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Capital Structure's Influence on Share Price Empirical Evidence from Banks listed in BSE SENSEX in India

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Abstract- The study is to understand the impact of capital structure i.e. the various sources of arranging long term finance on the share prices of the listed banks of BSE SENSEX. The study employed regression method of analysis to evaluate the impact of capital structure on share price of all listed Banks in BSE SENSEX in India by extracting data on capital structure for the period 2010 to 2019, a period of ten years. ANOVA was used to determine the suitable model and the test showed a significant results at 5% level of significance . The finding shows that the capital structure shows a significant impact on share price of 5 listed deposit money banks in BSE SENSEX in India. The results portrays capital structure to influence firm value. The study recommended that listed banks in BSE SENSEX in India should make an effort to be rational when raising capital as it affects its market value.

Index Terms- Capital Structure, Share Price, Financing Decision, Firm value

1. INTRODUCTION

'Investments should be made' is an evolving and evergreen thought in the minds of almost every individual to be on a safer side in future but where to do it? While answering this question an investment option always tops the list is Stock Market, rather shares of a company but these share prices are always fluctuating and one can only daringly invest in it; that which stocks should be invested in or whether the invested stock will provide the aspired results or not.

Interaction between demand and supply is an uncontrollable force which paves way for continuous movement in stock prices. Increase in demand of any particular stock increases its prices or we can also generalize as market value of stock increases and this also depends on the psychology of the investors convesely, if they perceive that increase in market value of company's stock or its profitability will lead to increase in its market demand. The psychology of the investors about the stock prices is based on the information of the company in the market. If the information is positive the investors believe that stock prices will going to raise and vice versa. The sources of information could be newspapers, business magazines, stock exchange, news channels , annual reports etc.

On the other parameter Capital structure has direct impact on the profitability of the stocks and each and every investor prefer to invest in the stock which is most profitable. Capital structure of a company is composed of debt and equity sources used for raising long term finance. Debt is a source on which fixed interest is to be paid irrespective of the fact whether

company earns profit or not. Whereas equity is source for shareholders or funds for owners where dividend is decided out of profits of the company.

Raising funds through debt is considered to be the cheaper source, since it provides leverage in taxation. But high proportion of debt in capital structure may increase the burden of interest payment and can result in financial insolvency in worst times. As opposite to interest, dividend does not provide any tax benefit as it is appropriation of profit .If a company is in tax slab of 50 per cent it will pay 10 percent of interest on its debentures, which will give a benefit of effective cost of 5 percent on the other hand in case of 10 percent preference shares the cost of raising would be 10 percent.

The ideology behind investing is to maximize Earning per share which is done by using both the options of arranging finance as debt is a cheaper source of finance because of the tax benefit it provides. This idea is taken as a base of the study. Finance managers have complete freedom to choose an apt combination of debt and equity till it contributes positively to its share prices. Finance Managers across the globe are completing this challenging task of finding an optimal mix of debt and equity so that the share prices can be maximised.

Therefore, this study attempts to streamline the change in capital structure to accommodate change in share price would become highly significant. The objective of the study is to examine the impact of debt, equity and debt equity ratio financing on share price of listed banks in BSE SENSEX in India. To accomplish this target, the study hypothesized that debt, equity and debt equity ratio financing has no significant influence on share price of listed Banks in BSE SENSEX in India.

The study could also be purposeful the potential investor as it help them in deciding the stocks by looking at the capital structure of the company.

A study of this phenomena will serves as the basic planning tool for financial managers. The link between capital their structure and share price cannot overlooked therefore it is necessary that there should be improvement in prices of shares of listed Banks in BSE SENSEX in India for the long-term survival. of listed Banks . Thus, it is crucial to assess the link between capital structure and share price of listed Banks in BSE SENSEX in India for a choice of sound capital structure. The paper is planned into six sections, with this portion being introduction. Section two deals with review of extant related studies, the next section three is devoted to the methodology of the study. Segment four present data analysis and section five discussion about the findings and section six finally draw conclusion on the discoveries and afterward the suggestions.

2. LITERATURE REVIEW

There are past studies conducted in various nations which are identified with the points of this research. With a specific end goal is to show the research gap and justify the significance of this study.

Brounen, D., & Eichholtz, P. M. A. (2001) in their study examines the stock price reactions on announcement of equity and debt offerings and concluded that a negative price reaction was found on new equity offerings in low-tax countries and positive on debt offerings.

Jie Cai and Zhe Zhang (2006) using a sample of U.S. public firms during 1975-2002, stated a significantly negative effect of leverage changes on stock returns. They found that the negative effect was stronger for the firms with a higher leverage level.

Salawu (2009) explored the effect of capital structure on profitability of listed DMB in Nigeria. The investigation analyst utilized secondary data for the period 1990 to 2004 which

was extracted from the Annual reports of 50 non-monetary related recorded firms and fact books issued by the Nigerian Stock Exchange. The investigation outcome point out that profitability gives a positive connection with long term debt.

