IJRD International Journal of Research & Development Organisation
ISSN: 2455-6661

Journal of Business Management Science

TRADING ON EQUITY: AN ALTERNATIVE SOURCE OF CAPITAL STRUCTURE

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ABSTRACT

The capital structure decision is a key factor in the success of the firm. There is no unique formula that solves a firm's capital structure allocation, nor is there likely to be one. However, a careful study of the field should enable individuals to specify appropriate boundaries of how much of each type of financing is reasonable and required as it is necessary for a firm to evaluate the various sources of capital to attain the optimal capital structure, therefore this article discusses some of the features of trading on equity as an alternative source of capital structure with implications.

Keywords: Trading on Equity, Capital structure, Cost of Capital, Financial Leverage and EBIT.

INTRODUCTION

Capital is the major part of all kinds of business activities, which are decided by the size, and nature of the business concern. Capital may be raised with the help of various sources. If the company maintains proper and adequate level of capital, it will earn high profit and they can provide more dividends to its shareholders.

According to Gerestenberg, "Capital structure of a company refers to the composition or make-up of its capitalization and it includes all long term capital resources, viz, loans, bonds, shares and reserves". Thus capital structure is made up of debt and equity securities and refers to permanent financing of a firm.

Decision of capital structure aims at the following two important objectives:

1. Maximize the value of the firm.
2. Minimize the overall cost of capital.

The value of firm is linked to profit maximization; it can be simplified by using time value of money principle. Thus it is defined as the present value of expected future cash flows plus current cash flows. Cost of capital also constitutes the major part for deciding the capital structure of a firm. When the cost of capital increases, value of the firm will decrease. Hence the firm must take careful steps to reduce the cost of capital.

There may be two fundamental patterns of capital structure which are as follows:

i. Equity capital only (including Reserves and Surplus)

ii. Equity capital in combination with preference capital or long term debt i.e. debentures, bonds and loans from financial institutions etc. (i.e. trading on equity).

For the purpose of this research article we have emphasised on trading on equity pattern as a source of capital only.

A REVIEW OF LITERATURE

The two main sources of fund generation, pointed out in Literature includes, equity financing and debt financing. Equity financing means rising funds for company activities or operations by issuing stocks to individual and institutional investors. These stocks can be common or preferred. These individual and institutional investors become creditors and receive ownership interest in exchange for their funds. On the other hand, when a company raises fund through the issuance of bonds or borrowing from banks or other financial institution, it is called debt financing. In return, these individuals and institutions receive promise that they will receive interest periodically and principal amount at maturity. When a company uses mix of these sources, it is called capital structure.

Modigliani and Miller (MM) (1963) added the effect of corporate taxes to the capital structure framework. Contrary to their earlier result (MM1958) showing the debt/equity question to be irrelevant, MM (1963) found that firm value is maximized when the firm is financed entirely with debt. MM (1963) reconsidered and revised their capital structure analysis with corporate taxes and demonstrated that capital structure does have relevance for firm value. They demonstrated that, given the deductibility of taxes, firms should use the maximum amount of debt attainable. All of the same MM (1958) perfect market assumptions are made in MM (1963), except that taxes are added as an imperfection.

Elton and Gruber (1975) explored the optimal capital structure pattern for firms subject to regulation. They showed that such firms should add the maximum amount of debt. Bierman and Oldfield (1979) were concerned with the effect on corporate value of substituting debt for equity in the presence of corporate taxes. They showed that assigning systematic risk to a corporation's debt and tax shelter eliminates the problems that arise from a simple valuation problem.

Mauer and Lewellen (1987) derived a model for the corporate debt management problem whereby they demonstrated that long-term debt in a corporation's capital structure becomes a valuable tax-timing option that can be exercised by the firm on behalf of the shareholders. Obviously, this option is not available for fully equity-financed firms. This analysis suggests that debt has a positive effect on total firm value even if there is no such effect related to the tax deductibility of the interest payments on debt.

There are a number of ways in which capital structure decisions are affected by the asymmetry of information. First, Myers and Majluf (1984) showed that under information asymmetry, the market under- values equity. If the undervaluation is large enough, issuing equity to finance a new project might result in the new shareholders capturing more than the net present value (NPV) of the new project, leaving the old shareholders at a loss. Therefore, the shareholders will resist issuance of equity. The implication of their work is that if equity is issued, it signals weakness and the share prices will decline immediately.

FACTOR AFFECTING CAPITAL STRUCTURE

- Profitability— the capital structure of the company should be most profitable. The most profitable capital structure is one that tends to minimize cost of financing and maximize earnings per equity share

- Solvency— the pattern of capital structure should be so devised as to ensure that the firm does not run the risk of becoming insolvent. Excess use of debt threatens the

solvency of the company. The debt content should not, therefore, be such that it increases risk beyond manageable limits.

