

Research Article

Do the Firm-level Variables and Human Capital Impact Capital Structure Decisions? A Study of Non-financial Firms in Pakistan

¹Agha Jahanzeb, ¹Norkhairul Hafiz Bajuri and ²Aisha Ghori

¹Faculty of Management, Universiti Teknologi Malaysia, Malaysia

²Jinnah University for Women, Karachi, Sindh, Pakistan

Abstract: In this study firm's capital structure decisions have been tried to examine theoretically and empirically. By testing the determinants of capital structure, i.e., size, tangibility, profitability, growth, non-debt tax shield, business risk and liquidity on firm's leverage (capital structure decisions) have been tried to determine. Size, profitability, non-debt tax shield, liquidity and human capital have been found significant and negatively related to capital structure decisions. Our analysis consists of 176 non-financial Pakistani companies listed on Karachi Stock Exchange over the period of 2003-2012.

Keywords: Corporate finance, capital structure, human capital, pecking order theory, trade-off theory

INTRODUCTION

For an extensive period, the framework of capital structure has been reviewed without having any considerable experimental tests or acceptable hypothetical model (Harris and Raviv, 1991; Frank and Goyal, 2008). As stated by Myers (1984), under this direction of research, up till now, stays as a mystery in the view that financial theory is not capable of exactly explaining the behaviour of firms. In such circumstances, to explicate the genuine determinants of debt of firms, the results are unsatisfactory (Ahmadimousaab *et al.*, 2013). It is found by Harris and Raviv (1991) that experimental test of leverage behavior of firms is loaded with difficulties in relation to computing the capital structure's explanatory variables. It is indicated by Rajan and Zingales (1995) that earlier empirical tests and literature are not sufficient to spell out the importance of the diverse theories. The hypothetical framework which was built up by classical theory (Modigliani and Miller, 1958) was distinguished by various impracticable suppositions that have congregated numerous criticisms. Certainly, a lot of financial behaviors stay improperly explicated by financial theory. The significance of business taxation is underlined by Modigliani and Miller (1963) and Myers (1977) in clarifying the high leverage of firms. It is revealed by Fama and Miller (1972), Stiglitz (1974) and Scott (1977) that bankruptcy charges and risk possibly will restrict the advantage of the probable tax shield received from deductibility of expense of interest. It is argued by DeAngelo and Masulis (1980) that non interest tax shield that is drawn from credit tax and

depreciation permits firms to make use of minimum debt in their capital structure.

LITERATURE REVIEW

An essential matter in corporate finance involves understanding of how firms choose their financing choices and it is apparent that there is no consensus on theories that explains a firm's perfect capital structure (Seifert and Gonenc, 2008). Modigliani and Miller (1958) initiated the first study on capital structure which concludes that capital structure is immaterial in a corporate world without taxes, transaction costs or other market imperfections. As theory of Modigliani and Miller (1958) lacks practicality in its assumptions, the next generation of researchers explored into meticulous conception of capital structure that made it possible for other prominent theories in capital structure to emerge.

Modigliani-miller theorem: Modigliani and Miller (1958) presented the ground-breaking study over a supposition that market perfection is present in the capital market. Hence, the market continues to function with no bankruptcy costs, transaction costs and information is accessible for everybody in the marketplace. In different words, Modigliani and Miller (1958) declared that firms' financing decisions are commenced with the same rate of interest and with no tax. Consequently, equity cost is similar in favour of firms which are both, non-leveraged and leveraged. Premium is incorporated for financial risk in support of non-leveraged firms. Eventually, these suppositions are indicating that the firm's value is not dependent on its capital structure. This revolutionary effort on capital

structure was first instigated by Modigliani and Miller (1958) in the area of Corporate Finance. In accordance with MM Theorem, leverage asserts no impact on the value of firm in ideal capital market. This theorem acknowledged that the value of firm is not influenced by ratio of debt-equity.

