

EFFECTS OF SELECTED FIRMS CHARACTERISTICS ON CAPITAL STRUCTURE DECISIONS OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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Abstract

Purpose - Capital structure choice remains a crucial decision alongside the vital choices intended by a corporate since they have a high consequence on the value and the cost of the company. Therefore this study main focus was to examine the effects of selected firms characteristics on the capital structure decisions of companies registered at the Nairobi Stock exchange.

Methodology - The study adopted a descriptive research design and used secondary data. The collected data was analyzed with the help of the SPSS software version 23 and presented with the help of frequency distributions, computation of mean and standard deviation. The association between the research variables was presented in a correlation matrix and a regression model.

Findings - Firm size showed greatest influence on the company choice of capital structure among the firms followed by asset structure, profitability and liquidity. Further, the regression model also generated adjusted R squared value of 0.692 that is to mean 69.2% of the variations in financing options can be well illustrated by variations in the firm size, asset structure, profitability and liquidity. The findings from the study indicated an affirmative correlation among firm's size and the financing options. The findings also revealed an affirmative association among assets structure against the source of financing. The findings from the research also showed that there is undesirable association among the firm's profitability and source of financing of the firms listed at the NSE while a negative relationship among liquidity and the principal investment was exhibited in the research findings. This leads to a conclusion that rise in company size resulted to a rise in the investment structure of a firm therefore increase in demand to increase the capital base by seeking more financing. The study also found out that an increase in asset structure resulted in an increase in capital structure while an increase in profitability levels resulted in decrease in capital structure; increase in in liquidity levels led to a decrease in capital structure of the firms listed at the NSE.

Implications –The study findings emphasize that firms should understand the specific characteristics that influence choice of their respective capital structure in order to opt for the best financing option. The study also further suggested that similar studies should be carried out every three to five years to find out the significance of firm characteristics on choice of capital structure of firms listed at the NSE

Value -The findings of the study would be significant to public institutions and other non-listed firms in the choice of financing options and design of capital structure. Policy makers would infer the findings in formulation of relevant capital structure policies.

Key words: Capital structure decisions, size of the firm, asset structure, profitability, liquidity

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Introduction

Capital structure is one of the most widely researched subjects in applied finance. Extensive research for the last 50 years has yielded very little or no fruits and so little conclusive guidance for managers on management of these firms has been reached. It is paramount to understand the effects of certain firm specific characteristics on capital structure choice based on either profitability or returns on investments, returns on assets or returns on equity. In as much as the stewards who are the managers of these corporations attempt to influence performance at their functional levels be it either in marketing, finance or operations, there still remains a gap in understanding the combined effects of the firms specific characteristics in more holistic view.

Abor, (2005) used the following firm characteristics such as; firm size, market power, firm leverage, as firm short term liquidity in an attempt to investigate their effects on capital structure. Several Studies have been conducted in areas of financial performance but were restricted to one or two variables under investigation. Barros, Nakamura, and Forte (2013) sought to explain effects of corporate governance on a firm's performance. Omondi (2010) investigated the relationships of capital structure to financial performance.

Capital structure for small scale firms is constrained by various factors such as inadequate access of long-term credits, high levels of borrowing and interest charges on loans. The undeveloped capital market forces push the investors to strictly rely on personal savings and support from friends and relatives to start up their business. (Muia, 2011). Due to inadequate access to the long-term financing by financial institutions, the small scale sectors opt to heavily rely on short term financing plans due to easy of accessibility, hence the choice of capital structure is a challenge to these firms. Therefore, this research aims to find the effects of selected firms characteristics on choice of capital structure among firms listed at the Nairobi stock exchange in Nairobi Kenya.

Size of the firm

Different theoretical arguments have been put in place in relation to the connection among the scope of the company and its choice of the capital structure. The cost of issuing debt and equity is more witnessed within small scale firms more than the large scale firms as highlighted by Musili (2005), therefore it is suggested that small firms may be more leveraged than large firms hence they opt to finance their operations on short term borrowing other than using the long term

method due to the availability of lower secure expenses allied with a substitute. (Titman and Wessel, 1988), which tends to agree with the pecking order theory due to the adverse selection problems.

