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ARTICLE

**DETERMINANTS OF CAPITAL STRUCTURE OF SERVICE AND
MANUFACTURING SECTORS OF PAKISTANI COMPANIES LISTED IN
KARACHI STOCK EXCHANGE**

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Abstract

Capital structure alludes to how an organization finances its operations whether through shareholders equity, debt or a blending of both. This study was aimed to find out the determinants of capital structure in Manufacturing and Service Sectors of Pakistan and examine which capital structure theory (Trade off theory or Pecking order theory) is relevant in Pakistani context. For study secondary data was collected from financial statements of 30 Companies and then data was analyzed through Correlation and Multi Regression analysis. Results showed that leverage has negative significant relationship with tangibility in both sectors which conformed Pecking order theory is followed by firms in both sectors. Profitability has negative significant relationship with leverage in manufacturing sectors whereas it has positive non-significant relationship with leverage in service sectors. This result revealed that manufacturing sectors follow Pecking order theory whereas service sectors support Trade off theory. Moreover in manufacturing sectors growth and leverage have negative significant relationship whereas in service sectors both variables show positive non-significant relationship. Manufacturing sectors support Trade off theory but service sectors support Pecking order theory. Size and leverage show positive non-significant relationship in manufacturing sectors whereas show positive significant relationship in service sectors. Due to positive sign, they follow Trade off theory. Effective tax rate has positive non-significant relationship with leverage. Positive sign shows firms follow Trade off theory in both sectors but due to non-significant result the effective tax rate not found to be a significant determinant of capital structure. This study will help corporate managers and decision makers to make optimal capital structure decision.

Key words: Capital Structure, Trade Off Theory, Pecking Order Theory, Manufacturing Sectors, Service Sectors

JEL Classification: G3, G32

Introduction

Financing and investment are two major decision areas in a firm. In the financing decision, manager is concerned with determining the best financing mix or capital structure

for the firm. Capital structure characterizes the firm financial framework which comprises debt and equity used to finance the firm. Capital structure is one of the most important topics among researchers in finance. The capability of firm to carry out stake holders' requirement is closely linked to capital structure and it also play vital role in maximizing the performance of firm and its value. It tries to explain the mix of securities and financing sources used by companies to finance investments (Myers, 2001). Saad (2010) states that capital structure means the way a firm finances its assets across the mixture of debt, equity or hybrid securities. Brigham (2004) said capital structure is the way in which a firm finance its total assets, current operations and any expected growth through issuing equity, debt and hybrid securities. To cut in short capital structure is mixture of debt which classified into long-term and short-term debt and equity which comes from issuing common stocks, preferred stocks and retained earnings. Beside these sources of finance, firms issue some hybrid securities that possess the characteristics of both equity and debt. It's very difficult to determine the capital structure of an organization. Financial managers are facing problems in accurately determining the optimal capital structure. Whereas optimal capital structure described as smallest weighted average cost of capital so that worth of an organization can be enhanced. The key barrier in capital structure is between debt and equity. The ratio of debt funding is measured by gearing or leverages. There are different factors that affect a firm's capital structure, and a firm should challenge to determine what its best mix of financing. But determining the precise optimal capital structure is not a science, so after examining a number of features, firms establish a target capital structure which it considers is most auspicious (Myers, 2001).

There are different theories which try to explain the capital structure but according to Myers (2001) there was no universal theory on the debt to equity choice. The very first theory of capital structure was given by Modigliani and Miller (1958) which states that capital structure theory works under perfect market condition and the assumption of perfect market are no taxes, no transition cost, no bankruptcy cost, market efficiency, rational investors. Under these assumptions, the weighted average cost of capital (WACC) remains constant by changes in capital structure. According to Trade off theory firms prefer to partially finance with debt and partially with equity. There are advantages of financing with debt such as tax shield benefits, agency cost benefits and there are some disadvantages of financing with debt such as costs of financial distress including bankruptcy costs of debt. Therefore firm can optimize its value at a point where marginal costs of debt and marginal benefits of debt are balanced (Ross et al, 2008). Pecking order theory is another approach to define capital structure of a firm and it explains how company makes financial decisions. First developed by Donaldson in 1961 and later it modified by Stewart C. Myers and Nicolas Majluf in 1984, the theory seek to explain that the cost of financing increases with asymmetric information. Pecking order theory predicts the hierarchy of preference in which firms prefer internal financing to external financing and prefers debt to equity. Internal financing used first; when that is exhausted, then debt is issued; and when it is no longer practical to issue any additional debt, equity is issued.