Trade-off theory: By drawing its attention on benefit and cost analysis of debt, Static trade-off theory envisages that there is the most favourable ratio of debt which assists in maximizing the firm's value. The most advantageous point can be stricken when the returns of debt issuance counteracts the mounting current value of costs in relation to more debt issuance (Myers, 2001). The prime advantage of debt is to reduce the payments of interest. Such advantages motivate firms to utilize debt. It is clarified by Miller (1977) that this plain reaction gets multifaceted when there is the presence of personal taxes and at times by means of non-debt tax shields (DeAngelo and Masulis, 1980). Furthermore, equity issuance denotes to deviate from best so this can be deemed as appalling news. It is further recognized by Myers (1984) that they would decide to issue equity if they sense it is not fairly priced in the market. In contrast, investors turn out to be attentive that the equity issuance is mispriced or fairly priced. As a result, equity issuance shows investors the way to respond depressingly and administration doesn't demonstrate any concern to issue equity (Jahanzeb *et al.*, 2014).

Pecking order theory: Myers (1984) proposed the Pecking order theory which elucidates that firms most probably have a preference to fund new investments, primary with internally lifted finances, i.e., preserved earnings, after that by means of debt and issue equity as a last alternative. The best capital structure is not easy to describe as equity accompanies at the bottom and top of the 'pecking order', as disputed by Myers. He furthermore disputes that debt issuance protected by collateral helps to reduce asymmetric information concerning financing costs. The firms' financial decision making is explicated by this theory. It is stated by Shyam-Sunder and Myers (1999) that the impacts of earnings are appropriately estimated by the pecking order theory. While, in accordance with Fama and French (2002) and Frank and Goyal (2003) a small number of complications are incorporated in the theory as well. At present, in administering the financial resources of firms, it is not that much supportive.

EXPLANATORY VARIABLES

With respect to explanatory variables, we follow the literature and consider the five most commonly-used variables for determining leverage, namely (asset tangibility, growth opportunities, non-debt tax shields,

profitability and firm size (Rajan and Zingales, 1995; Lemmon *et al.*, 2008). In addition, two more variables, i.e., business risk and liquidity have also been added to make the study more comprehensive and to have a closer look into capital structure decisions' phenomenon. Further description of the variables is as follows:

Firm size: In order to determine a firm's capital structure, size occupies a vital role (Booth *et al.*, 2001; Amidu, 2007). Harris and Raviv (1991) and Rajan and Zingales (1995) present verification that higher leverage is usually possessed by larger firms. In addition, the cost of equity and debt financing is negatively linked with the size of the firm. Lower estimated costs of bankruptcy facilitate larger firms to employ more debts, as they are capable of borrowing at superior conditions and they encompass easier way in to the market. On the other hand, few researches have furthermore delineated negative association between capital structure and size (Titman and Wessels, 1988; Kouki and Said, 2012).

Study carried out by Frank and Goyal (2003) proposes the facts that in general size is compatible with trade-off theory. A slight support has been discovered by Newman *et al.* (2011) between pecking order theory of capital structure and size. A positive association is anticipated between the leverage and size of the firm (Hernadi and Ormos, 2012). In order to determine the size of the firm (SIZE) natural logarithm of total assets will be employed as an alternate (Chen, 2004; Lim, 2012).

Tangibility: Tangibility is furthermore deemed as a significant capital structure determinant. As said by Harris and Raviv (1991) that asset structure of firm has enormous value of liquidation. On the other hand, added collateral would out-turn if more tangible assets are possessed by the firm. In accordance with pecking order theory, having more tangible assets would assist the firm in decreasing agency cost and problems of information asymmetry provided that the firm possess more tangible assets. Secured debt holds lesser costs of agency in comparison to unsecured debt. It is being disclosed by few researchers that tangibility of firm is in agreement with pecking order theory (Amidu, 2007). Consistent with the static trade-off approach, firms in the company of higher fixed assets ratio provide as collateral in favour of new loans, supporting debt (Hijazi and Tariq, 2006).

We anticipate positive association between leverage and tangibility (TANG) (Rajan and Zingales, 1995). We make use of fixed assets over total assets (FA/TA) as an alternative to find out firms' tangibility of Chakraborty (2013).