The size of a firm can be established by comparing the level of sales against the natural logarithm of the total assets (Deesomsak et al., 2004), that is the firm's total turnover (Rajan and Zingales, 1995) as well as the natural logarithm of employees (Amenberger et al., 2013). Small scale firms are encouraged to have low leverage ratios because they can be easily liquidated when they are faced by financial distress. The agency theory experts argue that it is necessary to ensure that a business is able to relate closely the size of the firm and level of debt. According to Ortiz-Molina and Pena's (2008), they found out that the size of a firm has a positive effect on the ability of the firm to breakeven and therefore this limits the financing period of SMEs by the financial institutions so that they can have a control on the risk involved on lending.

Profitability

Profitability is the ration between firm's profits before the tax against the sales turnover (Ortqvist et al., 2006). The key factor determining choice of a suitable capital structure for firms is the level of a firm's profitability. Due to the fact that when a firm is making huge profits, it finances its operations using internal funds and it will only opt to use external funds when there is need for additional funds (Charkraborty, 2010). A profitable firm uses less debt than unprofitable firm as argued by Kemsley and Nissim (2002), a firm with financial distress has less operations to high cost of debt which is not the case of the large scale firms that can take advantage of external funding from banks including the less profitable firms in the markets (Riportella and Martinez, 2003). The level of profitability of a firm has an inverse effect the level of the debt ratio which agrees with the arguments of the pecking order theory (Zarebski and Dimovski, 2012). Rationally, the managers and owners of small scale firms prefer to manage their firms (Hamilton and Fox, 1998). Therefore, there are less chances of excessive investment. Majority of this firms do not support debt financing (Vos et al., 2007) but instead they opt to use internal financing for example use of retained earnings other than external sources of financing business operations.

In contrast, Omondi (2010) in his research found out that Kenyan firms tend to borrow more when their profits are high due to the reason that huge profits act as an incentive to a firm to invest more it also acts as a security to borrow more for business expansion.

Therefore his finding indicates that most of the firms do not agree with the pecking order theory findings on decision making in choosing their source of financing. However, Odinga (2003) found out that there exists a connection amongst the leverage and productivity of firms since the profitable firms tend to finance their operations from retained earnings and they borrow less due to fear of conflicts on payment of the debts since they believe that equity is more safe because the investors do not demand required rate of return.

Assets Structure

The level to which firms assets are tangible raises from the firm's ability to maintain a greater liquidation value. This is because the fixed assets including property plant and equipment do not depreciate their value even in times of financial crisis and therefore this gives heavy capital demanding firms to maintain their high levels of debt at lower costs because there is no threat to bondholders. Myers (1984) asserts that firms holding valuable Intangible assets create difficulties in accessing credit than firms holding tangible assets. Tangible assets have a decreasing effect on the financial leverage due to the risk involved on the operating leverage (Hutchinson and Hunter, 1995)

From a theoretical view, in terms of maturity, the pecking order theory argues that the level of presence is relatively related to short term debt financing and shows a positive impact on the long term financing (Barros et al., 2013).

In the Kenyan context, the view on firms with tangible assets tend to borrow more is commended by Kamere (1987) and Omondi (2010). This translates that majority of firms in Kenya prefer debt financing than equity financing and this tends to agree with the pecking order hypothesis since the theory argues that large scale firms prefer debt financing than equity due to the fact that it is more secure with less agency costs associated with it, although the agency cost theory argues that any asset used as security to acquire funding can be of great help to regulate and control managers and hinder them from the problem of moving all the firms value from debt holders to the shareholders of the firms.

Objective of the Study

The main objective of the research was to investigate the effects of selected firms characteristics on the capital structure decisions of companies listed at the Nairobi Securities exchange in Kenya

Methodology

Research design

According to Orodho (2009), Research design is the overall method that an individual uses to integrate the variables of the study in a logical manner to help answer the research problem identified in a certain area of study. The research was carried out by employing secondary quantitative data from firms listed at the NSE. Descriptive research design was adopted to study the relationship among the two variables, that is, how various independent variable i.e. (X_1 , X_2 , X_3 , X_4 , variables are manipulated in order to examine how a dependent variable is affected within a relatively controlled environment

Population

For the purposes of the study, the research concentrated on firms listed at the NSEs markets in Kenya covering the period between 2006-2015. The study was limited to all the firms listed in the NSE, ranging from agricultural sector, automobiles and accessories, banking, commercial and services, construction, energy and petroleum, insurance investment services and industrial sectors, because of greater availability and reliability of data from the 9 categories of the firms listed at the NSE.

