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DETERMINANTS OF CAPITAL STRUCTURE IN THE NIGERIAN MANUFACTURING SECTOR

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ABSTRACT

This paper analyses firms' characteristics that influence managers' decisions on how to finance their companies. In particular, this study investigates capital structure determinants of Nigerian manufacturing firms based on a panel data set from 2007 to 2014 (263firm-year observations) comprising 31 listed manufacturing firms . This study investigates determinants of total debt ratios considering factors that include Firm size, Growth, Profitability, Tangibility Earnings Volatility and Non Debt Tax Shield. The study adopts Regression data analysis and OLS estimations with cross section fixed effects, sector dummy variables and time dummy variables representing the period covering economic financial recession (2007-2008) and post recession (2009-2014) in Nigeria. The study indicates that there is a significant relationship between Profitability and the Capital Structure of listed manufacturing firms in Nigeria which supports the pecking order theory. the study also discovered that oil and gas sector of manufacturing firms had a capital structure that was highly tilted towards debt financing when compared to Consumer goods, basic materials, health care and industrials. The study also suggests the Oil and Gas sector's capital structure was highly tilted towards debt financing when compared to the other four sectors and manufacturing firms during the recession period. The study recommends that, manufacturing firm owners and managers should look beyond just profitability as a major determinant of their capital structure even though this is the norm in a growing and developing economy such as Nigeria.

Key Words*:* Capital Structure, Manufacturing Firms, Determinants

INTRODUCTION

The disputes as to what determines corporate capital structure have been on over a few decades and can be traced to the first capital structure theory propounded by Modigliani and Miller (MM) in 1958. The MM theory outlined the conditions (No taxes and no transaction costs to borrow or lend) under which capital structure is irrelevant (there is no optimal leverage ratio). However, there were criticisms to this approach by authors such as Angelo and Masulis (1978) as being too hypothetical. Over a period, MM and several other authors, began to soften some of these assumptions and came up with their own theories about capital structure. This resulted in the MM theory later evolving into the static trade off theory by Krauz & Litzebnerger (1973) and pecking order theory by Myers & Majluf (1984). Later, other theoriessuch as free cash flow theory by Jensen (1986) and market timing theory by Baker and Wurgler (2002) emerged. There were concerns as to how numerous the theories are. In contrast, Ritsumeikan and Susanto (2012) suggest that Even though there are numerous theories that

attempt to explain the determinants of capital structure, the number of factors that can possibly influence capital structure decisions are so vast that a single theory is not able to explain the entire aspects of capital structure.

*Several researcherssuggest that capital structure decisions are determined by a numerous set of factors. Bhabra,*Lui and Tirtiroglu*(2008)* highlighted the important factors influencing capital structure decision as, percentage of tangible assets, size, profitability, and growth opportunities. On the other hand, Frank and Goyal (2009) proposed that the consistent factors for explaining market leverage are median industry leverage, market-to-book assets ratio, tangibility of assets, profits, log of assets and expected inflation.

Manufacturing sector is very important to the development of any nation, especially a developing nation such as Nigeria Sola,Obamuyi, Adekunjo and Ogunleye(2013). Since a peak of 7.83% in 1982, the contribution of manufacturing as a share of total economic output in Nigeria generally declined. Many factors have contributed to the variation in sector share through time, many of which show both the vulnerability of manufacturing to global economic pressures, as well as the impacts that policy changes can have in reshaping the sector. This highlights the need for finding areas where manufacturing firms maximize their value. The efficacy of adopting capital structure decisions in maximizing firm value in developing economies such as Nigeria has not been reasonably explored by researchers**Cortez** and Susanto (2012) and Rajagopal (2010).

Objectives of the Study

1. The study seeks to determine the factors that influence financial managers in determining the capital structure of manufacturing firms in Nigeria.
2. The study seeks to investigate how manufacturing firms react in terms of debt financing during recessionand non-recession periods.
3. The study seeks to establish the behavior of firms with regard to how much debt financing the various sectors of manufacturing acquired during the period covering 2007- 2012.
4. The study also seeks to determine which sector (consumer goods, industrials, basic materials, healthcare, oil and gas) of manufacturing firms in Nigeria borrowed the most in the period covering 2007-2012.

Conceptual Framework

Determinants of Capital Structure

The determinants of capital structure are seen as the likely factors that can influence a firm in choosing its capital structure. The likely factors considered include tangibility of assets, how profitable a firm is growth options of the firm, non-debt tax shields, size of the firm and the volatility of firms' earnings among others.

