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Effect of Profitability and Financial Leverage on Capita Structure in Pakistan Textile Firms

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Abstract
This study concentration the effect of profitability and financial leverage on capital structure in Pakistan textile firms. This study is based on selected 10 listed KSE textile firms the data for the period 2009 to 2014. Estimated regression model and correlation between the financial leverage and profitability on capital structure. According to our finding there is negative relationship between capital structure and profitability and positive relationship between capital structure and financial leverage if the financial leverage is increase the profitability is decrease and vice virsa there have negative correlation.
Keywords: Capital Structure, Profitability, financial leverage

1. Introduction

Finance is basic element for running, developing or acquire any business and necessary for achieving strategic plans. . All companies of textile as well as other sector of economy need investment for financing their assets. There are different ways for raising capital or financing the businesses. The basic ways of collecting capital are issuing shares and getting debts. We have selected 10 textile firms listed in KSE during the data period 2009 to 2014.

This study defines the effects of profitability and financial leverage on the capital structure in Pakistan textile sectors. Textile sector is one of the biggest manufacturing industries in Pakistan. It plays a major role in economy of Pakistan. It makes addition of forty six percent to the total output of a Gross Domestic Product. Pakistan is one of the huge exporters of textile goods. Capital structure is a combination of long term, short term debts and equity. On the other hand capital structure represent how a firm finance overall work performance by utilization different funds. It plays a vital role in making financial decision by the management.

1.1. Profitability

Profitability means the relationship among business earnings from the capital assets of business. Profitability is measured by earning before tax to the total assets. According to pecking order theory a firm can increase its profitability by using its inside funds. There are two theories about profitability: Trade off Theory and Pecking Order Theory. Trade of theory claims that by using debts a firm can increase its profitability, as per trade off theory there is positive relationship among profitability and leverage. By increasing debts profitability also increase and vice-versa. Pecking order theory (Myers 1977) says that managers have better information about their company future than outsider and they protect the interest of existing shareholders. they should use retained earnings and if not available then they should prefer debt over equity (Porta et al., 2000; Sunder & Myers, 1999).

1.2. Financial leverage

The amount of debt used by the company to finance its assets is known as financial leverage. Financial leverage is way of enhancing estimated return in an entity whereas at the same time it's also threat to the shareholder interest because it create problems to repay the debts. Financial leverage can be measured by dividing a firm total debt to its total assets.

1.3. Significance of study

We have taken the capital structure as a dependent variable and profitability, financial leverage are treated as an independent variables which have not been used before.

1.4. Research question

- Is financial leverage has effect on capital structure?
- Is profitability has effect on capital structure?
- Is there any relation exist between financial leverage and profitability?

1.5. Research objective

How textile firms can increase their value in the market. It is important to note that textile sector is one of the largest sectors of Pakistan economy and purpose of the study is to grow the textile sector and to promote the economy, and find the relationship between capital structure, financial leverage and profitability.
Section 1 of this paper is introduction and next is literature review of textile firms. In section 3 describe data source

and justify the select of variables. At last section methodology used of this study.

2. Literature review

Modigaliani and Miller in 1958 tried to look into the connection among capital structure and earnings/market value. Their argument was that in an nation without corporate and personal taxes, capital formation had no consequence on firm value. In other words under some given preventive hypothesis , an un-leveraged firm had the same market value as a Leveraged firm. Consequently included corporate taxes in their model showed that earnings and market value of the firm will be the maximum if 100% debt is use a firm for financing its assets. The main assumption was that business risk can be fairly assessed by the SD of operating income (EBIT) and that all present and future potential investors share similar expectations about corporate earnings and the chances of variation in those earnings and also was they assumed the companies' stocks and bonds were traded in a perfect market and also assumption was that rate of interest on debt was a risk-free rate for firms as well as individuals.

Yoon, Eunju and Jang, SooCheong (2005) research association between return on equity (ROE), financial leverage and size of firms in the restaurant industry for the period 1998 to 2003. First it was assumed that vastly liveraged restaurant firms have lower profitability, but the researcher failed to hold the outcomes. On the basis of market and accounting it was accomplished that high financial leverage firm were fewer amount of risk. The investigator has used financial leverage as autonomous and firm volume is reliant variable. Amjad sohail durting the year 2006 conducted the research on the subject The collision of financial structure on profitability in Pakistan Textile segment by using jury data obtained from the financial statements of the companies scheduled on the Stock Exchange of Karachi. It is bring into being that a noteworthy positive connection exists between the short term debt and profitability and statistically important negative relationship between long term debt and profitability. The results are to some extent consistent with the previous studies as the negative relationship between long term debt and the firm performance have a tendency to sport the leading pecking order theory. The relationship of short term debt and the financial performance in contrast attests the static trade-off theory. Total debt as a whole has no association with the firm's performance because of the inherited different characteristics of short term debt and long term debt.

