Capital Structure Decision of Insurance Industry of Pakistan

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Abstract

The financial institutions perform central part in the performing and construction of financial system of the country. Capital structure decision for an institution lead to value creation or may it reach to the verge of solvency. The study opted independent variables i.e. Profitability, growth, risk, tangibility, size and age while; dependent variable is chosen as leverage. The statistic model signifies the imperative factor such as profitability, risk liquidity, size and age of capital structure in insurance companies of Pakistan.

Keywords: Capital structure, Insurance companies, Variables, Value creation.

Capital structure refers to the composition of debt and equity finance. The decision of capital structure is panacea for any financial and non financial organization. Right decision of the capital structure enhances the wealth of the share holder, which reflects the value creation (Dalal, 2013). Last decade depicts the financial crisis of the financial institutions, which incline the importance of leverage. The high portion of debt influences operation, profitability, liquidity and financial position of the firm. The goal of insurance companies are risk cover, however these firms must have to identify the capital structure. These companies have to pay the claims for the misshapen or any uncertainty of the policy holders so, the combination of debt and equity financing is a yardstick for the profitability and survival of the companies. The dramatically change in the systematic factor might influence the operating activities of the insurance companies due the inclined trend of the uncertainty. Financial sector is engine for country development and prosperity (Rahman, 2012). The economic

prosperity and development is based on the progress of business sector and it further strengthens employment position in the countries. The financial health of the firms is based on the capital structure and some of the micro and macro determinants are interest rate, security prices and these policies having impact on capital structure decision (Green, Murinde & suppakitijarak, 2002).The theory which created the foundation for the capital structure is MM theory, however non of the prevailing theory specify the weight for the capital structure for the firm to achieve the goal (Zhou, 2008). Capital structure decision is the foremost and hallmark for the any organization, because this decision influenced the value of the firm. Various theories identified different variables that having impact on the performance and profitability of the firm but the decision of the proportion of debt and equity is still a dilemma (Amidu, 2007). The researcher focal point in most of the studies are the non-financial firms, however very few research was conducted in the field of financial sector and particularly in insurance industry of Pakistan. Therefore the prevailing study also identifies and examines the determinants of capital structure of insurance sector of Pakistan over the period of seven year from 2007 to 2013.

Literature Review

Various theories such as MM theory, trade-off theory, Agency cost theory, signaling theory and pecking order theory stated different combination of debt and equity research and also identified diverse factor that may influence the strategic decision of the management. The single theory not specified the proportion of the debt and equity that provided edge for that firm, but each firm composition varies from industry to industry evidence by different prior research work. Zeitun and Tian (2007) explored the idea of the capital structure that firms raise debt finance and it's having inverse impact on the performance. Ahmad et al (2010) investigated the parameters of capital structure in insurance industry of Pakistan, such as liquidity, size; profitability and risk

by adopting Pecking order trend of liquidity, profitability and age and also negatively associated with debt financing. The size practiced positive relation with debt and reflects trade-off theory. The debt has insignificant linkage with growth and tangibility of the asset. Mary et al. (2011) illustrated that firm raised debt, so it overstretch the capability to overhaul the debt and may be susceptible to business decline and varying in mark up.

Chakraborty (2010) envisage the unlikely assumption in MM theory with the absence of bankruptcy cost. The trade-off theory also explored that companies are apparently opting their limits of debt to trade off leverage and get benefit of tax.

Naveed et al. (2010) enclosed the study about life insurance sector of Pakistan and shed light on that liquidity and leverage and consisting of inverse relations, when liquidity inclined then leverage decrease and vice versa. Ajanthan (2013) studied that firms use less debt proportion as compare to equity finance practiced profitability, and these firm raised internal finance Asnakew (2013) found that the parameters such as profitability, age and growth have significant effect on capital structure on insurance companies and business risk and liquidity, for long and total debt. While tangibility of the asset and size found to be insignificant on capital structure composition. Tornyeva (2013) identified the determinants of capital structure of insurance companies such as tangibility, risk, growth, tax and size. The (growth, size, tangibility and tax) are indirectly associated with debt adopting pecking order and static trade-off theory.

Research Methodology

Sample and Data

Insurance sector is prerequisite for the providing of risk coverage for the masses, all the financial institution published financial statements every year in their annual reports to educate all the stake holders. Five life insurance companies are selected

from 2007 to 2013. Data has been collected from annual reports and "Insurance Year Books" which is published by IAP.

Multi Regression Model

$LG = \beta0 + \beta1\ (SZ) + \beta2\ (GR) + \beta3\ (PR) + \beta\ 4\ (TA) + \beta5\ (LQ) + \beta6\ (AG) + \beta7\ (RK) + e$

LG= Leverage, SZ=Size, GR=Growth, PR= Profitability,
TA= Tangibility, LQ= liquidity, AG= Age, RK= Risk, e= error term.