Data Collection

The research statistics was sourced from secondary sources from NSE covering the period from 2006-2015. The NSE was ideal for investigation centered on the accessibility, convenience, and consistency of the data to be used. This period is considered long enough to provide sufficient variables to ascertain the strength of the relationship. The secondary data obtained included, audited annual financial statement from NSE and CMA, the daily trading data from NSE handbook i.e. share prices including open and closing prices will be obtained basically from the NSE for 10 years and outstanding shares, profits, total assets, total expenses for the year, long and short term debts outstanding as at the close of the period, the daily market share prices and equity.

The researcher used firms' age since the date of listing, as this is in conformity of Shumway (2001) who asserts the most meaningful measure of age is number of listing a firm has been

listing in the NSE. Fama and French (2004), and Chun, Kim, Morck and Yeung (2011), measured firms age in the same way.

Data Analysis

The findings of the study were tested for reliability and accuracy so as to ensure there is uniformity, consistency and the completeness as well as arranging the data to easy the process of coding and tabulation before it is analyzed. Once the testing of the data was done then entered into statistical package for social sciences (SPSS) statistics for analysis version 23. The statistics was then analyzed by generating descriptive statistics such as percentage and measures of central tendency like mean and standard deviations. In order to compute the regression analysis of the variables that were measured. Correlation examination was used to see the direction and the effects of firm's specific characteristics on the choice of a capital structure. The research was further analyzed using a multivariate linear regression, coefficients of determination (R squared), ANOVA, and beta coefficients for the model to state how much the model was explained any changes in the dependent variable that is the return on assets. The regression model was used to compute the association among the firms' specific features and the capital structure decision of firms listed at the NSE in Kenya

The study used the following regression model to conceptualize if selected firm characteristics has effects on the capital structure of companies listed at the NSE, since the study has more than two independent variables.

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$ Where Y: Capital structure, β_0 : Constant, X_1 : Firm size; X_2 : Asset Structure, X_3 : Profitability, β_1 : Liquidity,

B (0, 1,2,3,4, & 5) are the beta coefficients for the respective independent variables

μ is the error term in the model

Results and Discussions

Descriptive statistics

Descriptive statistics of the study were computed and summarized as shown in Table 1 Below

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Capital structure	290	-.09	3.54	2.0843	.89492
Firm size	290	8.47	16.12	12.3200	1.65627
Asset structure	290	.10	.98	.6853	.09781
Profitability	290	.12	.47	.2582	.11422
Liquidity	290	1.12	21.12	7.1300	4.91973
Valid N (list wise)	290				

The table above shows that the mean of the debt ratio for the 290 observation from the 29 listed firms from the year 2006 to the year 2015 is 2.08, this implied that the average debt ratio of firms listed at the NSE, while a standard deviation of 0.895, implied the variation of debt ratio in the listed firms, the minimum debt ratio is -0.09, which meant that there were firms with a negative debt ratio and the maximum debt ratio is 3.54, which meant that there are listed companies which have a debt ratio. The findings indicated that the scope of the company that is measured by use of logarithm of sales show a mean of 12.32, this implied the average logarithm of sales in the listed firms while the standard deviation of 1.656, indicated the variation of logarithm of sales in the listed firms the minimum logarithm of sales is 8.47, this implied the minimum logarithm of sales in the listed firms and the maximum logarithm of sales is 16.12, this implied the highest logarithm of sales of listed firms. On asset structure measured by fixed asset the mean is 0.6853, this indicated that the average asset structure of the listed firms while a standard deviation of 0.09781 indicated the variation of asset structure of the listed firms. The minimum fixed asset is 0.10, which implied to the minimum fixed asset of the listed firms and the maximum fixed asset is 0.98, which implied to the maximum asset structure of the listed firms. On profitability the mean return of asset is 0.2582 which indicated the average of profitability of the listed firms while standard deviation of 0.11422, indicated the variation of profitability in the listed firms.

The minimum return on asset is 0.12, this indicate the minimum profitability of the listed firms and the maximum return on asset is 0.47 which indicate the highest profitability of the listed firms.

Lastly liquidity indicated the current ratio mean is 7.13, implied to the average liquidity of the

listed firms with a standard deviation of 4.919, implies to the variation of liquidity of the listed firms the minimum current ratio is 1.12 which implies the least liquidity of the listed firms and the maximum current ratio is 21.12, which implies the maximum liquidity of the listed firms.

