cost: Here, $TBC = (NFE+MIOL) / (NFO+OL)$

MIOL= Market Interest Rate on Operating Liability

=OL*MBC (Market Borrowing Cost)

Δ ROCE = ΔROOAt + TLEVt (ΔROOAt - ΔTBCt) + ΔTLEVt (ROOAt-1- TBCt-1)

Here, Δ ROCE represent the change in ROCE for the change of time period.

We know that there are three types of leverage. For assessing the relationship of capital structure with profitability we have to calculate these three.

Operating Leverage (OLLEV)-The calculation is done by following formula-

$$OLLEV = OL / NOA$$

Where, OLLEV= Operating Liability Leverage, OL = Operating Liability, NOA = Net Operating Asset.

Financial Leverage) FLEV- The calculation is done by following formula-

$$FLEV = NFO / CSE$$

Where, FLEV = Financial leverage, CSE = Common Stock Equity, NFO= Net Financial Obligation.

Total Leverage (TLEV) The calculation is done by following formula-

$$TLEV = (NFO+OL) / CSE$$

Where, TLEV= Total leverage, OL = Operating Liability, NFO= Net Financial Obligation, CSE = Common Stock Equity.

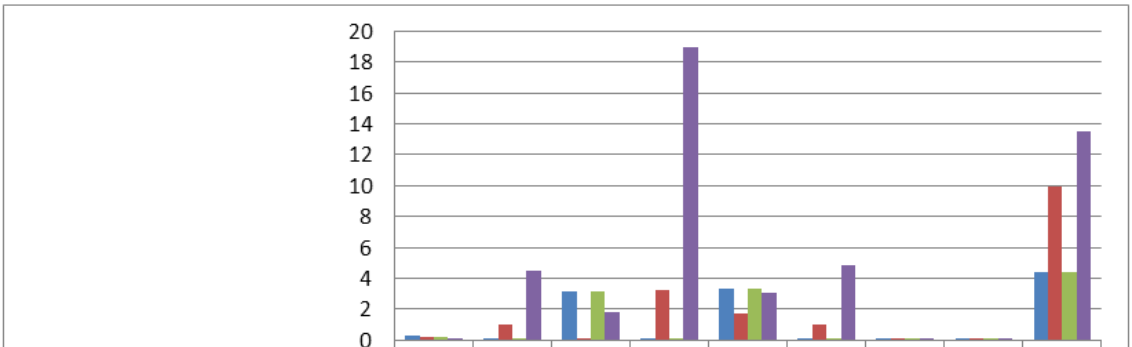
7. Findings and analysis

7.1 Profitability

In the time series analysis we find that in comparison to non-financial companies the financial companies are more profitable in the year of 2008, 2009 and 2010. Because the average ROCE in banking industry of last 5 years is 27.54% (Table-1) and for nonfinancial companies it is 17.16% (Table-1) which is almost 38% less than that of financial industry but in the year of 2011 and 2012 most of the financial companies experienced low profitability due to a conservative macroeconomic policy adopted by Bangladesh Bank. As cost of fund has increased and spread between ROCE and NBC has decreased so banks have been affected badly. The RNOA of financial companies was constant over the years. But RNOA of non-financial companies was highly volatile in comparison to that of financial companies. The average RNOA of financial companies of last 5 years is 4.75% (Table-1) and non-financial companies is 99.36% (Table-1).Though their profitability (ROCE) is very low. This is due to very low financial leverage of the non-financial companies as we know ROCE is a composition of both RNOA and financial leverage.

Table-1: Average mean and standard deviation during the year of 2008-2012

	Mean		Standard deviation	
	Financial	Non financial	Financial	Non financial
ROCE	0.2754	0.1716	0.1578	0.1404
RNOA	0.0478	0.9936	0.0478	4.5172
FLEV	3.1098	0.102	3.1098	1.8434
OLLEV	0.0732	3.2708	0.0732	18.9916
TLEV	3.355	1.677	3.355	3.0332
SPREAD 1	0.0776	1.0268	0.0776	4.8332
SPREAD 11	0.0332	0.0582	0.0332	0.1128
SPREAD 12	0.107706	0.0714	0.107706	0.1202
EPS	4.398	9.894	4.398	13.4796



	ROE	ROA	FLEV	OLLEV	TLEV	SPREAD 1	SPREAD 11	SPREAD 12	EPS
Mean Financial	0.2754	0.0478	3.1098	0.0732	3.355	0.0776	0.0332	0.107705	84.398
Mean Non financial	0.1716	0.9936	0.102	3.2708	1.677	1.0268	0.0582	0.0714	9.894
Standard deviation Financial	0.1578	0.0478	3.1098	0.0732	3.355	0.0776	0.0332	0.107705	84.398
Standard deviation Non financial	0.1404	4.5172	1.8434	18.9916	3.0332	4.8332	0.1128	0.1202	13.4796