Optimal capital structure is the one that strikes a balance between risk and return to accomplish ultimate goal of maximizing the stock prices (Ross et al, 2008). Capital structure is fundamentally permanent long term financing of a firm. Although there has been abundance of research focusing on the most important determinants of capital structure, there is still deviation regarding which factors significantly affect a firm's capital structure.

Literature Review

A.Ajanthan (2013) examined the determinants of Capital Structure of Hotel and Restaurant Companies in Sri Lanka and observed negative relationship between Profitability and debt ratio whereas other independent variables were not significant with debt ratio. Moreover, it concluded that Pecking order theory was more applicable to Sri Lankan perspective.

Samra Kiran (2013) conducted research on Capital Structure Determinants: A Comparative Analysis of Textile, Chemical & Fuel and Energy Sectors of Pakistan. The result revealed that in all sectors there is positive relationship among Leverage, tangibility, non-debt tax shield, growth. On the other hand Size, Profitability, earning volatility showed negative relationship with Leverage. Moreover, only tangibility variable showed significant relationship among all sectors, which confirm Trade Off theory. Other variable predicts similar sign as suggested by Capital structure theories but value was non-significant so they failed to confirm Significantly Capital Structure theories.

Paul et al (2013) conducted research on determinants of capital structure: evidence from Ghanaian firms. The purpose of this study is to examine the determinants of capital structure among 33 listed and non-listed Ghanaian companies from the period of 2003 to 2007. The result revealed that long-term debt is irrelevant determinant of quoted and non-quoted firms in Ghana because they were more relying on equity. Furthermore, the relationship found between profitability, tangibility, size, risk and Leverage was positive but non-significant. Negative significant relationship found between Growth, tax and Leverage.

Oladele & Adebayo (2013) took initiative to determine determinants of capital structure in Nigeria. The findings of study showed that Leverage has positive significant relationship with tangibility. Size has negative significant relationship with Leverage. Profitability and growth showed positive non-significant relationship with Leverage whereas Tax showed negative non-significant relationship with Leverage.

Faiza Saleem et al (2013) examined the determination of capital structure of oil and gas firms listed on Karachi stock exchange in Pakistan. This study concluded that all independent variables have significant impact on balance of Leverage and it also concluded that three out of five independent variables showed positive relationship with Leverage and other two out of five independent variables showed negative relationship with Leverage.

Khalid Alkhatib (2012) investigated the determinants of Leverage of listed companies in Jordan. Research concluded that when both sectors together analyzed, the result was not statistically significant. Moreover, when individual sector was analyzed then the result shown difference, in service 3 out of 5 independent variables shows significant relationship with Leverage whereas in industrial sector 2 out of 5 independent variables shows significant relationship with leverage.

Babalola & Abiodun (2012) examined the effects of optimal capital structure on Firms' Performances in Nigeria. The purpose of this paper was to identify the optimal structure to maximize the performance of selected firms under same systematic risk. Their main objective was to explore the empirical implications that there exists an optimal capital structure under trade-off theory and the optimal capital structure of manufacturing firms. They concluded that target ratio change with firm performance and external environment. They also find out that firm performance is quadratic function of debt ratio. Trade off theory

was more reliable for manufacturing industry and the results are constant with the hypothesis that the corporate performance is a nonlinear function of the capital structure.

Shehu (2012) examined the Determinants of Capital Structure in the Nigerian Listed Insurance Firms. The aim of this study was to investigate which theories of capital structure exist in Nigerian listed Insurance firms. Result showed that Probability follow Pecking Order theory, tangibility follow Trade Off theory, Agency theory support Growth independent variable and in the last asymmetry of information theory support Size variable.