In terms of tangibility, the type of assets a firm possesses, determines their financing behavior Kariuki and Kamar (2014). Alipour,Mohammadi and Derakhshan(2015) in support of the trade-off theory suggest that a company with a large quantity of tangible assets would be able to attract more debt because tangible assets may be collateralized in the event of bankruptcy. Rajan & Zingales (1995) and Myers and Majluf (1984) in support of the static trade off theory, stated that tangible assets have a positive relationship with debt ratio because greater collateral may mitigate the agency costs of the debt.In contrast,the peckingorder theory suggests that Debt ratio and tangible assets have a negative relationship because firms holding more tangible assets will be

less prone to asymmetric information challenges. Psillaki and Daskalakis (2009) show empirical evidence of a negative relationship between leverage and fixed assets in small and medium firms. The proxy for asset tangibility used in the literature includes the ratio of bookvalues of tangible assets plus inventories to total assets. This approach has been used by Chen (2004) and Gaud,Jani, Hoesli and Bender(2005).

There is no consensus on the effects of profitability on leverage Bauer (2004).Based on the static trade off theory, firms will leverage more to prevent managers from spending cash free flows gained from profits. High level of profit will also allow firms to have higher debt capacity therefore a positive relationship between Profitability and debt level can be expected. Myers and The study adopts the ratio of earnings before interest and tax (EBIT) to total assets supported by Titman and Wessels (1988).

Titman and Wessels (1988) are of the opinion that growth opportunities may be viewed as assets that add value to a firm, but cannot be used as collateral and are not subject to taxable income. Myers (1977) suggests that firms with high future growth opportunities are more likely to use more equity financing, because a higher leveraged firm is more likely to forgo profitable investment opportunities.According to the static trade-off theory, growth is negatively correlated with leverage because both the firm and creditors are unwilling to lend and borrow money Cortez & Susanto (2012).Under the pecking order theory, firms with more investments, or growth opportunities, are more likely to accumulate more debt the long run, because they need larger amounts of funds Frank andGoyal(2009). The market-to-book ratio is used by Rajan and Zingales (1995) as a proxy for the level of growth opportunities available to the company.

Non-debt tax shields such as tax deduction for depreciation are other items apart from interest expenses, which results to a decrease in tax payments. According to the trade-off theory, debt financing is better than equity financing because of motivation of saving corporate tax. However, DeAngelo and Masulis (1980) suggest that tax deductions for depreciation and investment tax credits can be considered as substitutes for the tax benefits of debt financing.This results in firms with large non-debt tax shields relative to their expected cash flow using less debt in their capital structures. The proxy for Non-debt tax shields as recognized by researchers such as Titman & Wessels (1988) and Chen (2004) is depreciation and amortization expenses divided by total assets.

Rajan and Zingales (1995) in support of the static trade-off theoryare of the opinion thatlarger firms tend to be more diversified and fail less often, so size measured as net sales may be an inverse proxy for the probability of bankruptcy.In addition, sizeaccording to Bauer (2004) may also be a proxy for the information outside investors have, which should increase their preference for equity relative to debt.Empirical studies are not in agreement as to the relationship between size of the firm and its leverage. Some researchers such as Huang and Song (2002), Rajan and Zingales (1995) and Friend and Lang (1988) find a positive relation between size and leverage. On the other hand,Kester(1986) and Titman and Wessels (1988) report a negative relationship. However, Bauer (2004) argues thatthe results of these researches are very often weak by way of the level of statistical significance. Theproxy for the size of a company is the natural logarithm of sales.

The risk of financial distress is significantly important in capital structure decisions Karacae,Temiz, and Gulec (2016). Trade off theory suggests that firms with higher debt or are more likely to failshould not be highly leveraged Alipour,Mohammadi and Derakhshan (2015).

Volatility may be understood as a proxy for probability of bankruptcy (risk of the firm). Here also there are divergent views as to type of relationship that exists between volatility and the leverage of the firm.Forinstance, Kim and Sorensen (1986) and Huang and Song (2002)suggest a positive relationship while Bradly,Jarrell and Kim. (1984) and Titman and Wessels (1888) suggest a negative relationship.Standard deviation of return on assets is used as a proxy for volatility in this study.