This is the essence of capital structure theory of Free Cash Flow Theory by (Jensen, 1986). A study done by Coricelli et al (2011) in Central and Eastern European companies showed hump-shaped link between the debt level and productivity growth.

Addae Amponash Albert, Bassi- Nyarko Michael & Hughes daniel (2013)in their investigating study between capital structure and profitability of listed firms in Ghana stock exchange over a period of 5 years showed that equity capital has positive relationship with profitability of the firms being studied and debt had negative relationship with studied firm's profitability.

Wilford Mawanza & Nathan Mugumisi (2013) in their study on four listed companies in the tourism and hospitality sector for the period 2009 to 2013 in Zimbabwe found through regression that there was a inverse relationship between stock price performance and capital structure.

Jane Chemutai, Dr. Caroline Ayuma, Dr. Yusufkibet (2016) in their study aimed at investigating the effects of capital structure on the share-price performance of the banks listed on the Nairobi Security Exchange employed a descriptive research design for those companies who gone public from 2009-2015. The study findings indicated that there was a significant relationship between all the study variables debt, equity, bond and retained earnings on the share price performance. The study recommends that, the commercial banks listed in Nairobi Security Exchange should formulate and enact a policy which makes commercial debt cheaper hence reduces cost of operation of banks.

A. Iqbal, H.Raza, M. Aslam et al.(2016) examines the impact of different leverage measures on the share price of cement sector on Pakistan Stock Exchange for the period 2005to 2015 through panel data approach concluded that debt ratio and degree of financial leverage is negatively determining the share price.

Ghosh, A., Cai, F., & Fosberg, R. H. (2017) analyzed the impact of capital structure on performance of 63 companies listed in Karachi stock exchange for the period ranging from 2007 to 2011concluded that capital structure has positive impact on firms value so the financial managers should be careful while taking capital structure decisions.

Study of this kind is not performed on the banking segment of listed banks on BSE SENSEX. It would be interesting to see that the same result of the above researches would come or it reveal something new.

3. METHODOLOGY

The regression research method was adopted for this research to examine the influence of capital structure on share price of listed banks in BSE SENSEX in India. This is on the grounds that the study looks to investigate the connection between capital structure and share price of listed banks in BSE SENSEX in India. The data for this study was extracted from secondary sources which is the annual reports of all the listed banks in BSE SENSEX as at 31st March 2020. The total number of listed banks in BSE SENSEX as at 31st was six(6) and census was used as the sample which makes the sample size for the study as 6 listed DMB in BSE SENSEX in India. Regression was utilized for the research which was calculated for each bank for a period of ten years from 2010 to 2019.

MODEL SPECIFICATION

With a specific end goal to determine the influence of capital structure on share price of listed DMB in BSE SENSEX in India, a linear model was constructed. The model captured contribution of capital structure (debt, equity and debt/equity ratio) on share price of listed DMB in BSE SENSEX in India. The regresion model is shown is as underneath:

$$SP_{i,t} = \beta_0 + \beta_1 D_{i,t} + \beta_2 E_{i,t} + \beta_3 D/E_{i,t} + Er_{i,t}$$

where:

D= Borrowings

E= Equity capital of banking companies in period t.

$DE_{i,t}$ = Debt/ equity ratio of banking firms

$Er_{i,t}$= error term

β_0= constant term

β_1,β_2 and $\beta 3$ = slope identifier

i= particular bank

t= time variable

we take share prices as dependent variable and the other three variables as independent variables.

DATA ANALYSIS

To know the relationship between independent and dependent variables a pair wise correlation method was used .

TABLE I: CORRELETATION RESULT BETWEEN STOCK PRICE AND OTHER VARIABLES FOR DIFFERENT BANKS

	AXIS	HDFC	ICICI	INDUSIND	KOTAK	SBI
EQUITY CAPITAL	-0.59	0.2	-0.52	0.88	-0.52	0.88
DEBT/EQUITY RATIO	-0.74	0.31	-0.62	0.97	-0.62	0.97
BORROWINGS	-0.76	0.30	0.71	-0.84	0.71	-0.84

source: Author's computation

As per table no I Equity capital and stock price has a moderate negative correlation for Axis Bank, ICICI and KOTAK Bank and a high positive correlation for INDUSIND and SBI bank and a low positive correlation for HDFC Bank

Debt/Equity ratio has a highly negative correlation with stock price of Axis, ICICI and Kotak Bank and a very high positive correlation with INDUSIND and SBI Bank and a low positive correlation with HDFC Bank's stock price

Borrowings were having a high negative correlation with stock price for Axis, INDUSIND and SBI bank, high positive correlation with ICICI and Kotak and low positive correlation with HDFC bank's share price.