Chapra & Asim (2012) have conducted research on Determinants of Capital Structuring: An Empirical Study of Growth and Financing Behavior of Firms of Textile Sector in Pakistan. The aim of this study was to find out the factors of optimal capital structuring that distress growth and financing behavior of textile sector firms in Pakistan by focusing that capital structure has vital role in firm financial management decisions and it creates firm value and increase profitability. The findings showed that there was a negative relationship between independent and dependent variables (Financial Leverage). The study also increases knowledge that how firms take active decisions about capital structure needs.

Mishra & Chandra (2011) investigated the determinants of capital structure in manufacturing firms of India. Result concluded that pecking order hypothesis was relevant in Indian manufacturing companies that the Leverage negatively related to profitability, whereas assets tangibility positively related to Leverage. Moreover Tax rate negatively related to leverage, this result contradict the Trade Off theory.

Wanrapee Banchuenvijit (2011) examined the determinants of capital structure of Thai listed companies. Findings reveal that Profitability showed negative relationship with Leverage which concluded that less debt used by profitable firms. Tangibility also showed negative relationship with Leverage which concluded that companies having high amount of fixed assets used less debt. Furthermore, Leverage showed positive relationship with size which revealed higher level of debt issued by larger companies.

Wafaa & Sbeiti (2010) investigated the Determinants of Capital Structure: Evidence from the GCC Countries. The finding showed that corporate capital structure in these countries can be explained by the determinants suggested in corporate finance models and Stock markets which have become more developed and considered an important tool for corporate financing decisions in these countries.

Khrawish & Khraiwesh (2010) examined the determinants of capital structure of Jordanian Industrial companies. Result revealed that LTD/TD & size as well as LTD/TD & tangibility have significant Positive relationship. Leverage ratio & profitability showed significant negative relationship. Positive relationship observed between Leverage ratio & short-term debt and negative relationship between LTD/TD & short-term debt.

Amarjit Gill et al (2009) examined the determinants of capital structure in service industry of USA. They observed Profitability and Tangibility have negative with Leverage. Other variables such as tax rate, size, and growth opportunities were not significant determinant of capital structure in service industry.

Mahabuba (2009) examined the insight into the capital structure determinants of pharmaceuticals companies in Bangladesh. The result concluded that regression model was fitted properly and 69% variation was described by determinants of the capital structure of pharmaceutical companies. All independent variables were statistically significant

determinants of capital structure. Negative relationship was between agency cost of equity and bankruptcy risk whereas positive relationship observed among growth rate, operating leverage, tangibility and debt service capacity. Agency cost theory and static trade-off theory was more applicable in pharmaceutical companies in Bangladesh.

Determinants of Capital Structure

Total Leverage described as the amount used by firms to finance its total assets, current operation and long-term operations. This study studied five independent determinants of capital structure and their influence on Total Leverage (Relationship is shown in table I).

Growth: Growth is an important determinant of capital structure and mostly used in previous research. According to trade off theory, there is negative relationship between debt and growth opportunity because cost of debt rises when highly growing firm invest in risky project even at the cost of creditors. When firm borrow more debt to support growth opportunities; this will increase the cost as well as the probability of financial distress. On the other hand, Pecking order theory predicts positive relationship between growth opportunities and Leverage. According to pecking order theory, firms prefer internal financing to finance their projects (Ross et al, 2008) but additional funds are needed by highly growing firms which leads them to borrow more, they issue securities focus to less asymmetric information (Tong & Green, 2005).

Profitability: Profitability is one of the most important independent determinants of capital structure and clearly explained in theories. Trade off theory proposes positive relationship between profitability and Leverage due to two reasons. First profitable firms have less risk of financial distress therefore having lower bankruptcy cost as well as cost of debt is also lower. Second reason when profitable firm borrow more, leads to pay more interest which ultimately leads to pay less tax because interest payments are tax deductible (Frank and Goyal, 2009). Whereas Pecking order theory predicts negative relationship. Argument of this theory is that profitable firms have more retained earnings which are preferable source of funds, and they borrow less leverage, Therefore there is negative relationship between profitability and leverage (Huang & Song, 2006).