- Flexibility— the capital structure should be such that it can be easily manoeuvred to meet the requirements of changing conditions. Moreover, it should also be possible for the company to provide funds whenever needed to finance its profitable activities.
- Conservatism— the capital structure should be conservative in the sense that the debt content in the total capital structure does not exceed the limit which the company can bear. In other words, it should be such as is commensurate with the company's ability to generate future cash flows.
- Control— the capital structure should be so devised that it involves minimum risk of loss control of the company. The above principles regarding an appropriate capital structure or as a matter of fact militant to each other. For example, raising of funds through debt is cheaper and, is therefore, in accordance with principle of profitability, but it is risky and, therefore, goes against the principle of solvency and conservatism. The prudent financial manager should try to have the best out of the circumstances within which the company is operating. The relative importance of each of the above features will also vary from company to company.

For example, one company may give more importance to flexibility as compared to conservatism while the other may consider solvency to be more important than profitability. However, the fact remains that each finance manager has to make a satisfactory compromise between the management's desire for funds and the trend in the supply of funds. Financial manager has to plan the appropriate mix of different securities in total capitalization in such a way as to minimize the cost of capital and maximize the earnings per share to the equity shareholders. The right capital structure planning also increases the power of company to face the profits/ losses and changes in financial market.

TRADING ON EQUITY

The use of long term debt and preference share capital, which are fixed income bearing securities, along with equity share capital is called financial leverage or trading on equity. Trading on Equity occurs when a corporation uses bonds, other debts and preferred stock to increase its earnings.

The use of long term debt capital increases the earnings per share as long as the return on investment is greater than the cost of debt. Preference share capital will also result in increasing EPS

Because of its effects on the earnings per share, financial leverage is one of the important considerations in planning the capital structure of a company, the companies with high level of Earnings before Interest and Taxes (EBIT) can make profitable use of the high degree of leverage to increase the return on the shareholders equity.

Trading on equity is calculated by relating the rate of return on equity capital under the existing capital structure inclusive of debt capital to the rate of return on equity capital under an all-equity capital structure, i.e. the equivalent amount of equity share capital be raised in place of borrowed funds.

In other words, trading on equity is a technique by which a firm tries to maximize the return of equity shareholders by using fixed interest bearing securities in the capital structure. Therefore trading on equity has a direct impact on shareholders' wealth.

TYPES OF TRADING ON EQUITY

The trading on equity is basically of three types:
1. Trading on Thin Equity-
When the amount of equity share capital is less than the fixed cost capital like preference shares, debentures, bonds and long term loans, it is termed as trading on thin equity.
For example, if in the capital structure of any company the equity share capital is of Rs. 30, 00,000 and fixed cost capital is 50, 00,000 then it would be termed as trading on thin equity.

2. Trading on zero equity-
When the amount of equity share capital is equals to the fixed cost capital like preference shares, debentures, bonds and long term loans, it is termed as trading on zero equity.

3. Trading on thick equity-
When the amount of equity share capital is more than the fixed cost capital like preference shares, debentures, bonds and long term loans, it is termed as trading on thick equity.
For an example, if in the capital structure of any company the equity share capital is of Rs. 50, 00,000 and fixed cost capital is 30, 00,000 then it would be termed as trading on thin equity.

COST OF CAPITAL AND TRADING ON EQUITY

Likewise trading on equity, Cost of capital is another important factor that should be kept in mind while designing the capital structure of a firm. The capital structure is said to be optimum when the cost of capital is minimum and the total value of the firm is maximum. Cost of capital is the minimum return expected by its suppliers. Of all the sources of capital, equity capital is the costliest as the equity shareholders bear the highest risk. On the other hand, debt capital is the cheapest source because the interest is paid on it by the firm whether it makes profits or not. Preference share capital is also cheaper than equity capital as the dividends are paid at a fixed rate on preference shares. But the leverage effect is more pronounced in case of debt because of the following reasons:
a. Cost of debt is usually lower than the cost of equity share capital.
b. Interest paid on debt is tax deductible.
c. Debts are typically secured by assets like machinery, receivables, inventory, or other things of value which may be seized by lenders in case of default by the borrowers.
d. In the event of bankruptcy of a company, debt holders are satisfied in full before making any payment to the equity shareholders.