RafiqueMahir, studding during 2011 about the effect of the productivity of the firm and its financial leverage on the capital structure of the automobile sector companies in Pakistan. This study used the data during the five year data of 11 automobile listed companies in KSC. Financial leverage and profitability minor effect on capital structure, during this study they are unable to identify the effect.

Dr. TaaniKhalaf, 2012 The research aim to settle on the impact of working funds management policy and financial leverage on financial performance of Jordania corporations measured in terms of disposable income, return on equity (ROE) and return on asset (ROA). This schoolwork used on forty five corporations included in the manufacturing sector. Results of the study indicated that firm's working capital management policy, monetary pull, and firm dimension have valuable relation to the net earnings. However working capital management policy has no important impact on return on equity and return on assets.

"Net Income" (NI), "Return on Assets" (ROA), and "Return on Equity" which h are the measure of profitability are used as reliant variables, whereas working capital management policy and Debt ratio which is a proxy variable of financial leverage are used as independent variables.

"Sunday Ajao" et,al,2012 was research involving "trend analysis" of five years financial statements of five industrialized firms was carried out using purposive sampling technique. The result however, showed that every working capital component effected the profitability levels of the company at varying rates, but, these effects when pooled together are not significant. To facilitate the smooth running and/or effective management of working capital so as to enhance the level of profitability, it was recommended that the companies should adequately plan and control their operations, adjust the shortfalls as noted, consider the principles of finance in their decision making, employ the services of experts (analysts) in complex business areas, and conduct periodic stock taking if possible every two weeks. During the year 2013 l "Mumtaz Raheel" explained in this research that firm's capital structure an important role in determining its future growth, sustainability and financial performance. It is observed that investors are highly interested in the performance of firms listed in the stock market. Empirical evidence gives little indication of identifying the casual relationship between capital structure of a firm and its financial performance, However it is generally believed that transactions and bankruptcy costs play a vital role in the choice of debt to equity financing. Debt/Equity ratio is commonly used as a measure of capital structure, while other ratios like (Earning per Share, Price/Earnings Ratio, Operating profit Margin, Return on Asset, Return on equity) are used as proxies for firm performance. These ratios are used to study the relationship between capital structure and firm performance in the context of large private companies in Pakistan. A total of 83 companies are selected from KSE 100 index for our analysis

3. Research design

3.1 Source of Data

This study is based on data take from State Bank of Pakistan "Balance Sheet" analysis of listed companies in Karachi Stock Exchange 2009 to 2014 of 10 firms. They provide the information of financial statement of all listed companies.

3.2 The Sample

This study concentration on the textile firms listed in KSE. Firstly, we are selected 20 firms of KSE. After all of screening incomplete of data we are left 10. The computation of data is giving Annexure A.

Name of Companies
Ellcot Spinning Mills Limited (Pak)
Gadoon Textile Mills Limited
Ghazi Fabric International Limited
Hafiz Textile Mills Limited
ICC Textile Mills Limited
Quality Textile Mills Limited
Sapphire Textile Mills Limited
Shahzad Textile Mills Limited
Shahtaj Textile Limited
Zephyr Textile Limited

3.3. Variable Description

3.3.1. Dependent and independent variable

Onward discussion of verity of theories capital structure, now discuss the dependent and independent variables of our study. We used the debt to equity ratio for capital structure (dependent variable). For independent there are various but we used in our study financial leverage to represent the debt ratio (total debt/Total assets), and for the profitability (EPS) of firms.

3.4. Hypothesis

There is a positive relationship between financial leverage and capital structure when debts increase it's also increase the financial payable.

There is negative relationship between financial leverage and profitability due to increase in one the other will be decreased.