Table 1
Variables and Their estimated association

Determinants	Explanation	Expected Relationship
Size	Natural log of premium	P
Growth	% change in premium	N
Profitability	EBIT divide by total asset	N
Tangibility	Fixed asset divide by total asset	N
Risk	Standard deviation of total claim divided by total premium	N
Liquidity	Current asset divided by current liability	N
Age	Difference between observation year and establishment year	N

Results

The impact of seven variables such as "size, profitability, age, growth, liquidity, tangibility and risk" on capital structure of insurance companies has investigated by OLS Regression Model. Table 4.1 explores the outcomes of regression analysis, by selecting seven independent variables are empirically calculated by opting the financial information of life insurance sector of Pakistan

from 2007 to 2013. Adjusted R square value is fewer slightly as compare to the value of R square (0.966) determined that leverage ratio is closely 96 percent dependent on independent variables. Moreover, F statistics explained that the empirical outcomes are significant at 1 percent, therefore proved the validity of the estimated model. While, the value of t statistics of risk and size are positive and significant at 5 percent and 1 percent Moreover, growth and tangibility are positive but insignificant. Furthermore the table also explained that the t value of independent variables such as size, profitability and liquidity are negative and significant at 1 percent of significance level.

Table 2

Regression Coefficients & Significance level of Model

Variables	Unstandardized coefficient		t value	Sig
	B	std. Error		
constant	.311	.087	4.041	.013
Size	.121	.008	12.611	.001*
Growth	.011	.001	1.454	.154
Profitability	-1.152	.512	-2.723	.076*
Tangibility	.631	.913	.642	.621*
Liquidity	-.015	.004	-3.182	.007*
Age	-.081	.005	-5.112	.001
Risk	.021	.006	2.623	.028

R Square 0.966
Adjusted R Square 0.954
F statistics 115.011
** Significant at 1% level*
***Significant at 5% level*

Table 2 depicts that at 1 percent level of significant the coefficient of variable size is positive and these information forecasts for the large firms of the insurance industry of Pakistan. These firms give high rank to the debt as benchmark to equity, while developing the composition of capital structure. Moreover, it displayed a positive association between leverage and size of the

insurance companies over selected years. The outcome also concluded the pattern that large firms are utilized more debt in the capital composition because these firms are less uncertain more spread and can also diminish bankruptcy cost. However, small size firms required to give priority to lower debt due to low liquidity and might confront financial destabilization. The value of growth displays an affirmative association between debt and growth ratio, but insignificant with regard to p-value of 0.154. Positive sign denoted greater debt ratio also presented by pecking order theory however, insignificant outcome shows that growth is not estimated as a prominent variable for leverage in the analysis of insurance sector. Agency costs of debt are predicated to be huge for firm that are in growth stage but discarded that hypothesis. These firms take ability for acquisition. The value of coefficient for profitability variable is negatively resulted, but significant at 1 percent of significance level. Negative sign shows the inverse linkage between leverage and profitability confirms that insurance sector used less debt proportion in Pakistan. Furthermore the result also empirically verifies that insurance companies of Pakistan tag on pecking order prototype. The insurance companies adopted and preferred retain earning for the raising of finance as compare to issuing debt instruments. Moreover, inverse association provides the conformation of agency theory, while this reflects that financially stable and profitable companies ignore to raise funds from market that is inefficient. Tangibility of assets value is .631 and having positive coefficient but is not significant with the p value; however positive association reflects that the firm can borrow with the providing of low resource. Moreover the insignificant linkage of tangibility variable is not much strong to explain insurance companies in Pakistan. The model explains that the independent variables of liquidity with negative coefficient value-0.015 are significant at 1 percent but this negative sign explore the opposite association of liquidity and debt. The negative linkage of debt and age of the insurance companies are clear from the table however the negative association depicts that firms having long life belonging from the insurance industry used small

debt in the development of capital structure. For the long survival of the firm less borrowing strategy will be follow (Nivorozhkin, 2005).Risk is positive and significant significantly at 5 percent level. Only risk is significant at 5 percent all the other independent variables are significant at 1 percent level. The Positive relation of risk and capital composition in the insurance industry as claim is hiking then debt is also inclining trend. The more risky companies acquire debt from external source, when paying to the policyholder.

Conclusion

The empirical outcome of the study identified over the period 2007 to 2013 that the parameters of the insurance companies are profitability, size, risk and liquidity. These factors are pre requisite for the insurance industry of Pakistan by adapted Pecking order pattern in provision of profitability, age, liquidity. As leverage possessed inverse association with age, profitability and liquidity, however direct correlation between leverage and size depicts steady pattern with the trade off theory. The consequence concluded that leverage expose insignificant linkage with tangibility of asset and growth.

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