Correlation Analysis

The range of correlation analysis is between +1 and -1. The correlation analysis method was used to establish the degree of relationship between variables under study and also to test whether the relationship is significant as well as establishing the cause and effect relationship.

Table 2: Correlation analysis

		Capital Structure	Firm size	Asset structure	Profitability	Liquidity
Capital Structure	Pearson Correlation	1				
Firm size	Pearson Correlation	.697**	1			
Asset Structure	Pearson Correlation	.574**	.390	1		
Profitability	Pearson Correlation	-.448**	.654**	.611	1	
Liquidity	Pearson Correlation	-.413**	.512	.167	.672**	1

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

From study findings, there is a positive relationship among company size and the investment choice of the firms listed at the NSE. Where the ($r=0.697$, $p \text{ value} < 0.001$). Therefore a growth on the company's size caused an increase in the capital structure base of the firms listed at the NSE, this means that the variation of the variables is in the same direction. The association among asset structure and capital structure showed a positive trend with the capital structure base ($r=0.574$, $p \text{ value} < 0.001$). Hence concluding that an increase in the assets structure results in increase of capital structure. This discoveries of the investigation showed that a undesirable

association exists among firms profitability and capital structure as well of the listed firms ($r=0.448$, p value <0.001). Hence this can lead to a conclusion that high profits results in less capital structure base.

The association between liquidity and capital structure showed as negative skewness $r=-0.413$, p value <0.001). Hence we can conclude that an increase in the liquidity of a firm leads to decrease in in the capital structure base of a firm

4.5 Regression Analysis

The study employed the multivariate regression model that was used to examine the relevance of the variables under study in respect to the capital structure decision

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.837 ^a	.700	.692	.248

a. Predictors: (Constant), firm size, asset structure, profitability, liquidity

From the findings of table 4.3, the difference in the dependent variable as a result of deviation in the independent variable is tabulated by use of the coefficient of determination referred to as adjusted R squared. R squared cannot be used to find out if the coefficients estimates and predictions are biased and whether the regression model is adequate. Therefore this is the reason why the adjusted R² is highly recommended. From table 4.3 above, the coefficient of determination equals to 0.692 (R²= 69.2%)

In conclusion, the changes in capital structure can be illustrated by changes in the variables firm sizes, asset structure, profitability and liquidity to a degree of 69.2 % leaving only 30.8% unexplained.

Table 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.381	4	5.095	19.45	.000 ^b
	Residual	74.735	285	.262		
	Total	95.116	289			

a. Dependent Variable: capital structure

b. Predictors: (Constant), firm size, asset structure, profitability, liquidity

The main aim of ANOVA analysis is to establish if the deviation in the research variables gives details of the observed variance in the findings of the study. From the ANOVA table, the significant level of .000 indicates that the findings are relevant to make conclusions on the research variables since the P value is less than 0.05 and thus the model statistically significant. The calculated F value was greater than the critical value that is $2.40 < 19.45$ an indication that firm size, asset structure, profitability, and liquidity affects the capital structure of listed firms in the NSE.

Table 5: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.192	.522		4.195	.000
	Firm size	.372	.085	.308	4.359	.000
	Asset structure	.276	.037	.691	7.556	.000
	profitability	-.102	.041	-.120	-2.487	.003
	Liquidity	-.173	.073	-.216	-2.998	.019

a. Dependent Variable: Capital structure

The established multiple linear regression equation becomes:

$$Y = 2.192 + 0.372X_1 + 0.276X_2 - 0.102X_3 - 0.173X_4$$

The findings of the study shows that holding all variables (firm size, asset structure, profitability and liquidity) at constant zero capital structure at the firms will be 2.192, the study found out addition of a single unit in a company size will increase the capital structure of the firms by 0.372, the study also found out addition of one unit in asset structure will increase the base on choice of financing option of firms by 0.276, also a unit decrease in profitability of the firms will increase the capital structure by 0.102 and a unit decrease in liquidity will increase the capital structure by 0.173.