TRADING ON EQUITY AND ITS IMPACT ON THE SHAREHOLDER's FUND

The primary motive of a company regarding trading on equity is to magnify the shareholder's return under favourable economic condition. The role of trading on equity in magnifying the return of the shareholders is based on the assumptions that the fixed charges funds such as bonds, other debts and preferred stock can be obtained at a cost lower than the firm's rate of return on net assets (ROI) .Thus when the difference between the earnings generated by assets financed by the fixed charges funds and cost of these funds is distributed to the shareholders, the earning per share (EPS) and return on equity (ROE) increases but on the other hand EPS or ROE will fall if the company obtains the fixed- charges funds at a cost higher than the rate of return on the firm's assets. However, according to the traditional approach (one of the theories of capital structure), mix of debt and equity capital can increase

the value of the firm by reducing overall cost of capital up to certain level of debt because after which it could result in heavy losses to the shareholders. Traditional approach states that the overall cost of capital decreases only within the responsible limit of financial leverage and when reaching the minimum level, it starts increasing with financial leverage. So a business enterprise should always look for balanced amount of financial leverage.
Let's see a more logical aspect of using trading on equity or financial leverage through an example suppose, if you run a small business and need Rs.40, 000 for financing, you can either take out a Rs.40, 000 bank loan at a 10% interest rate or you can sell a 25% stake in your business to an investor for Rs.40, 000. Suppose your business earns Rs.20, 000 profits during the next year. If you took the bank loan, your interest expense (cost of debt financing) would be Rs.4, 000, leaving you with Rs.16, 000 in profit. Conversely, if you have used equity financing, you would have zero debt (and thus no interest expense), but would keep only 75% of your profit (the other 25% being owned an investor). Thus, your personal profit would only be Rs.15, 000 (75% x Rs.20, 000).

From this example, you can see how it is less expensive for you, as the original shareholder of your company, to issue debt as opposed to equity. Taxes make the situation even better if you had debt, as interest expense is deducted from EBIT. So, as we can see, provided a company is expected to perform well, debt financing can usually be obtained at a lower effective cost. However, if a company fails to generate enough cash, the fixed-cost nature of debt can prove too burdensome. This basic idea represents the risk associated with debt financing.

Companies are never 100% certain what their earnings will amount to in the future (although they can make reasonable estimates), and the more uncertain their future earnings, the more risk presented. Thus, companies in very stable industries with consistent cash flows generally make heavier use of debt than companies in risky industries or companies who are very small and just beginning operations. New businesses with high uncertainty may have a difficult time obtaining debt financing, and thus finance their operations largely through equity.

A COMPARATIVE STUDY OF FINANCIAL LEVERAGE OVER EQUITY FINANCING

Every time when funds have to be procured, the financial manager weighs the pros and cons of various sources of finance and selects the most advantageous sources keeping in view the target capital structure.

An EBIT-EPS approach should be analysed to understand the importance of financial leverage.

1. EBIT- EPS Analysis:

The EBIT-EPS analysis is one important tool in the hands of the financial manager to get an insight into the firm's capital structure planning. He can analyse the possible fluctuations in EBIT and their impact on EPS under different financing plans. Under favourable conditions, financial leverage increases EPS; however it can also increase financial risk to shareholders. Therefore, the firm should employ debt to such an extent that financial risk does not spoil the leverage effect.

- In case of constant EBIT

Suppose a new firm, Goodroads Ltd, is being formed. The management of the firm is expecting a before tax rate of return of 25% on the estimated total investment of Rs. 600,000.This implies EBIT of Rs. 150,000. The firm is considering two plans for financing: i) either to raise the entire funds by issuing 60,000 ordinary shares at Rs. 10 per share or ii) to raise Rs.300,000 by issuing 30000 ordinary shares of Rs. 10 each per share and borrow Rs. 300,000 @ 15% rate of interest. The tax rate is 50% (Refer Table 1).

TABLE 1

EBIT-EPS analysis in case of constant EBIT

Particulars	Only Equity (Rs)	Equity and Debt(Rs)
1.Earnings before interest and taxes (EBIT)	150000	150000
2.Less: Interest	-	45000
3.Profit before interest (PBT)	150000	105000
4. Less: Taxes	75000	52500
5. Profit after taxes (PAT)	75000	52500
6.Total earnings of investors (PAT + Interest)	75000	97500
7. Number of equity shares (N)	60000	30000
8. Earnings per share (PAT/ N)	1.25	1.75

Now we can see that in table 1, the impact of financial leverage is quite significant as the earning per share increases with use of debt element.