Size: Company size is another important potential determinant and is most often used in empirical research. According to Trade off theory larger firms are more diversified as compared to smaller firms and therefore have low default risk, less volatility in cash flow, lower bankruptcy cost, have market reputation, have bargaining power so can borrow at lower cost. Therefore Trade off theory predicts positive relationship between company size and Leverage. Whereas according to Pecking order theory larger companies have less asymmetric information and related cost as well as larger companies can issue equity at lower cost as compare to debt, having opportunity of retained earnings therefore they use lower leverage in their capital structure. Therefore Pecking order theory predicts negative relationship between Leverage and company size (Frank & Goyal, 2009).

Tangibility: According to trade off theory, there is positive relationship between Debt and tangibility of assets. A firm having more tangible assets can borrow at little cost as compare to firm which have less tangible assets. Assets tangibility provides bargaining power to borrower. Ross et al (2008) described that Firm which have more physical assets can borrow more by pledging their physical assets as collateral and alleviating money lenders risk of bearing such agency cost of debt, low agency cost leads to increase debt it means positive relationship between tangibility of assets and debt. Whereas Pecking order theory predicts negative relationship between tangibility of assets and Debt. According to this theory firms

having more physical assets will have less asymmetric information problems and firms can issue more equity as compare to debt.

Effective tax rate: According to trade off theory, there is positive relationship between effective tax rate and Debt. As tax rate increase, firm borrow more because interest payments are tax deductible and companies aim to borrow entire from debt financing to take advantage of tax deduction. Whereas pecking order does not describe any relationship between effective tax rate and debt.

Objectives

1. To investigate the relationship between growth opportunities & Leverage
2. To examine the relationship between firm's profitability and debt ratio
3. To investigate the relationship between firm size and debt ratio
4. To analyze the relationship between asset tangibility & debt ratio
5. To examine the relationship between effective tax rate & debt

Hypotheses

Hypotheses based on the assumptions of Capital Structure Theories i-e (Trade off theory and Pecking Order Theory).

H₁ Higher growth opportunities increases the Leverage of firm

H_{1(a)} Higher growth opportunities increases the leverage of Manufacturing sectors

H_{1(b)} Higher growth opportunities increases the leverage of Service sectors

H₂ Profitability of firm increases the Leverage of firm

H_{2(a)} Profitability of firms increase the leverage of firms of Manufacturing sectors

H_{2(b)} Profitability of firms increase the leverage of firms of Service sectors

H₃ Size of the companies has positive relation with Leverage

H_{3(a)} Size of the companies has positive relation with leverage in Manufacturing sectors

H_{3(b)} Size of the companies has positive relation with leverage in Service sectors

H₄ Asset tangibility of firm increases the debt ratio

H_{4(a)} Asset tangibility of firm increases the debt ratio of Manufacturing sectors

H_{4(b)} Asset tangibility of firm increases the debt ratio of service sectors

H₅ Effective tax rate has positive relation with Leverage

H_{5(a)} Effective tax rate has positive relation with Leverage in Manufacturing sectors

H_{5(b)} Effective tax rate has positive relation with leverage in Service sectors

Scope of Research

Determinants of capital structure were examined in Manufacturing and Service sectors of Pakistan. Therefore companies of manufacturing and service sectors were taken as a sample. Pharma and Biotech, Oil and Gas, Constructions and Materials (Cement), Food

Producers and Textile sectors were taken as manufacturing sectors. Whereas Commercial Banks, Life Insurance, Financial Services, Travel and Leisure and fixed line telecommunication sectors were taken as service sectors.

Methodology

Sample size: Total sample size of this study was thirty companies. From which fifteen companies were taken from manufacturing sectors and fifteen companies were taken from service sectors (shown in table II) from the period of 2010-2012. The five manufacturing sectors were Pharma and Biotech, Oil and Gas, Constructions and Materials (Cement), Food Producers and Textile. Whereas five service sectors include Commercial Banks, Life Insurance, Travel and Leisure, Financial Services and fixed line telecommunication.

Data Source: The present study used secondary data which was extracted from the comprehensive income and financial position statements of the sample trading companies listed in Karachi Stock Exchange. The Financial statements of Companies were available at KSE website and at official websites of companies own.