4. Methodology

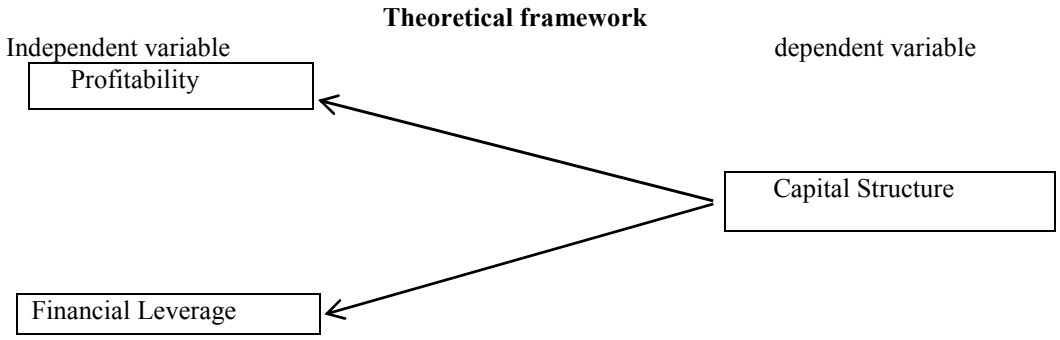
4.1 The Regression Model

This model is used to forecast one variable from one or more. Our study used the panel data regression model. This type of data helps analysis of cross-sectional and time series data. Panel data are given follows individual sample it's provided several observations and combine the features of cross-sectional and time series data. It provides the results on statistical units of number of year.

Our regression model equation will be:

$$\mathbf{CS} = \boldsymbol{\beta_o} + \boldsymbol{\beta_1}\ \mathbf{PF} + \boldsymbol{\beta_2}\ \mathbf{FL} + \in$$

CS = Capital Structure
PF = Profitability
FL = Financial Leverage
$\in$ = The error term
β_o= The intercept of equation
β_1= The change of co-efficient for profitability
β_2= The change of co-efficient for financial leverage



4.2. Result and Conclusion

This section reported the descriptive statistics and the regression analysis and correlation of co-efficient. Finally, important conclusion about the result has been drawn.

4.2.1. Descriptive Statistics

Descriptive statistics present in Table 1. This table shows information of variables. This table presents the mean, median, maximum, minimum, and standard deviation for the variables.

4.2.2. Correlation of Coefficient

Table 2 reported the result for check the multi-co-linearity between the independent variables.

According to our findings the multi-co-linearity is serve among the selected independent variables. Capital structure and profitability is negatively correlated. Whenever debt to equity ratio increase the profitability is decrees. On the other hand the financial leverage is positive correlated. When the debt ratio increase the payable is also increase. Financial leverage and profitability is negatively correlated any one increase the other one is decrees and vice virsa.

4.2.3. Regression Analysis

We are examining the regression of capital structure on financial leverage and profitability for the purpose those variables have significant explanatory influence as shown in table 3.

The estimated value of table 3 reported that that R- squired is 0.22. This show capital structure is 22% variation in dependent variable and are explain given two independent variable. The value of F-statistics validly of model. The value of probability (F-statistic) show the model is good fit. The Durbin-Watson statistic (2.56) show there is evidence to accept null hypothesis that there is autocorrelation in estimated model. This table also accounts the positive relationship with the capital structure and financial leverage show the coefficient value is 0.35. The hypothesis is reported the significant relationship according to our statistically result.

Reference

1.Modigliani, F. & Miller, M. (1958).The cost of capital, corporate finance, and the theory of investment, American Economic Review 48, 261-297

2.Yoon, Eunju and Jang, SooCheong (2005) "The Effect of Financial Leverage on Profitability and Risk of Restaurant Firms ," Journal of Hospitality Financial Management: V ol. 13: Iss. 1, Article 24. Available at: http://scholarworks.umass.edu/jhfm/vol13/iss1/24

3. Mahira Rafique, 2011,'' Effect of Profitability & Financial Leverage on Capital Structure: A Case of Pakistan's Automobile Industry'' Economics and Finance Review Vol. 1(4) pp. 50.

4. Dr. Khalaf Taani International Journal of Management Sciences and Business Research, 2012, Vol. 1, Issue 8. (ISSN: 2226 -8235)

5. Sunday Ajao et,al, 2012," Effective Working Capital Management And Profitability"

6. Raheel Mumtaz et;al, 2013, capital structure and financial performance evidence from Pakistan J. Basic. Appl. Sci. Res, 3(4)113-119

Table 1: Descriptive Statistics

	CS	FL	PF
Mean	0.761154	-0.583403	1.867498
Median	0.387365	-0.594935	2.014156
Maximum	5.129899	0.014002	4.783818
Minimum	-1.452434	-2.353878	-2.407946
Std. Dev.	1.298104	0.427528	1.638432
Skewness	1.300046	-1.418928	-0.655557
Kurtosis	5.032968	6.805120	3.453631
Jarque-Bera	27.23360	56.33090	4.812005
Probability	0.000001	0.000000	0.090175
Sum	45.66927	-35.00419	112.0499
Sum Sq. Dev.	99.41943	10.78405	158.3832

Table 2: Estimated Correlation between Variables

	CS	FL	PF
CS	1.000000	0.354834	-0.407144
FL	0.354834	1.000000	-0.308146
PF	-0.407144	-0.308146	1.000000

Table 3: Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.696949	0.280003	6.060458	0.0000
FL	0.769517	0.372418	2.066272	0.0434
PF	-0.260700	0.097178	-2.682704	0.0095