Profitability: The results of Chen and Chen (2011) propose that profitability can be deemed as an explanatory capital structure variable. Impact of

profitability over leverage is vague. Highly lucrative firms encompass sound accessibility of internal resources of finance. This advocates that firms look for debt funding when they lack internal funds and this is associated with theory of pecking order (Gaud *et al.*, 2005; Amidu, 2007).

The trade-off model demonstrates that firms that are profitable will make use of more debt, because they are more apt to encompass low risk of bankruptcy and a high burden of tax (Ooi, 1999). We anticipate negative association between leverage and profitability; empirical facts have revealed that profitability and debt ratios are negatively correlated (Saarani and Shahadan, 2013). Profitability (PROF) is calculated as earnings before interest and tax over Total Assets (EBIT/TA) as earlier calculated by Booth *et al.* (2001) and Tongkong (2012).

Growth: The market-to-book ratio of equity plays a dual role in empirical studies. It is used as a measure of market mis-valuation (over or under-pricing) and is utilized as a proxy for future growth opportunities in the trade-off framework. Firms with higher growth opportunities, which typically have higher valuations, may prefer to lower their leverage to maintain their financial flexibility (Myers, 1977). Myers (1977) pointed out that high-growth companies will give up investment programs with a positive net present value to increase corporate value and shareholder wealth. Therefore, the company's growth opportunities have a significantly positive impact on corporate value (Tongkong, 2012). According to trade-off theory, if companies with greater growth opportunities have more retained earnings, then, they issue more debt to maintain the target debt ratio and thus, they will tend to have a higher capital structure.

In accordance with Harris and Raviv (1991), we also use the Market to Book ratio (MB) as a measure of firm's growth opportunities. We assume that this variable is negatively correlated with capital structure decisions (Flannery and Rangan, 2006).

Non-debt tax shield: Non-debt tax shield like investment credits of tax and depreciation tax deduction are alternatives for the tax benefit of debt financing (DeAngelo and Masulis, 1980). Consequently, when other tax deduction increases, the leverage tax advantage increases. As such, between financial leverage and Non-Debt Tax Shield (NDTS) a negative association takes place under the theory of Pecking Order. However, Moore (1986) and Scott (1977) have made an argument that considerable NDTS can be able to work as attractive collateral and as a result high debt levels can be induced by NDTS. As a result, a positive association is anticipated in this case.

Various researchers offer diverse results concerning Non-Debt Tax Shield (NDTS). Bauer (2004) and Shahjahanpour *et al.* (2010) presented facts

on the negative association between leverage and non-debt tax shield. Hernádi and Ormos (2012) refuse negative effect of non-debt tax shields. The results by Ramlall (2009) demonstrated that non-debt tax shield was discovered to be ineffective.

We anticipate negative association between leverage and Non-Debt Tax Shield (NDTS) (Hernadi and Ormos, 2012). Next to Akhtar and Oliver (2009), we delineate non-debt tax shield as total annual depreciation expense divided by book value of total assets.

Business risk: As stated by Bauer (2004), volatility or business risk may be considered as the proxy for firm's risk. Leverage ratio can be less if a firm has less risky position. Therefore, generally, there is a presumption of inverse relation between capital structure and volatility. On the basis of the results presented by Hsia (1981) and Huang and Song (2002) state, "As the variance of the value of the firm's assets increases the systematic risk of equity decreases. So the business risk is expected to be positively related to leverage". Kim and Sorensen (1986) and Huang and Song (2002) also confirm this relation. However, Bradley *et al.* (1984) and Titman and Wessels (1988) demonstrated the negative relation.

This study also expects the negative Relation between Business Risk (RISK) and capital structure (Dang *et al.*, 2012). Standard deviation of return on assets over three years has been used as the proxy to measure business risk (Booth *et al.*, 2001; Hernadi and Ormos, 2012).

Liquidity: Net effect of liquidity on capital structure is unidentified and it has both the positive and negative impacts (Mouamer, 2011). Firms having high liquidity ratio may have high debt level because of their need to meet debt obligations. This suggests a positive relation between liquidity and capital structure. On the other hand, having more liquid assets, shows that these assets would be utilized as the financing source in future. Hence, this suggests negative relation between capital structure and liquidity.