- In case of varying EBIT

Suppose that Goodroads Ltd may face any of the four possible economic conditions i.e. very poor, poor, normal, and good. The firm may have 5% chances of performing very poorly and earning a negative 5% return that means the EBIT shall be Rs. -30,000 in negative (-0.5% of Rs. 600,000). The firm may have chances of earning 10% as rate of return in case of poor economic conditions. In that case the EBIT shall be Rs. 60,000 (10% of Rs.600, 000). Under normal economic conditions, the firm has chances of earning 25% as rate of return; in that case EBIT shall be Rs. 150,000. If the economic conditions are really favourable, the firm can earn 60% as rate of return; in that case EBIT shall be Rs. 360,000. The tax rate is 50% (Please refer table 2, table 3, table 4 and table 5 respectively).

Now, we will analyse varying impact of trading on equity or financial leverage through different options (Plan 1 with no use of debt, Plan 2 with 25% use of debt, Plan 3 with 50% use of debt and Plan 4 with 75% use of debt) on the varying EBIT.

So, Lets discuss the various plans in order to see the impact of changing amount of trading on equity or financial leverage in different economic conditions.

Plan 1: No debt

TABLE 2

EBIT-EPS analysis in case of varying EBIT with no use of Debt capital

Particulars	Very poor (Rs)	Poor (Rs)	Normal (Rs)	Good (Rs)
1.EBIT	**-30000**	**60000**	**150000**	**360000**
2.Less: Interest	0.00	0.00	0.00	0.00
3.PBT	-30000	60000	150000	360000
4. Less: Tax	-15000*	30000	75000	180000
5. PAT	-15000	30000	75000	180000
6.No.of share	60000	60000	60000	60000
7. EPS	-0.25	0.50	1.25	3.00

Table 2 represents the change in earning per share when no element of debt capital is used by the company with varying EBIT in different economic conditions i.e. very poor, poor, normal and good respectively.

Plan 2: 25% debt

TABLE 3

EBIT-EPS analysis in case of varying EBIT with 25% use of Debt capital

1.EBIT	**-30000**	**60000**	**150000**	**360000**
2.Less: Interest	22500	22500	22500	22500
3.PBT	-52500	37500	127500	337500
4.Less: Tax	-26250*	18750	63750	168750
5.PAT	-26250	18750	63750	168750
6.No. of share	45000	45000	45000	45000
7. EPS	-0.58	0.42	1.42	3.75

Table 3 represents the change in earning per share when 25% debt capital element is used which is Rs. 1, 50,000 (25% of 6, 00,000) by the company with varying EBIT in different economic conditions. Since the interest rate is 15%, hence the amount of interest is Rs. 22,500 (15% of 1, 50,000).

Plan 3: 50%

TABLE 4

EBIT-EPS analysis in case of varying EBIT with 50% use of Debt capital

1.EBIT	-30000	60000	150000	360000
2.Less: Interest	45000	45000	45000	45000
3.PBT	-75000	15000	105000	315000
4. Less: Tax	-37500*	7500	52500	157500
5. PAT	-37500	7500	52500	157500
6.No.of share	30000	30000	30000	30000
7.EPS	-1.25	0.25	1.75	5.25

Table 4 represents the change in earning per share when 50% debt capital element is used which is Rs. 3, 00,000 (50% of 6, 00,000) by the company with varying EBIT in different economic conditions. Since the interest rate is 15%, hence the amount of interest is Rs. 45,000 (15% of 3, 00,000).

Plan 4: 75% debt

TABLE 5

EBIT-EPS analysis in case of varying EBIT with 75% use of Debt capital

1.EBIT	-30000	60000	150000	360000
2.Less: Interest	67500	67500	67500	67500
3.PBT	-97500	-7500	82500	292500
4. Less: Tax	-48750*	-3750	41250	146250
5. PAT	-48750	-3750	41250	146250
6. No. of shares	15000	15000	15000	15000
7.EPS	-3.25	-0.25	2.75	9.75

Table 4 represents the change in earning per share when 75% debt capital element is used which is Rs. 4, 50,000 (75% of 6, 00,000) by the company with varying EBIT in different economic conditions. Since the interest rate is 15%, hence the amount of interest is Rs. 67,500 (15% of 4, 50,000).

*It is assumed that losses will be set off against other profits or tax credit will be available to the firm.

So, from the above tables we can analyse the impact of financial leverage in the changed financing mode of an enterprise. Financial leverage works both ways it accelerates EPS under favourable economic conditions, but depresses EPS when the earnings are not good for the firm as too much of a good thing is usually bad. Hence, a balanced amount of financial leverage will definitely grow the value of firm until and unless the conditions are favourable.

DO COMPANIES PREFER BORROWINGS?

A number of companies in practice prefer outside borrowings for many reasons some of them are tax deductibility of interest, higher return to shareholders due to gearing, complicated procedure for raising equity capital, no dilution of ownership and control and equity results in a permanent commitment than debt.