R-squared	0.223899	**Mean dependent var**	0.761154
Adjusted R-squared	0.196667	**S.D. dependent var**	1.298104
S.E. of regression	1.163476	**Akaike info criterion**	3.189408
Sum squared resid	77.15954	**Schwarz criterion**	3.294125
Log likelihood	-92.68223	**Hannan-Quinn criter.**	3.230368
F-statistic	8.222013	**Durbin-Watson stat**	2.560329
Prob(F-statistic)	0.000729		

Annexure A

		FL	EPS	CS
2014				
	Elloct spinning mill limited	0.4068	23.37	1.4579
	Gadoon textile mill limited	0.496	24.78	0.6766
	Ghazi fabric international limited	0.9941	0.32	169
	Hafiz limited	0.1896	15.75	0.234
	ICC textile mill limited	0.8293	2.45	3.2165
	Quality textile mills limited	0.4378	0.75	1.0205
	Sapphire textile mills limited	0.3949	48.97	0.6528
	Shahzad textile mills limited	0.3583	12.11	0.7928
	Shahtaj textile limited	0.4719	7.37	1.1073
	Zephyr textile limited	0.6798	1.07	3.4746
2013				
	Elloct spinning mill limited	0.4187	32.16	0.7203
	Gadoon textile mill limited	0.5121	48.42	1.2315
	Ghazi fabric international limited	0.095	1.71	93.95
	Hafiz limited	0.2064	4.07	0.2601
	ICC textile mill limited	0.788	0.1	4.1429
	Quality textile mills limited	0.3742	10.39	0.7891
	Sapphire textile mills limited	0.3943	106.38	0.6511
	Shahzad textile mills limited	0.3887	14.9	0.9685
	Shahtaj textile limited	0.4795	11.69	1.1884
	Zephyr textile limited	0.7034	1.92	4.2738
2012				
	Elloct spinning mill limited	0.4747	13.37	0.9039
	Gadoon textile mill limited	0.4932	27.68	0.9733
	Ghazi fabric international limited	0.9631	4.95	52.93
	Hafiz limited	0.8678	5.69	1.011
	ICC textile mill limited	0.8008	2.76	4.08
	Quality textile mills limited	0.5266	4.16	1.592
	Sapphire textile mills limited	0.4075	53.46	0.688
	Shahzad textile mills limited	0.4271	6.53	1.2623
	Shahtaj textile limited	0.6266	9.04	1.821
	Zephyr textile limited	0.7775	0.25	5.4512
2011				
	Elloct spinning mill limited	0.4492	32.16	1.4775
	Gadoon textile mill limited	0.564	92	1.2939
	Ghazi fabric international limited	0.9028	6.42	26.8212
	Hafiz limited	0.5411	2.88	0.9863
	ICC textile mill limited	0.803	6.8	5.8268
	Quality textile mills limited	0.4334	12.59	1.035
	Sapphire textile mills limited	0.4774	80.04	0.9137
	Shahzad textile mills limited	0.438	7.59	1.4687
	Shahtaj textile limited	0.6768	21.19	2.2777
	Zephyr textile limited	0.7926	1.49	6.2971
2010				
	Elloct spinning mill limited	0.6585	11.75	1.9284
	Gadoon textile mill limited	0.4729	119.56	1.5189
	Ghazi fabric international limited	0.9719	3.44	17.9815
	Hafiz limited	0.9792	2.81	0.9861
	ICC textile mill limited	0.7375	14.51	3.8025
	Quality textile mills limited	0.4712	3.1	3.6761
	Sapphire textile mills limited	0.4825	50.57	0.9325
	Shahzad textile mills limited	0.4717	7.92	1.9496
	Shahtaj textile limited	0.6862	11.16	2.4573
	Zephyr textile limited	0.8239	1.06	9.3797
2009				
	Elloct spinning mill limited	0.7431	0.09	2.8938
	Gadoon textile mill limited	0.6734	14.45	2.4868
	Ghazi fabric international limited	0.9473	3.99	9.7629
	Hafiz limited	1.0141	5.44	0.9626
	ICC textile mill limited	0.7561	7.4	6.1278
	Quality textile mills limited	0.5907	0.13	0.3036
	Sapphire textile mills limited	0.5623	8.95	1.2847
	Shahzad textile mills limited	0.5137	2.49	2.0743
	Shahtaj textile limited	0.6987	12.13	0.9213
	Zephyr textile limited	0.8054	2.54	8.1072