The p values of the independent variables; (firm size, asset structure, profitability and liquidity) indicated as .000, .000, .003 and .019 respectively were all less than 0.05. This meant that all independent variables were statistically significant

Summary of Findings

The key purpose of research was to examine the effects of selected firm characteristics on the choice of capital structure whereby descriptive research design where data used was from past records from the year 2006 to 2015 of the listed firms by NSE. The study results showed a minimum debt ratio of the listed firms. The study also found out the maximum debt ratio where this showed the listed firms with the highest debt ratio. The outcome of the study showed that minimum financing of the listed firms is a key factor to consider. This implied that there were listed firms with a negative capital structure. The study also found out the mean of the firm size which indicated the average size of the listed companies. The researcher also found out the mean of the asset structure is indicated as the average of the total asset of the listed firms. Also the findings of the study showed the minimum asset structure, this indicate the lowest fixed assets of the listed firms. In addition to asset structure the study showed the maximum asset structure, this implied the listed firms with the highest fixed assets.

The study findings also shows the mean of the profitability of the asset structure. This shows the average profitability of the listed firms. Also the study showed the minimum of the profitability,

which indicated the highest value of profitability of the listed firms. The study also showed the minimum value of profitability, this indicated the listed firms with the lowest profitability. The findings of the study also showed the mean of the liquidity of the listed firms as well as the average of the liquidity of the companies listed at the.

The study revealed that 69.2% change in the capital structure was attributed by changes in the firm size, asset structure, profitability and liquidity. Therefore this study shows that an affirmative association among the company size and capital structure of companies listed at the NSE. This may be explained by the larger the firm size the more options of accessing capital. The debt ratio may increase as a result of the firm size. Large firms have may require alternative means such as debts to finance some of the expansion activities of the firms. Another outcome of the findings is that, asset structure has an influence on the debt ratio. The findings of the study reveal that there is an affirmative association among the asset structure and the capital structure of the listed firms. This implies that the more the assets structure the firms the more increase in the debt ratio. The asset structure of the listed firms can be used as collateral means to acquire loans. The more the asset structure the more loans can be given to the listed firms

It is evidenced from the findings of the study that firms profitability influences capital structure negatively which is attributed by the fact that debt ratio in the listed companies showed a negative trend due to the decrease in profits levels. Liquidity and capital structure of this firms exhibited a negative association as well f the companies listed against the debt ratio. This implies that firms that the extent that firms have cash to meet short term obligation the more it affects negatively on the debt ratio.

Conclusions

The outcomes of the study lead to the subsequent inferences. First, the study found out that the size of the firms affects the capital structure. The study concludes that the larger the firms grow the more the debt ratio increases. When the company size increases the more the capital base it requires. The study found out that the asset structure affects positive the capital structure. The study concludes that the more asset structure a firm has the more the investment funding need

increases. This is attributed to the fact that the large firm has more asset structure compared to the small firms. The asset structure can be used as collateral to acquiring debt.

The more of sales the firms have the more debt ratio increases. The study also establishes that the profitability has decreasing association with the capital structure. The more profits the firm generates the more the debt ratio will have a negative effect. The listed firms' high debt ratios will decrease the profitability of the organization. The profits of the listed firms will decrease through paying the debt owned by the firms. For profitability, the study attained an inverse relation that supports the arguments by the pecking order theory which disagrees with the trade off theory, therefore this study recommends that those companies that have huge gains finance their operations with retained earnings and not by use of the debt source

The study revealed that the liquidity impacts on choice of financing option and therefore the more the liquid the firm is the less the capital base it requires. The study concludes that liquidity of the firm affects negatively the capital structure. The listed firm with lots of cash at their disposal applies it to finance the activities before considering borrowing.

Recommendations of the study

From the study findings the listed companies will need to consider the effects of selected firms' characteristics on the capital structure, this is evidenced by the argument that most of the companies are private organizations and therefore the study will benefit other private sectors since the findings of the study revealed that 69.2% change in capital structure is attributed to the change in firm size, asset structure, profitability and liquidity. The study makes the following recommendations. First, the business size impacts positively the capital structure.

The study recommends the listed firms should take into consideration the company size. The larger the companies size the more influence it has on capital structure. If the firms are looking for debt as a means of financing some of the firm activities the size of the firm should be taken into consideration. The second recommendation is that asset structure influences positively the capital structure. The study recommends the firms to consider the asset structure in terms of logarithm of sales when considering the capital structure as a means of financing some of the activities. When the logarithm of sales is high then the firms are able to increase the debt ratio to finance some of the projects.