Figure -1: Average mean and standard deviation during the year of 2008-2012

7.2 Leverage of different Industry

Banks and NBFIs have very high degree of leverages as they run their business with others money. 5 year average of financial leverage of financial companies is 3.109 and non-financial companies are only .102 which is very low in comparison to financial companies. So it is clear that banks are very levered firm. So any changes in spread highly affect the profitability of the banks. Operating profitability of the banks has very low opportunity to create operating liability. So it is difficult for bank and NBFIs to lever their operating profitability by operating leverage. Average operating liability leverage of the financial companies is only .0732% (Table-1) where as it is 3.27% (Table-1) in case of manufacturing companies. RNOA can help them to lever their operating asset profitability. Firms with high financial leverage have the risk of income volatility. Quality of earning is dependent on the leverage of the firm. Higher leverage creates risk and impairs the quality of the profitability.

7.3 Variation of leverage Across Industry

Because of different operation leverage varies in different industries. After analysis we have found that financial companies have higher leverage than manufacturing companies. Financial companies do their business with others money so their leverage is higher than that of industry. Average FLEV of Banking and NBFI industry is 3.109 (Table-1) and manufacturing companies is .102 (Table-1) but operating leverage of financial companies is lower than the operating leverage of non-financial companies.

7.4 Contribution of leverage to Profitability

Does leverage has any contribution to profitability? Leverage is driver for ROCE which is final indicator of profitability of a firm. If ROCE is decomposed than it will be found that ROCE = RNOA + [FLEV * SPREAD] (Nissim and Penman 2003). Here ROCE is decomposed in two parts one is profitability of operating asset and other part is contribution from leverage and spread. [FLEV * SPREAD] can be considered as the contribution of leverage to the profitability. Now it can be calculated that what percentage of profitability comes from leverage and spread. Average RNOA of banking industry is 4.78% and ROCE is 27.54% (Table-1). That means profitability of Net operating asset of the industry is 4.78% but Stock holders enjoys 27.54% return, which is an impact on profitability of the firm.

7.5 Operating Leverage and Operating Profitability

Operating liability leverage plays a very important role to lever the profitability of net operating asset. Measure of operating profitability is RNOA. RNOA can be decomposed as flows; RNOA=ROA+OLLEV (Spread) (Nissim and Penman 2003).Operating leverage drive up the RNOA if there is positive spread between ROA and implicit cost of borrowing. In observation it is found financial companies have lower OLLEV than manufacturing companies. The average OLLEV of financial companies of last 5 years is .133 where as it is 3.27 in case of non-financial companies. So financial companies RNOA is not higher than the ROA. But manufacturing companies RNOA is much higher than their ROA.

7.6 Leverage and volatility of Profitability

Leverage is not only a risk indicator it also tells about the quality of earning. Leverage plays noticeable impact on profitability and nature of profitability. Decomposition of ROCE and RNOA is as below ROCE= RNOA+FLEV (RNOA-NBC).If any firm is highly levered than the second portion of the ROCE will be large. If there is any change in RNOA it will affect the spread and highly levered firms ROCE will be changed significantly but on the other hand firms with low leverage will not be affected significantly by the change in spread. Highly levered firm will experience more volatile income stream than a low levered firm. Banking industry is highly levered industry so all the bank experienced high profitability. The average ROCE of the financial companies in 2010 was 45.80 % (Table-2). But in 2011 the bubble has burst out and ROCE of the financial companies was decreased to 16.50%.And the central bank of the country adopted conservative monetary policy so NBC increased all these lower down the spread between RNOA and NBC. This results a significant decrease of ROCE of the banking industry. In 2012 the average ROCE of banking industry was 10.40% (Table-2).

Table-2: Industry wise comparison (Mean) of all measurement variables during 2008-2012

	2008		2009		2010		2011		2012	
	Financial	Non financial	Financial	Non financial	Financial	Non financial	Financial	Non financial	Financial	Non financial
ROCE	0.273	0.142	0.377	0.194	0.458	0.2	0.165	0.174	0.104	0.148
RNOA	0.1	0.309	0.112	0.015	0.128	0.328	0.084	4.342	0.079	-0.026
FLEV	7.824	0.502	7.972	0.428	6.644	-0.106	5.128	-0.347	5.02	0.033
OLLEV	0.105	1.819	0.121	-0.899	0.142	0.562	0.152	15.477	0.143	-0.605
TLEV	8.323	2.463	8.832	1.941	7.562	1.303	5.798	1.197	5.642	1.481
SPREAD 1	0.089	0.692	0.036	-0.084	0.058	0.292	0.017	4.151	0.003	0.083
SPREAD11	0.038	0.043	0.075	0.064	0.066	0.077	0.019	0.068	0.008	0.039
SPREAD12	0.096	0.057	0.033	0.079	0.055	0.09	0.015	0.075	0.003	0.056
EPS	6.526	8.383	8.479	10.82	10.653	10.745	4.446	10.022	2.506	9.5