Mode of Analysis

In the present study, data was analyzed through Spearman’s Rho correlation and multiple regressions. SPSS 16.0 Version was used in order to analyze the data. The ratio of Dependent and Independent variable was taken into account (shown in table III). The Multi Regression analysis was performed to analyze the impact of independent variables on dependent variable. LG is outcome of five independent variables. The model of this study was

$$LG = a + \beta_1 (GR) + \beta_2 (PF) + \beta_3 (SZ) + \beta_4 (TG) + \beta_5 (ET) \dots\dots\dots 1$$

Where,

LG= Leverage

Gr= Growth

SZ= size

TG= Tangibility

ET= Effective Tax Rate

Results and Analysis

Correlation: In hypothesis 1, it was assumed that firms having higher growth opportunities use more leverage for financing their operation. The result in table V indicated negative significant relationship between growth opportunity and leverage in manufacturing sectors whereas result in table VI indicated positive non-significant relationship between leverage and growth in service sectors. Manufacturing support Trade off theory whereas service sectors support Pecking order theory due to correct prediction of sign which states that internally generated funds are not sufficient to meet additional financial needs so they use more debt in their capital structure ratio. Therefore we partially accept alternative hypothesis and partially accept null hypothesis.

In hypothesis 2, it was assumed that profitability of firm and leverage are directly related to each other which mean profitable firm use more leverage. The result in table V

indicated that there is negative significant relationship between profitability and leverage in manufacturing sectors. Whereas the result in table VI indicated that there is positive non-significant relationship between profitability and leverage in service sectors. Manufacturing sectors follow Pecking order theory which suggests that profitable firms use a lesser amount of debt, because internal generated funds (retained earnings) are sufficient to meet financial needs which are also an end signal to creditors that firm have low bankruptcy risk. In other case firm can issue debt such as bonds debenture at low rate of interest since they are seen as less risky to creditors. Whereas service sectors confirm Trade off theory due to correct prediction of sign but value was non-significant which showed Profitability is not significant determinant of capital structure in Service sectors. Therefore we partially accept alternative hypothesis and partially accept null hypothesis.

In hypothesis 3, it was assumed that size of the company has positive relation with leverage. The result in table V and VI revealed that size has positive relation with leverage in manufacturing as well as in service sectors and the former was non-significant but later was significant so we partially accept alternative hypothesis and partially accept null hypothesis. In both sectors, result supports Trade off theory which states that large firms are more diversified, they have reputable position in market and they have low transaction cost as well as they can borrow at low rate of interest as they have bargaining power. Large firms also have constant cash flow and have lower risk of bankruptcy.

In hypothesis 4, it was assumed that firms having more tangible assets use more debt in their capital structure ratio. Result in table V and VI show negative significant relationship between tangibility and leverage in manufacturing as well as in service sectors. Result indicated that Pecking order theory is followed by firms which states that firm having more tangible assets lower the information asymmetries, firm issue equity which will be relatively less costly as compare to leverage. The other reason for service sectors is that the service industry generally classified by higher level of current assets and lower level of fixed assets, as current assets can be easily altered into cash and this having more liquid volume than fixed assets. Lending institutions generally give debt to those who keep their fixed assets as collateral so that they can convert company fixed assets in to cash in case of firm bankruptcy or financial distress. The reason for manufacturing sectors is that tangible assets are poor source of collateral in emerging economies as their value fluctuates day to day. Due to significance value, we accept alternative hypothesis and reject null hypothesis.

These findings are similar to the findings of studies conducted by Amarjit Gill et al (2009) in United States and Wanrapee Banchuenvijit (2011) in Thailand. While contrast with the results of studies conducted by Paul et al (2013) in Ghanaian firms, A.Ajanthan (2013) in Sri Lanka, Oladele & Adebayo (2013) in Nigeria, Kiran (2013) in Pakistan, Mishra & Chandra (2011) in India, and Mahabuba (2009) in Bangladesh.