This study hypothesizes negative relation between the capital structure and liquidity (De Jong *et al.*, 2008). To measure liquidity, this study employs the ratio of current assets over current liabilities (Mouamer, 2011).

Human capital: Although, the theoretical and empirical literature on the relation between human capital and capital structure is still rare, but there are quite a few recent studies available. The main finding of study presented by Akyol and Verwijmeren (2013) is that there is a positive relation between wages paid to the employees and leverage, which means firms with higher leverage must pay higher wages to their employees or it will be difficult for them to hire employee in a competitive labor market (Berk *et al.*,

2010). Furthermore, another recent study by Chemmanur *et al.* (2013) tests the theoretical propositions presented by Berk *et al.* (2010). Chemmanur *et al.* (2013) conclude that there is a significant and positive relationship between average employee pay and leverage. In addition, there is a significant and positive effect of leverage on average employee pay for those firms which are financially safe, but insignificant effect for those firms which are financially distressed. They also conclude that in nontechnology firms the impact of leverage on average employee pay is greater than in technology firms, because the employees working in nontechnology firms can be viewed as more defensible (Berk *et al.*, 2010; Naslmosavi *et al.*, 2013).

This study measures human capital by total salaries and wages of a firm (Ting and Lean, 2009):

$$HC = \text{Total salaries and wages of a firm}$$

RESEARCH METHODOLOGY

Dependent variable: The term capital structure may be very comprehensive and can be defined and measured differently. However, from the chapters which have been explained earlier should clarify this that the measure of capital structure decisions here in this study will be total debt ratio.

Following Mateev *et al.* (2013), we measure Capital Structure Decisions (CSD) with total debt ratio, that is, total debt to total assets:

$$\text{Total Debt Ratio} = \frac{\text{Short - term debt} + \text{Long - term debt}}{\text{Total Assets}}$$

Sample and variables: Our sample of the panel data consists of 176 non-financial firms listed on Karachi Stock Exchange for the period of ten (10) years from 2003-2012. Data has been collected from DataStream of Thomson Reuters.

Regressions model: The panel data model includes multiple regression model applied in this study. In order

to determine the factors that influence capital structure decisions, the model is being elaborated as follows:

$$CSD = \beta_0 + \beta_1(SIZE)_{it} + \beta_2(TANG)_{it} + \beta_3(PROF)_{it} + \beta_4(GROW)_{it} + \beta_5(NDTS)_{it} + \beta_6(RISK)_{it} + \beta_7(LIQ) + \beta_8(HC) + \varepsilon_{it}$$

where,

- i = The cross-section dimension
- t = The time dimension
- ε = An error term
- LEV = Leverage ratio of a firm
- SIZE = Size of a firm
- TANG = Tangibility
- PROF = Profitability of a firm
- GROW = Growth of a firm
- NDTS = Non-debt tax shields of a firm
- RISK = Business risk
- LIQ = Liquidity of a firm
- HC = Human capital of a firm

Table 1: Descriptive statistics of capital structure determinants and human capital

Variable	Min	Max	Mean	S.D
CSD	0.00	1.570	0.53910	0.24326
SIZE	6.15	20.12	14.8333	1.93090
TANG	0.00	1.090	0.49600	0.25988
PROF	-0.77	0.930	0.10850	0.15460
GROW	-1.50	1.230	0.11410	0.40361
NDTS	0.00	0.130	0.03870	0.02057
RISK	0.00	0.190	0.04380	0.02862
LIQ	-0.91	2.620	1.02560	0.49774
HC	0.00	0.210	0.05080	0.03960
Observations	1760			

S.D: Standard Deviation

Table 2: Regression analysis of capital structure determinants and human capital

Independent variable	β - value	t-value	Adjusted R^2	F-value
SIZE	0.003	0.985	0.145	37.07**
TANG	-0.091**	-4.061		
PROF	-0.136**	-3.615		
GROW	-0.011	-0.8470		
NDTS	-0.758**	-2.8370		
RISK	-0.221	-1.1650		
LIQ	-0.171**	-14.233		
HC	-0.368**	-2.6110		