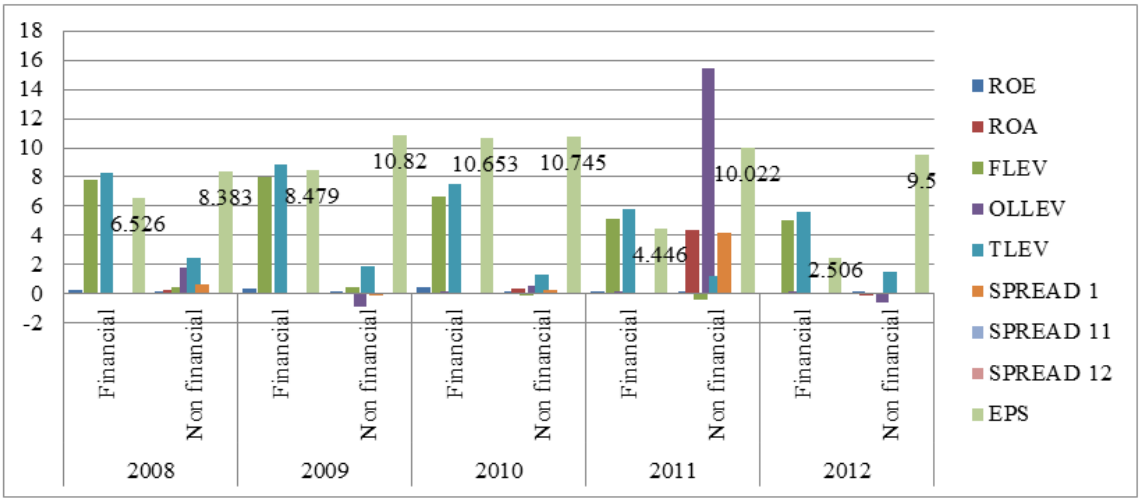


Figure-2: Average mean of financial and nonfinancial companies during 2008-2012

We have found that EPS is higher in non financial companies in almost all of the years (Figure-3). In 2012 it is 2.506 for financial companies and 9.50 for non financial companies (Table-2).

7.7 Total Leverage and Profitability

In case of total leverage financial companies are highly levered than nonfinancial companies. We have found that average total leverage of financial companies is 3.355(Table-1) and nonfinancial companies is only 1.677 (Table-1).

7.8 SPREAD and Profitability

Nonfinancial companies enjoy more spread in terms of SPREAD 1 and SPREAD 11 which is 1.0268 and .0582 than that of financial companies which is .0776 and .0332 than nonfinancial companies but in terms of SPREAD 12 financial companies have .107706 and nonfinancial companies have .0714 (Table-1).

7.9 Earning Per Share (EPS) and Profitability

Financial companies possess the lower EPS than that of nonfinancial companies. We find that average EPS for nonfinancial companies is 9.894 on the other hand for financial companies it is 4.398(Table-1).

Table 3: Industry wise comparison (Standard deviation) of all measurement variables during 2008-2012

	2008		2009		2010		2011		2012	
	Financial	Non financial	Financial	Non financial	Financial	Non financial	Financial	Non financial	Financial	Non financial
ROCE	0.17	0.118	0.249	0.166	0.252	0.141	0.058	0.128	0.06	0.149
RNOA	0.044	0.983	0.057	0.935	0.068	1.003	0.033	19.033	0.037	0.632
FLEV	4.014	2.02	3.425	1.791	2.593	1.173	2.881	1.491	2.636	2.742
OLLEV	0.068	11.444	0.058	4.946	0.08	4.651	0.086	70.587	0.074	3.33
TLEV	4.796	4.166	3.55	3.116	2.638	2.395	3.02	2.285	2.771	3.204
SPREAD1	0.287	2.295	0.031	0.966	0.048	1.016	0.011	19.069	0.011	0.82
SPREAD11	0.031	0.128	0.047	0.115	0.051	0.098	0.018	0.101	0.019	0.122
SPREAD12	0.45052	0.136	0.027	0.128	0.041	0.105	0.01	0.107	0.01	0.125
EPS	3.834	13.051	5.877	14.452	7.65	12.669	2.686	11.855	1.943	15.371