In hypothesis 5, positive relationship between effective tax rate and leverage was assumed. Findings in table V and VI showed that the tax variable in both sectors is positively related with leverage which show firms prefer debt financing when firm face high tax provision because interest amount is tax deductible which is consistent with Trade off theory due to positive relationship. Non-significant relationship established therefore tax rate was not found to be significant determinant of capital structure. Due to this, null hypothesis was accepted and alternative hypothesis was rejected.

Result is consistent with the result of study conducted by Amarjit Gill et al (2009) in USA whereas it is inconsistent with the result of study conducted by Paul et al (2013) in

Ghanaian firms, Oladele & Adebayo (2013) in Nigeria and Mishra and Chandra (2011) in India.

Regression: Moreover multi regression technique was used to know how well the model fits into data. In table VIII manufacturing sectors shows the value of R square is 64.9% and it's significant because p value was 0.001 which is less than 5%. This shows that around 65% deviation in response variable is due to these five predictor variables (Growth, Profitability, Size, Tangibility, Effective tax rate) and other 35% variation is from other variables which were not included in this regression model. Whereas in table X service sectors shows the value of R square is 72.5% and also its significant at 0.000 level, which shows around 72.5%% variation in response variable was due to these five predictor variable other 27.5% variation was due to other variables which were omitted from this model.

Conclusion


This study attempted to find out the determinants of capital structure of manufacturing and service sectors of Pakistani firms from the period of 2010-2012. In manufacturing sectors negative significant relationship was found between growth and leverage whereas in service sectors positive non-significant relationship was found between growth and leverage. Manufacturing sectors support Trade off theory but service sectors support Pecking order theory due to correct prediction of sign. Negative relationship was observed between profitability and leverage in manufacturing sectors and positive relationship was observed in service sectors where it was significant in manufacturing sectors but non-significant in service sectors. This result revealed that manufacturing sectors follow Pecking order theory whereas service sectors follow Trade off theory. Significant negative relationship was found between tangibility and leverage in both sectors which confirmed that Pecking order theory is followed by firms in both sectors. Size and leverage shows non-significant positive relationship in manufacturing sectors whereas positive significant relationship found in service sectors. Due to positive sign, they follow Trade off theory. Effective tax rate has positive relationship with Leverage but the result was non-significant. Positive sign confirmed that firms follow Trade off theory in both sectors which shows those firms having higher tax prefer debt financing. Due to non-significant result, the effective tax rate not found to be a significant determinant of capital structure. 

Table I: Summary of Theoretical predictions
(Relationship between determinants and Leverage)

Independent variables	Dependent variable	Expected signs	
		Trade Off Theory	Pecking Order Theory
Growth	Leverage	-(ve)	+(ve)
Profitability	Leverage	+(ve)	-(ve)
Size	Leverage	+(ve)	-(ve)
Tangibility	Leverage	+(ve)	-(ve)
Effective Tax rate	Leverage	+(ve)	----

Table II: Sample size

Manufacturing Sectors				
<i>Pharma and Biotech</i>	<i>Oil and Gas</i>	<i>Constructions and Materials (Cement)</i>	<i>Food Producers</i>	<i>Textile</i>
<ul style="list-style-type: none"> • Searle • Ferzosns • Abbott 	<ul style="list-style-type: none"> • PSO • OGDC • Shell 	<ul style="list-style-type: none"> • Lucky Cement • Attock Cement • Fauji cement 	<ul style="list-style-type: none"> • Nestle Pakistan • Engro foods • National foods 	<ul style="list-style-type: none"> • Gul Ahmad • Fateh • Nishat Mills
Service Sectors				
<i>Commercial Banks</i>	<i>Life Insurance</i>	<i>Financial Services</i>	<i>Travel and Leisure</i>	<i>Fixed line telecommunication</i>
<ul style="list-style-type: none"> • MCB • HBL • UBL 	<ul style="list-style-type: none"> • EFU • Jubilee • East west Life 	<ul style="list-style-type: none"> • Arif Habib • Jahangir Siddique co. • Capital asset leasing 	<ul style="list-style-type: none"> • Dream world • Pakistan hotels developers • Pakistan services 	<ul style="list-style-type: none"> • PTCL • Telecard • World Call Telecom