Theoretical Framework

According to Myers (2001), there is no universally accepted theory of the debt to equity choice. These theories, assist researchers understand what determines the capital structure that firms choose. Cortez and Susanto (2012) suggest that capital theories can be divided into two groups.Either they predict the existence of the optimal debt-equity ratio for each firm (static trade-off models) or they declare that there is no well-defined target capital structure (pecking-order hypothesis).

Static trade-off model developed by Kraus and Litzenberger (1973)is an offshoot of the MM theory. Myers (1984) suggests that the optimal capital structure is an optimal solution of a trade-off between a tax shield and the costs of financial distress in the case of trade-off theory. According to this theory the optimal capital structure is achieved when the marginal present value of the tax shield on additional debt is equal to the marginal present value of the costs of financial distress on additional debt. Thus, by increasing the amount of debt, firms can derive tax benefit through the interest tax shield. However, Miller (1977) and Graham (2000) argue that the trade-off model suggests that many profitable firms should be more highly levered than they certainly are, as the tax savings of debt seem large while the costs of financial distress seem insignificant. In contrast, Bradley, Jarrell and Kim(1984) suggests moderate amount of debt as optimal.

The pecking order theory of capital structure propounded by Donaldson (1961) and then extended by Myers and Majluf (1984) suggests that firms do not have a target amount of debt in mind, but that the amount of debt financing employed depends on how profitable a firm is. Myers and Majluf (1984) state that there is a pecking order among financing sources, in the case of information asymmetries in the firm between insiders (shareholders and managers) and outsiders (investors). Firms will use sources of funds such asretained earnings, debt financing and equity financing in order until that source is exhausted or the cost of that source becomes too high over equity financing. The theoretical justification behind this argument is that access to capital markets especially for equity is so expensive that it totally dominates all other factors.

Research Methodology

The main objectives of this study is examine whichinternal factors of Nigerian manufacturing firms influence their managers' decisions on the most efficient capital structure. The study also attempts to understand what theory better explains those decisions. The study adopts Panel data regression analysis and OLS estimations with cross section fixed effects, sector dummy variables and time dummy variables representing the period covering economic financial recession(2007-2008) and post recession (2009-2014) in Nigeria. The Ordinary Least Square (OLS) correlation method is used in estimating and analyzing the regression model stated below. This is because the test in this study is a test of association between capital structure and some independent variables(size, growth Options, profitability, tangibility, Non Interest tax Shield and Earnings Volatility).

The population of the study consists of 67 firms

which are subdivided into five distinct sectors namely, oil and gas (10 firms), consumer goods (23 firms), industrials (18 firms), basic materials (10 firms and healthcare (6 firms).The sample comprises a total of31manufacturing companies listed on the Nigerian stock exchange within the period from2006 to 2014 (263firm-year observations) which supports the central limit theorem which states that a sample of 30 distribution is approximately normal and the results of statistical tests performed are meaningful Grinstead and Snell(2000)The study adopted stratified random sample which represents consumer goods sector, oil and gas sector, industrials sector, basic materials sector and healthcaresector (see **table 1**below) in order to ensure proportional representation of sectors that make up the population of manufacturing firms.

Table 1: Sample Size

Manufacturing Sector	Number of Sampled Firms
Consumer Goods	12
Oil and Gas	6
Industrials	6
Basic Materials	4
Health Care	3
Total	**31**

Model Specification

The model specification for this study suggests that the Capital Structure of a firm (CST) is a function of six independent which include: firm size (SIZE), growth opportunities (GROW), profitability (PROF), tangibility (TANG), earnings volatility (EVOL), non-interest tax shield (NITS), Dummy variable recession/economic boom (D1) and Dummy variable representing different sectors (D2) across i companies covering t period. The equation is represented as, CST = f (SIZE, GROW, PROF, TANG, EVOL, NITS) with the linear expression:

$CST_{it} = a_0 + \beta_1 SIZE_{it} + \beta_2 GROW_{it} + \beta_3 PROF_{it} + \beta_4 TANG_{it} + \beta_5 EVOL_{it} + \beta_6 NITS_{it} + \beta_7 D1 + \beta_8 D2 + Ut_{it}$

Analysis and Result

In order to ensure that the results are robust, several diagnostic tests such as Durbin Watson test, variance inflation factor (VIF) and Tolerance statistics were computed as shown in Table 1 and 2. The Durbin Watson is estimated at 2.126 for the model specified which is little above the standard of 2 indicating the absence of auto-correlation (see table 3) thus ensuring that the residuals of the proceeding and succeeding sets of data do not affect each other.The Variance Inflation Factor (VIF) statistics for all the independent variables consistently fall below 1.826. This indicates the absence of multicollinearity among the variables under investigation thus showing the appropriateness of fitting of the model of this study.