Dependent variable: CSD. Asterisks denote significance level *p<0.05; **p<0.01

Table 3: Correlation

Variable	CSD	SIZE	TANG	PROF	GROW	NDTS	RISK	LIQ	HC
CSD	1								
SIZE	-0.053*	1							
TANG	0.028	-0.203**	1						
PROF	-0.182**	0.225**	-0.107**	1					
GROW	-0.020	0.092**	-0.018	0.154**	1				
NDTS	-0.090**	-0.043	0.105**	0.109**	-0.009	1			
RISK	-0.032	-0.017	-0.042	0.062**	-0.021	0.044	1		
LIQ	-0.341**	0.227**	-0.338**	0.261**	-0.027	-0.008	-0.012	1	
HC	-0.117**	-0.023	-0.140**	0.146**	0.030	0.120**	0.105**	0.132**	1

*: Correlation is significant at the 0.05 level (2-tailed); **: Correlation is significant at the 0.01 level (2-tailed)

Descriptive statistics: The Table 1 to 3 demonstrates the estimation results. Summary of statistics for dependent and explanatory variables have been presented below. During the period of this study, the statistics show that the 53.91 percent of assets have been financed by debt. While comparing this statistic, according to Rajan and Zingales (1995), Pakistani firms seem to be more leveraged than those of Thailand, Zimbabwe Brazil, Jordan, Mexico and Malaysia.

CONCLUSION AND DISCUSSION

This study tried to examine the determinants of capital structure of Pakistani non-financial firms and the factors that influence capital structure decisions. This enlightens the knowledge on explanatory variables and assists to understand the problems related to capital structure. We conducted the empirical tests that help us to clarify the puzzling results of determinants. Capital structure decisions are influenced by many variables, i.e. firm size, profitability, non-debt tax shield and liquidity. All those significant variables were negatively related to CSD. It can be said that highly profitable and large firms having more liquid assets in Pakistan reduce their debt ratio.

Furthermore, this research employed a unique variable which has not been tested yet on capital structure, i.e., human capital. The impact of human capital on capital structure remained negative, which means that the firms which invest more on employees tend to lessen their debts and rely on their internal financing first.

Further research can be made by employing short – and long-term debt ratios along with total debt ratio to examine the different behaviours of firms with respect to debt levels. In addition, more firm-level variables (e.g., dividend, firm age and uniqueness) and country-level determinants (stock market development, gross domestic production, interest rate and inflation) may also be employed to have a better insight on capital structure.