Below are some of the sectors that prefer trading on equity or financial leverage as a part of their capital structure. (Please refer table 6 to table 16)

Sector wise Overview of few Companies in India by Debt – Bombay Stock Exchange

Debt/Liability figures as per the latest Balance Sheet available (13.09.2015)

TABLE 6
SECTOR: Retail

Sr.	Company	Last Price	Debt	% of Liability
1.	Future Retail	109.60	4,200.93	33.36
2.	Pantaloons	199.20	1,235.63	57.77
3.	Future Life	65.70	1,149.40	29.11

TABLE 7
SECTOR: Auto - 2 & 3 Wheelers

Sr.	Company	Last Price	Debt	% of Liability
1.	Majestic Auto	60.25	90.22	35.42
2.	Kinetic Eng	54.15	72.90	27.82
3.	Scooters India	24.75	23.23	15.25

TABLE 8
SECTOR: Banks - Public Sector

Sr.	Company	Last Price	Debt	% of Liability
1.	SBI	235.15	1,781,943.53	87.01
2.	Bank of Baroda	186.40	652,823.80	91.31
3.	Bank of India	136.05	571,963.77	92.45

TABLE 9

SECTOR: Consumer Goods – White Goods

Sr.	Company	Last Price	Debt	% of Liability
1.	Value Ind	10.94	1,097.71	66.80
2.	Lloyd Electric	193.50	684.92	38.86
3.	Fedders Lloyd	67.80	509.62	47.35

TABLE 10
SECTOR: Domestic Appliances

Sr.	Company	Last Price	Debt	% of Liability
1.	Bajaj Electric	251.25	386.88	13.67
2.	Khaitan Electric	38.35	315.59	60.78
3.	Butterfly	151.00	174.63	30.70

TABLE 11
SECTOR: Finance - Term Lending Institutions

Sr.	Company	Last Price	Debt	% of Liability
1.	Power Finance	220.20	169,037.87	73.92
2.	REC	252.15	131,902.32	72.01
3.	IDFC	131.15	55,004.46	63.58

TABLE 12
SECTOR: Vanaspati & Oils

Sr.	Company	Last Price	Debt	% of Liability
1.	JVL Agro Ind	15.60	208.17	12.97
2.	BCL Industries	29.80	166.57	51.23
3.	Pioneer Agro	13.75	4.22	35.85

TABLE 13
SECTOR: Transport & Logistics

Sr.	Company	Last Price	Debt	% of Liability
1.	Jet Airways	331.30	10,251.59	54.39
2.	SpiceJet	23.80	1,516.28	52.26
3.	Arshiya	28.55	1,365.53	56.85

TABLE 14
SECTOR: Telecommunications – Service

Sr.	Company	Last Price	Debt	% of Liability
1.	Reliance Comm.	67.00	27,166.00	36.05

2.	MTNL	15.70	16,604.40	61.84
3.	Idea Cellular	147.85	16,157.88	28.01

TABLE 15
SECTOR: Textiles – Processing

Sr.	Company	Last Price	Debt	% of Liability
1.	Raj Rayon Ind	0.46	543.91	82.24
2.	Gupta Synthetic	1.43	211.76	97.02

TABLE 16
SECTOR: Construction & Contracting – Civil

Sr.	Company	Last Price	Debt	% of Liability
1.	Gammon India	11.70	4,746.10	52.34
2.	Hind Constr	17.60	4,582.32	47.54
3.	IVRCL	7.31	3,539.98	42.35

Source: MoneyControl.com

From the above tables it can be analysed that majority of public companies are adding financial leverage as a part of their capital structure.

CONCLUDING REMARKS

The above discussions lend credence to the fact that financial leverage should be used by the companies as an additional source of capital structure, as if used successfully leveraged finance can accomplish much more than a company could possibly achieve without the injection of leverage. A high leverage or (high portion of debt in capital structure) in low growth firms can be used to discourage management from investing in non-profitable businesses or projects because debt pre-commits firms to pay interest and principal and such commitments in low growth firms can reduce managerial discretion over free cash flows that may have otherwise been allocated to negative NPV projects. In other words, the banks and other debt-holders perform a beneficial monitoring and disciplinary role in low growth firms where a high level of debt can limit the over-investment bias caused by managerial agency problems. On the other hand trading on equity if used by the medium and high growth firms will not only increase the value of firms as well as the credit ratings but also increases the wealth of shareholders which is the prime motive of every finance manager. So, it can be concluded that a right amount of leverage will always improve the value of firm and increases its credibility if handled with care.

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