Another recommendation is that the firms' profitability shows an undesirable influence on the level of debt. The study recommends organizations that when firms are profitable they should reduce the debt ratio this is to avoid reducing the profits made by the listed firms. The last recommendation is that liquidity has an undesirable consequence on capital structure decisions of the firms listed at the NSE.

The study recommends the listed firms before taking any debt as means of financing they should consider the liquidity of the firm. When the firms have more cash they should use the cash in financing the activities thus minimizing the use of debt.

References

- Abor, Joshua (2005); the effect of capital structure on profitability; an empirical analysis of listed firms in Ghana, *Journal of risk finance* vol 6 No 5, 2005
- Amenberger, M., Schmid, T., Achleitner, A. K., and Kaserer, C. (2013). Capital structure decisions in family firms: Empirical evidence from a bank-based economy. *Review of Managerial Science*, 7(3), 247-275.
- Barros, L. A., Nakamura, W. T., and Forte, D. (2013). Effects of corporate governance on a firm's performance in Brazilian enterprises. *BAR-Brazilian Administration Review*, 10(3), 347-369.
- Chakraborty, I., (2010). Capital structure in an emerging stock market: The case of India, *Research in International Business and Finance*, 24: 295-314
- Chun H, Kim J-W, Morck R. (2011). Varying heterogeneity among US firms: facts and implications. *Rev. Econ. Stat.* 93(3):1034-5
- Deesomsak, R., Krishna, P., and Pescetto, G. (2004). The determinants of capital structure: Evidence from the Asia Pacific region. *Journal of Multinational Financial Management*, 14, 387-405.
- Fama, E. F., and French, M.H. (2004). *The Capital Asset Pricing Model*. New York: Holt, Rinehart and Winston.
- Hamilton, R. T., and Fox, M. A. (1998). The financing preferences of small firm owners. *International Journal of Entrepreneurial Behaviour and Research*, 4(3), 239-248.
- Hutchinson, R. W. (1995). The capital structure and investment decision of the small owner-managed firm: Some exploratory issues. *Small Business Economics*, 7, 231- 239.
- Kamere N.H (1987), "some factors that influence the capital structure of public companies in Kenya," Unpublished MBA project
- Kemsley, D., and Nissim, D. (2002). Valuation of the debt tax shield. *The Journal of Finance*, 57(5), 2045-2073.

- Muia, Z. M. (2011). *The Relationship Between Capital Structure and Financial Performance of SMEs in Nairobi*. University of Nairobi.
- Musili, K (2005), "capital structure choice. A survey of industrial firms in Kenya," unpublished MBA project
- Myers, S (1984), "The search for optimal capital structure," *Midland corporate finance journal*, 6-16
- Odinga.G.O (2003), "Determinants of capital structure of companies listed at the NSE," Unpublished MBA project
- Omondi W Amadeus (2010) "Relationships of capital structure to financial performance." Unpublished MBA project
- Orodho, J. A. (2009). *Elements of Education and Social Science Research Methods, Second Edition*. Maseno: Kanezja.
- Ortiz-Molina, H., and Penas, M. F. (2008). Lending to small businesses: The role of loan maturity in addressing information problems. *Small Business Economics*, 30(4), 361-383.
- Ortqrist, D., Eryadi, K., Mosli, Rahman, S., and Selavarajah, C. (2006). Determinants of capital structure in new ventures: Evidence from Swedish Longitudinal Data. *Journal of Development Entrepreneurship*, 11(4), 277-296.
- Rajan, R. G., and Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, 50(5), 1421-1460
- Riportella, C. C., and Martinez, J. C. (2003). What do we know about the financial behaviour of the Spanish SMEs? An empirical analysis. *Business Economics, Series 08*, Universidad Carlos III de Madrid.
- Shumway (2001), measuring the age of listed firms, *Journal of Investment Management*, 13, 21-31
- Titman S, and Wessel R (1988), "the determinants of capital structure choice," *Journal of finance*, 43, 1-21
- Vos, E., Yeh, A. J. Y., Carter, S., and Tagg, S. (2007). The happy story of small business financing. *Journal of Banking and Finance*, 31(9), 2648-2672.
- Zarebski, P., and Dimovski, B. (2012). Determinants of capital structure of A-REITS and the global financial crisis. *Pacific rim property Research journal*, 18(1), 3-19.