REFERENCES

- Ahmadimousaab, A., M.A. Anuar, S. Sofian and A. Jahanzeb, 2013. Capital structure decisions and determinants: An empirical study in Iran. *Int. Res. J. Appl. Basic Sci.*, 5(7): 891-896.
- Akhtar, S. and B. Oliver, 2009. Determinants of capital structure for Japanese multinational and domestic corporations. *Int. Rev. Financ.*, 9: 1-26.
- Akyol, A.C. and P. Verwijmeren, 2013. Human capital costs, firm leverage and unemployment rates. *J. Financ. Intermed.*, 22(3): 464-481.
- Amidu, M., 2007. Determinants of capital structure of banks in Ghana: An empirical approach. *Balt. J. Manag.*, 2(1): 67-79.
- Bauer, P., 2004. Determinants of capital structure: empirical evidence from the Czech Republic. *Czech J. Econ. Financ.*, 54: 2-21.
- Berk, J.B., R. Stanton and J. Zechner, 2010. Human capital, bankruptcy and capital structure. *J. Financ.*, 65: 891-926.
- Booth, L., V. Aivazian, A. Demircuc-Kunt and V. Maksimovic, 2001. Capital structures in developing countries. *J. Financ.*, 56(1): 87-130.
- Bradley, M., G.A. Jarrell and E.H. Kim, 1984. On the existence of an optimal capital structure: Theory and evidence. *J. Financ.*, 39(3): 857-878.
- Chakraborty, I., 2013. Does capital structure depend on group affiliation? An analysis of Indian firms. *J. Policy Model.*, 35(1): 110-120.
- Chemmanur, T.J., Y. Cheng and T. Zhang, 2013. Human capital, capital Structure and employee pay: An empirical analysis. *J. Financ. Econ.*, 110(2): 478-502.
- Chen, J., 2004. Determinants of capital structure of Chinese-listed companies. *J. Bus. Res.*, 53: 1341-1351.
- Chen, S.Y. and L.J. Chen, 2011. Capital structure determinants: An empirical study in Taiwan. *Afr. J. Bus. Manag.*, 5(27): 10974-10983.
- Dang, V.A., M. Kim and Y. Shin, 2012. Asymmetric capital structure adjustments: New evidence from dynamic panel threshold models. *J. Empir. Financ.*, 19(4): 465-482.
- DeAngelo, H. and R.W. Masulis, 1980. Optimal capital structure under corporate and personal taxation. *J. Financ. Econ.*, 8(1): 3-29.
- De Jong, A., R. Kabir and T.T. Nguyen, 2008. Capital structure around the world: The roles of firm- and country-specific determinants. *J. Bank. Financ.*, 32(9): 1954-1969.
- Fama, E.F. and M. Miller, 1972. *The Theory of Finance*. Holt, Rinehart and Winston, New York.
- Fama, E.F. and K.R. French, 2002. Testing trade-off and pecking order predictions about dividends and debt. *Rev. Financ. Stud.*, 15(1): 1-33.
- Flannery, M.J. and K.P. Rangan, 2006. Partial adjustment toward target capital structures. *J. Financ. Econ.*, 79(3): 469-506.
- Frank, M.Z. and V.K. Goyal, 2003. Testing the pecking order theory of capital structure. *J. Financ. Econ.*, 67(2): 217-248.
- Frank, M.Z. and V.K. Goyal, 2008. Trade-off and Pecking Order Theories of Debt. In: Eckbo, B.E. (Ed.), *Handbook of Corporate Finance: Empirical Corporate Finance*. Vol. 2, *Handbook of Finance Series*, Chapter 12, Elsevier, North-Holland, Amsterdam.
- Gaud, P., E. Jani, M. Hoesli and A. Bender, 2005. The capital structure of swiss companies: An empirical analysis using dynamic panel data. *Eur. Financ. Manag.*, 11(1): 51-69.