Table 2: Model Summary Table

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.236[a]	.056	.014	42.71467	.056	1.333	11	249	.206	2.126

a. Predictors: (Constant), IND, RCSS, NITS, GROWTH, EVOL, HCARE, BMATT, PROF, OIL, SIZE, TANG

b. Dependent Variable: LEV

Table 2 presents the regression result between Firm size, Growth, Profitability, Tangibility Earnings Volatility, Non Debt Tax Shield and Leverage (CST). From the model summary table above, the followinginformation can be distilled. The R value of 0.236 shows that, there is a weak relationship as regards (SIZE, GROW, PROF, TANG, EVOL, NITS) and CST. The R^2 value of 0.056 indicates that 5.6% of the variation in the Capital Structure (Leverage) of listed Manufacturing firms can be explained by a variation in the independent variables: (SIZE, GROWTH, PROF, TANG, EVOL, NITS) while the remaining 94.4% could be accounted by other variables not included in this model. The significant change of 1.333 with a variation of change at 5.6% indicates that the set of independent variables were as a whole contributing to the variance in the dependent variable.

Table 3: Coefficients Table

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	26.902	27.823		.967	.335		
SIZE	-.610	1.642	-.030	-.372	.711	.570	1.754
GROWTH	-3.415	5.129	-.043	-.666	.506	.897	1.114
PROF	-93.209	27.664	-.235	-3.369	.001	.783	1.278
TANG	22.665	16.478	.114	1.376	.170	.548	1.826
1EVOL	-.446	.730	-.044	-.611	.542	.729	1.373
NITS	56.735	114.361	.037	.496	.620	.688	1.453
RCSS	-.858	6.442	-.008	-.133	.894	.975	1.026
OIL	-8.868	7.879	-.084	-1.125	.261	.677	1.477
HCARE	-11.302	11.149	-.068	-1.014	.312	.833	1.200
BMATT	-14.215	10.294	-.101	-1.381	.169	.711	1.406
IND	-11.062	7.396	-.104	-1.496	.136	.779	1.284

a. Dependent Variable: LEV

The regression result as presented in **Table 3** above is addresses the objectives of the study which include; examining the relationship between SIZE, GROW, PROF, TANG, EVOL, NITS to CST; examining how Recession causes the capital structure of the firms within the sector determined their capital structure during the recession periods covering 2008-2009; determining how capital structure of the various manufacturing sub sectors reacted during the 2008 recession. **Table 3** suggests that that during the recession period, the capital structure of the firms recorded a significant decrease at 0.008. This could be as a result of lack of access to debt finance as a source of capital structure during the period in question. Lastly, it is seen that there exist a variation change in the capital structures of the various sub sectors of the manufacturing sector (Oil and Gas, HCARE, BMATTS and INDUS) to the tune of -0.084, -0.068, -0.101 and -0.104 respectively as a result of the various determinants of the listed firms capital structure inculcated in this study.

SECTOR/TIME	MAX	MIN	MEAN	ST. DEV
OIL & GAS	9.86	-0.28	3.3435	1.94024
CGOODS	5.12	0.39	1.7292	.98070
BMATTS	1.93	0.53	1.2063	.44545
HCARE	1.94	0.76	1.1732	.36978
INDUS	3.76	0.33	1.5363	.87596
RECESS	9.86	-8.93	2.0093	2.37325
NRECESS	12.57	-0.28	1.9496	1.45068

Table 4: Descriptive Statistics of Total Debt.

Table 4 Indicates that firms in the Oil and Gas sector had a capital structure that was highly tilted towards debt financing when compared to the other four sectors (CGOODS, BMATTS, HCARE, and INDUS). This is represented in the descriptive statistics with Oil and Gas having a Mean leverage of 3.3435 which is a little above the other sectors which have an average of 1.41125. Table 4 below, also suggests that there was no remarkable difference in the attitude of firms towards debt financing during the recession (Mean 2.0093) and non recession years (mean 1.9496).