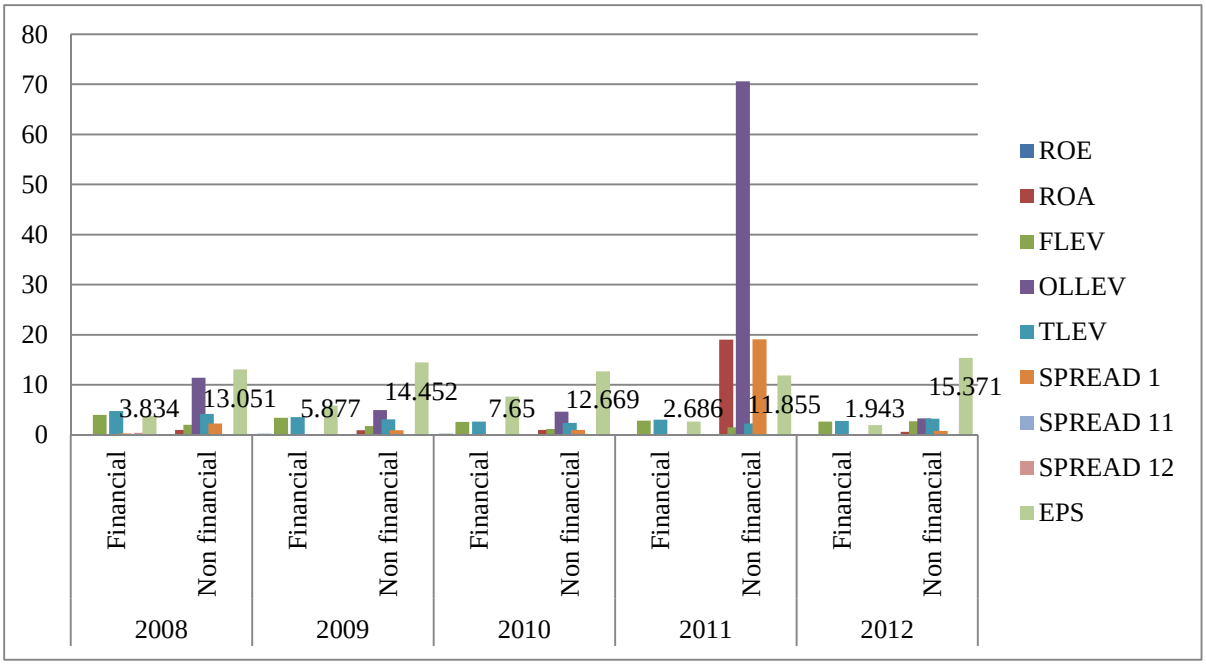


Figure-3: Average Standard deviation of financial and nonfinancial companies during 2008-2012

We have found that EPS of non financial companies is higher than financial companies (Figure-3). In 2012 it is 1.943 for financial companies and 15.371 for financial companies (Table-3).

8. Recommendation

An implication of the findings is that company management should take into account the aspect of financing risk involved with relatively large financial leverage in their design of capital structure. All the institutions financial and nonfinancial should be more conscious at the time of taking financing decision. Specially, financial companies should emphasize on that issue as they have less EPS than that of nonfinancial companies. To safeguard the interest of the shareholders different regulatory bodies like Bangladesh Bank and Bangladesh Securities and exchange commission should closely monitor their activities.

9. Conclusion

The importance of financial structure is growing day by day. It is still a challenging task for financial and nonfinancial institutions and complexities in taking financing decisions are growing as well. Though, recently some cases show lack of proper efficiency in taking financing decisions in Bangladeshi financial and nonfinancial companies which cause trouble in financial sectors. As a result, many companies are positively encouraged to ensure sound knowledge over financial structure decisions. It will ultimately lead to make good earnings in the business organizations. The major results of this research provide an overview of financial structure status in Bangladesh. This research reveals that the banking and NBFIs companies are highly levered in comparison to non-financial companies. Leverage plays an important role here. ROCE, RNOA and ROA are the determinants of company's profitability. ROCE is again composed of RNOA and financial leverage and spread. Whereas the RNOA is very low (almost half of ROCE) in banking and NBFIs industry, the industry shareholders enjoy a high rate of profitability. This is due to financial leverage and spread. Leverage can express the quality and stability of the income stream. Income streams of highly levered firm are more volatile than the income streams of low levered firm. On the other hand, operating leverage of financial companies is very low than that of non-financial companies as banks and other NBFIs have less scope to increase their operating profitability by operating leverage. In valuation of firms; residual income, profitability etc are very important factor and liability

leverage has various impact on these factors. Besides, leverage can help to forecast the pattern of income stream. So to understand the income and to take capital structure decisions, leverage is always one of the important factors to be considered.

Future Research: Future research may focus on the effect of financial structure on firm's performance. Application of improved financing techniques for financial and non financial institution could be another emerging area of research.

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