Table III: Calculation of dependent and independent variables

VARIABLES	PROXIES
Leverage	Total Debt/ Total Assets
Growth Opportunity	Annual % change in Total Assets
Profitability	EBIT/ Total Assets
Size	Log Of Total Assets
Tangibility	Total Gross Fixed Assets/ Total Assets
Effective Tax Rate	Total Tax/ Total Taxable Income

Table IV Descriptive Statistics

MANUFACTURING SECTOR				SERVICE SECTORS		
	N	Mean	Std.dev	N	Mean	Std.dev
Leverage	45	.5591	.23497	45	.4695	.32243
Growth	45	.1941	.15222	45	.1209	.22296
Profitability	45	.1703	.10409	45	.0273	.10939
size	45	7.8692	1.15444	45	8.0486	.1.02316
Tangibility	45	.4472	.23159	45	.4860	.39140
tax	45	-.2084	3.76446	45	.2472	.52811

Table V Correlation of Manufacturing Sectors

Dependent variable	Independent Variable	R	P value
Leverage	Growth	-.356	.017*
	Profitability	-.479	.001**
	Size	.111	.467
	Tangibility	-.432	.003**
	Effective Tax Rate	.199	.189

*Correlation is significant at the 0.01 level (2-tailed).

**Correlation is significant at the 0.05 level (2-tailed).

Table VI Correlation of Service Sectors

Dependent variable	Independent Variable	R	P value
Leverage	Growth	0.183	0.228
	Profitability	.045	.768
	Size	.301	.045*
	Tangibility	-.640	.01**
	Effective Tax Rate	.074	.629

*Correlation is significant at the 0.01 level (2-tailed).

**Correlation is significant at the 0.05 level (2-tailed).

Table: VII Regression Analysis of Manufacturing Sectors

	B	Std Error	T	Sig
(Constant)	1.184	.242	4.885	.000
Growth	-.506	.207	-2.444	.019
Profitability	-.893	.282	-3.167	.003
Size	-.027	.026	-1.028	.310
Tangibility	-.360	.129	-2.789	.008 *
Tax	.010	.008	1.241	.222

*Correlation is significant at the 0.01 level (2-tailed).

VIII Model Summary

R	R square	Adjusted R square	Sig. F Change
0.649	0.421	0.346	0.001

Table: IX Regression Analysis of Service Sectors

	B	Std Error	T	Sig
Constant	.506	.323	1.568	.125
Growth	-.153	.201	-.762	.450
Profitability	-.136	.398	-.342	.734
Size	.034	.038	.879	.385
Tangibility	-.601	.098	-6.123	.000
Tax	-.028	..075	.376	.709