H_{0A} - Debt has no significant impact on market price of bank's share

Table II: REGRESSION VALUES BEWEEN DEBT AND STOCK PRICE

	r square	P value
AXIS	0.58	0.01
HDFC	0.10	0.37
ICICI	0.39	0.05
INDUSIND	0.95	0.00

KOTAK	0.29	0.11
SBI	0.89	0.00

source: Author's computation

Table no II summarizes the regression result being debt or borrowings as independent variable and stock price be the dependent one. The p value in the case of every bank studied was significantly less than the tabulated value of .05 at 95% confidence level except HDFC and KOTAK Bank and the variation ranges between 39% to 95% which cannot be a subject to neglect.

H_{0B} - Equity capital has no significant impact on market price of bank's share

Table III: REGRESSION VALUES BEWEEN EQUITY CAPITAL AND STOCK PRICE

	r square	P value
AXIS	0.34	0.08
HDFC	0.04	0.57
ICICI	0.27	0.12
INDUSIND	0.78	0.00
KOTAK	0.43	0.04
SBI	0.77	0.00

source: Author's computation

Table III contains the value of r square and significance F or p-values when regression analysis was performed been equity capital as independent variable and stock price of the bank as dependent variable which gives half and half result which means 50 % of banks says that equity capital has a significant bearing on stock price of the bank be it INDUSIND Bank' share , Kotak Bank's share or SBI Bank's share with a variation range from 43% to 78% as per r square value on the other hand no significant change in the market price of the share of Axis Bank's , HDFC Bank and ICICI bank is shown as the p value of these three banks was significantly more than 0.05 and the variation in stock price due to change in equity capital was only from 4% to 34%.

H_{0C} - Debt/Equity ratio has no significant impact on market price of bank's share

Table IV: REGRESSION VALUES BEWEEN DEBT/EQUITY AND STOCK PRICE

	r square	P value
AXIS	0.55	0.01
HDFC	0.00	0.93
ICICI	0.50	0.02
INDUSIND	0.71	0.00
KOTAK	0.58	0.01
SBI	0.48	0.03

source: Author's computation

Table no. IV shows the extracts of results from regression analysis taken debt/equity ratio as independent variable and Stock price of bank as dependent variable. This ratio proves it significant presence in every bank's share price except HDFC Bank's share price as the significance F or p values are far less than .05 which proves that the change in stock price

was not because of chance. The variation calculated as per R square was within the range of 48% to 71%.

4. DISCUSSIION OF THE FINDINGS

To sum up the result of correlation analysis between debt, equity capital and debt/equity ratio and market price of HDFC's bank share show a low positive correlation, which implies that the capital structure and market price of HDFC bank's share were very less impacted by each other.

Rather there was a high negative correlation for equity capital and debt/ equity ratio with the market price of Axis, ICICI and kotak bank's share market price. IndusInd Bank and SBI's market value of shares shows a very high positive correlation with the changes in Equity capital and Debt/Equity ratio of the banking company.

Borrowings as a part of capital structure shows high negative correlation with market value of Axis bank, INDUSIND bank and SBI's share and a significant positive correlation with ICICI bank and Kotak bank's share.

The result of regression analysis summarizes that debt is having a significant effect on market price of all the banks except HDFC and Kotak. Equity capital as a component of capital structure was showing its significant impact on market price of 50% of banks listed in BSE SENSEX namely INDUSIND,KOTAK and SBI whereas for the other three the relationship was not significant.

Debt / equity ratio which depicts the changes in debt and equity proportion of the banking company proves its significant impact on all the bank's listed in BSE SENSEX except HDFC Bank.

5. CONCLUSION AND RECOMMENDATION

Banks are the vital segment of the stocks exchanged BSE SENSEX and their vacillation in their costs colossally impacts the most established stock trade in India just as Asia, having the eleventh biggest market capitalization value at $ 2.2 trillion. The recorded banks in BSE SENSSEX in India is unarguably basic to the development and improvement of all pieces of an economy and thusly, the pined for the overall progression of a country economy necessitates that the section stays strong and sound. In this manner one imperative worry that could sabotage the crucial meaning of the section is the issue of capital design; in such way, capital construction is significant for assessment of recorded banks in BSE SENSSEX in India. The investigation takes a gander at the capital construction and offer cost of recorded banks in BSE SENSSEX in India. The examination gives shifted results or examples while deciding the connection between stock cost and considered capital construction factors.

In any case, unquestionably the relapse examination reasons that obligation/value proportion as a mechanism of capital construction gives an adjustment owing debtors and value capital of an organization shows that it is fundamentally affecting all the financial organizations concentrated during the exploration time frame aside from HDFC bank . It is proposed that banks in BSE SENSEX in India should put forth an attempt to be sane when raising capital and recorded banks in BSE SENSEX in India should endeavor and capitalize on hold benefit for its financing. The recorded financial organizations in BSE SENSEX of India should remember that any adjustment in the red to value extent of an organization will fundamentally impact its stock worth rather can be said as market esteem so the money

chiefs alongside the top administration ought to be adept while choosing the capital construction of the organization.

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