- Harris, M. and A. Raviv, 1991. The theory of capital structure. *J. Financ.*, 46(1): 297-355.
- Hernádi, P. and M. Ormos, 2012. Capital structure and its choice in central and Eastern Europe. *Acta Oecon.*, 62(2): 229-263.
- Hijazi, S.T. and Y.B. Tariq, 2006. Determinants of capital structure: A case for Pakistani cement industry. *Lahore J. Econ.*, 11(1): 63-80.
- Hsia, C., 1981. Coherence of the modern theories of finance. *Financ. Rev.*, 16(1): 27-42.
- Huang, S.G.H. and F.M. Song, 2002. The Determinants of Capital Structure: Evidence from China. Working Paper No. 1042, Hong Kong Institute of Economics and Business Strategy (HIEBS).
- Jahanzeb, A., S. Rehman, N.H. Bajuri, M. Karami and A. Ahmadimousaabad, 2014. Trade-off theory, pecking order theory and market timing theory: A comprehensive review of capital structure theories. *Int. J. Manage. Commer. Innov.*, 1(1): 11-18.
- Kim, W.S. and E.H. Sorensen, 1986. Evidence on the impact of the agency costs of debt in corporate debt policy. *J. Financ. Quant. Anal.*, 21: 131-144.
- Kouki, M. and H.B. Said, 2012. Capital structure determinants: New evidence from French panel data. *Int. J. Bus. Manag.*, 7(1): 214-229.
- Lemmon, M., M. Roberts and J. Zender, 2008. Back to the beginning: Persistence and cross-section of corporate capital structure. *J. Financ.*, 63: 1575-1608.
- Lim, T.C., 2012. Determinants of capital structure empirical evidence from financial services listed firms in China. *Int. J. Econ. Financ.*, 4(3): 191-203.
- Mateev, M., P. Poutziouris and K. Ivanov, 2013. On the determinants of SME capital structure in Central and Eastern Europe: A dynamic panel analysis. *Res. Int. Bus. Financ.*, 27(1): 28-51.
- Miller, E.M., 1977. Risk, uncertainty and divergence of opinion. *J. Financ.*, 32(4): 1151-1168.
- Modigliani, F. and M. Miller, 1958. The cost of capital, corporation finance and the theory of investment. *Am. Econ. Rev.*, 48(3): 261-297.
- Modigliani, F. and M. Miller, 1963. Corporate income taxes and the cost of capital. *Am. Econ. Rev.*, 53: 433-443.
- Moore, W., 1986. Asset composition, bankruptcy costs and the firm's choice of capital structure. *Quart. Rev. Econ. Bus.*, 26: 51-61.
- Mouamer, F.M.A., 2011. The determinants of capital structure of Palestine-listed companies. *J. Risk Financ.*, 12(3): 226-241.
- Myers, S.C., 1977. Determinants of corporate borrowing. *J. Financ. Econ.*, 5: 147-175.
- Myers, S.C., 1984. The capital structure puzzle. *J. Financ.*, 39(3): 574-592.
- Myers, S.C., 2001. Capital structure. *J. Econ. Perspect.*, 15(2): 81-102.
- Naslmosavi, S., S. Sofian and M.B.M. Saat, 2013. Intellectual capital components and independent auditor's opinion: A review on past studies. *Middle East J. Sci. Res.*, 15(4): 500-510.
- Newman, A., S. Gunessee and B. Hilton, 2011. Applicability of financial theories of capital structure to the Chinese cultural context: A study of privately owned SMEs. *Int. Small Bus. J.*, 30(1): 65-83.
- Ooi, J., 1999. The determinant of capital structure: Evidence on UK property companies. *J. Property Invest. Financ.*, 17(5): 464-480.
- Rajan, R.G. and L. Zingales, 1995. What do we know about capital structure? Some evidence from international data. *J. Financ.*, 50(5): 1421-1460.
- Ramlall, I., 2009. Determinants of capital structure among non-quoted mauritian firms under specificity of leverage: Looking for a modified pecking order theory. *Int. Res. J. Financ. Econ.*, 31: 83-92.
- Saarani, A.N. and F. Shahadan, 2013. The determinant of capital structure of SMEs in Malaysia: Evidence from enterprise 50 (E50) SMEs. *Asian Soc. Sci.*, 9(6): 64-73.
- Scott, J.H., 1977. Bankruptcy, secured debt and optimal capital structure. *J. Financ.*, 32: 1-19.
- Seifert, B. and H. Gonenc, 2008. Pecking Order Behavior in Emerging Markets. Working Paper, Old Dominion University, United States.
- Shahjahanpour, A., H. Ghalambor and A. Aflatooni, 2010. The determinants of capital structure choice in the Iranian companies. *Int. Res. J. Financ. Econ.*, 56: 167-178.
- Shyam-Sunder, L. and C.S. Myers, 1999. Testing static tradeoff against pecking order models of capital structure. *J. Financ. Econ.*, 51(2): 219-244.
- Stiglitz, J.E., 1974. On the irrelevance of corporate financial policy. *Am. Econ. Rev.*, 64: 851-866.
- Ting, I.W.K. and H.H. Lean, 2009. Intellectual capital performance of financial institutions in Malaysia. *J. Intell. Cap.*, 10(4): 588-599.
- Titman, S. and R. Wessels, 1988. The determinants of capital structure choice. *J. Financ.*, 43(1): 1-19.
- Tongkong, S., 2012. Key factors influencing capital structure decision and its speed of adjustment of Thai listed real estate companies. *Proc. Soc. Behav. Sci.*, 40: 716-720.