Table: X Model Summary

R	R square	Adjusted R square	Sig. F Change
0.725	0.525	0.464	0.000

References

- Adebayo, O., & Oladele, J.A. (2013). Determinants of capital structure in Nigeria. *International Journal of Innovation and Applied Studies*, Vol. 3, pp. 999-1005.
- Ajanthan, A. (2013). Determinants of Capital Structure: Evidence from Hotel and Restaurant Companies in Sri Lanka. *International Journal of Scientific and Research Publications*, Vol. 3, pp. 1-8.
- Amarjit, G., Chenping, P., Nahum, B., & Smita, B. (2009). The Determinants of Capital Structure in the Service Industry: Evidence from United States. *The Open Business Journal*, Vol. 2, pp. 48-52.
- Andreas, W.H.J. (2013). *Determinants of capital structure: an empirical study of Danish listed companies*. Master Thesis, Aarhus University, Business and Social Sciences, Denmark.
- Bisma, R., Faiza, S., Ghazala, A., Qaiser, M., Muhammad, I., Rabia, S., & Sidra, T. (2013). The determination of capital structure of oil and gas firms listed on Karachi stock exchange in Pakistan. *Interdisciplinary journal of contemporary research in business*, Vol. 4, pp. 225-233.
- Chandra, S., & Mishra. (2011). Determinants of Capital Structure: A Study of Manufacturing Sector PSUs in India. *International Proceedings of Economics Development & Research*, Vol. 11, pp. 247 - 252.
- Hasan, A., Norhasniza, M., Shashazrina, R., & Zuraidah, A. (2012). Capital structure effect on firm's performance: focusing on consumers and industrials sectors on Malaysian firms. *International Review of Business Research Papers*, Vol. 8, pp. 137-155.
- Husni, A.K. & Husni, H.A.K. (2010). The determinants of the Capital Structure: Evidence from Jordanian Industrial Companies. *JKAU: Econ. & Adm*, Vol. 24, pp. 173-196.
- Imran, C., & Muhammad, A. (2012). Determinants of Capital Structuring: An Empirical Study of Growth and Financing Behavior of Firms of Textile Sector in Pakistan. *Journal of Management and Social Sciences*, Vol. 8, pp. 1-9.
- Irfan, A. (2011). *Determinants of capital structure: Empirical evidence from Pakistan*. Master's Thesis, University of Twente Enschede, Netherlands.
- James, K.A., Paul, K.O.P., & Kingsley, O.A. (2013). Determinants of Capital Structure: Evidence from Ghanaian Firms. *Research Journal of Finance and Accounting*, Vol. 4, pp. 44 -52.
- Jean, J.C. (2004). Determinants of capital structure of Chinese-listed companies. *Journal of Business Research*, Vol. 57, pp. 1341-1351.
- Joshua, A. (2007). Industry classification and the capital structure of Ghanaian SMEs. *Studies in Economics and Finance*, Vol. 24, pp. 207 – 219.
- Khalid, A. (2012). The determinants of leverage of listed companies. *International Journal of Business and Social science*, Vol.3, pp.78-83.
- Kinga, M. (2007). The determinants of capital structure choice: evidence from Polish Companies. *International Atlantic Economic Society*, Vol. 13, pp. 495-514.

- Mahabuba, L. (2009). An insight into the capital structure determinants of the pharmaceutical Companies in Bangladesh. *Conference of Global Business and Management Forum (GBMF)*, pp.1 – 17.
- Mahfuzah, S., & Raj, Y. (2012). Capital structure and firm performance: evidence from Malaysian listed companies. *Procedia - Social and Behavioral Sciences*, Vol. 56, pp. 156-166.
- Muhammad, S., Muhammad, T., Saeed, A. U. & Zaighum, (2012). Impact of Capital Structure on Firms' Financial Performance: Evidence from Pakistan. *Research Journal of Finance and Accounting*, Vol. 3, No. 9, pp. 1-7.
- Naizuli, R.W. (2011). *Capital structure and financial performance: a case of selected medium sized enterprises in Kampala*. Masters Thesis, Makerere University, Uganda.
- Ong, S. & The, H. (2011). Capital structure and corporate performance of Malaysian construction sector. *International Journal of Humanities and Social Science*, Vol. 1, pp. 28-35.
- Pinkova, P. (2012). Determinants of capital structure: evidence from the Czech automotive industry. *Acta Universities Agriculture ET Silviculturae Mendeliana Brunensis*, Vol. 60, pp. 217-224.
- Samra, K. (2013). Determinants of Capital Structure A Comparative Analysis of Textile, Chemical & Fuel and Energy Sectors of Pakistan. *International Review of Management and Business Research*, Vol.2, pp. 37 - 47.
- Schweser. (2013). *CFA Level 1 Book 4: Corporate Finance, Portfolio Management and Equity Investments*. United States of America: Kaplan, Inc. printed in.
- Siti, R.U. (2012). *Determinants of capital structure in the manufacturing sector of firms in Indonesia*. Ph.D. Dissertation, Maastricht School of Management, Indonesia.
- Wafaa, S. (2010). The determinants of capital structure: Evidence from the GCC Countries. *International Research Journal of Finance and Economics*, Vol. 47, pp. 54-76.
- Wanrapee, B. (2011).** Capital structure determinants of Thai listed Companies. *The Clute Institute International Academic Conferences*, New Orleans Louisiana, pp. 1-8.

Certainly advertising can link a supply to a demand, probably it can awake a latent demand, but there is no evidence that it can create a demand that is not there.

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