Test of Research Hypotheses

Ho_1: *There is no significant relationship between Firms Size, Growth, Profitability, Tangibility, Earnings Volatility and Non Debt Tax Shield to Capital Structure.*

Given that the significant level is 0.05 and the calculated value for SIZE, GROW, TANG, EVOL, NITS (0.711, 0.506, 0.177, 0.542 and 0.620) are greater than the significant level, we accept the Null hypothesis and conclude that there is no significant relationship between SIZE, GROW, TANG, EVOL, NITS and CST. PROF on the other hand, has a calculated value of 0.001 which is not greater than the significant level of 0.05 and as such the study rejects the null hypothesis and accepts the alternative hypothesis with conclusion that there is a significant relationship between Profitability and the Capital Structure of listed manufacturing firms in Nigeria.

Findings

The result shows a weak relationship between the independent variables when combined together and Leverage with a variation of 23.6%, the remaining 76.4% account for factors not considered in this study., these factors could include Age of firms, Taxation, Government policy, information asymmetry and Managerial ownership which in one way or the other determine the capital structure of listed Manufacturing firms in Babalola (2014).

The results of the study indicate that there is a significant negative relationship between Profitability and the Capital Structure of listed manufacturing firms in Nigeria. This suggests that profitability is a determinant of capital structure of Nigerian listed manufacturing firm.These findings are supported by the work of Myers and Majluf (1984) who suggested a negative relationship between profitability and debt using the pecking order theory thus suggesting that profitable firms do not need to rely heavily on outside financing. Instead, profitable firms will lower debt financing as they rely on retained earnings to meet their financial obligations.However this result is in contrast to Ogbulu and Emeni (2012) who in their cross-sectional survey of 110 listed firms on the Nigerian stock exchange, found that size and age had a significant relationship with capital structure. Results also suggest a negative relationship between profitability and debt which is supported by Myers and Majluf (1984) who also found a negative relationship between profitability and debt thus lending credence to the pecking order theory.

The results of the study also suggest that the Oil and Gas sector had a capital structure that was highly tilted towards debt financing when compared to the other four sectors. Also, manufacturing firms had larger component of debt in their capital structure during the recession period covering 2008-2009

CONCLUSIONS

Profitability is a significant determinant of the choice of a Capital structure by manufacturing firms in Nigeria while Firm size, Growth, Tangibility, Earnings Volatility, Non Debt Tax shield are not significant determinants.This lends credence to the pecking order theorem. Firms in theOil and Gas sector acquired more debt financing when compared to the other four sectors (CGOODS, BMATTS, HCARE, and INDUS). Manufacturing firm owners and managers should look beyond just profitability as a major determinant of their capital structure although this is the norm in a growing and developing economy such as Nigeria. Other factors such as Information asymmetry and government policy should be investigated to explore if they are considered by financial managers in determining capital structure of manufacturing firms in Nigeria.

REFERENCES

Alipour, M., Mohammadi, M. F. S., & Derakhshan, H. (2015). Determinants of capital structure: an empirical study of firms in Iran. *International Journal of Law and Management*, *57*(1), 53-83.

Babalola Y. A. (2014). Triangulation Analysis of Capital Structure and Firms' Performance in Nigeria. East Ukrainian National University [Vol. Dahl] 91034 Lugansk, Ukraine

Bradley, M., Jarrell, G., & Kim, E. H. (1984). On the existence of an optimal capital structure: Theory and Evidence. The Journal of Finance, 39(3), 857-878.

Baker, M., & Wurgler, J. (2002). Market Timing and Capital Structure. *The Journal of Finance,* 57

No.1.evidence. *Journal of Finance*, 57(1), 1-32.

Baver, P. (2004). Determinants of Capital Structure: Empirical Evidence from Czech Republic. *Czech Journal of Economics and Finance, 54, 2-21*

Bhabra, H.S., Lui, T. & Tirtiroglu, D. (2008). Capital structure choice in a nascent market: Evidence from listed firms in China. *Journal of Financial Management, 37(2),*341-364.

Chen, J.J. (2004). Determinants of capital structure of Chinese-listed companies. *Journal of Business Research, 57,* 134- 135.

Cortez, M. A., & Susanto, S. (2012). The determinants of corporate capital structure: evidence from Japanese manufacturing companies, *Journal of International BusinessResearch,* 11(3), 121-134.

De Angelo, H. and Masulis, R. (1980). Optimal Capital Structure under Corporate and Personal Taxation. *Journal of Financial Economics,* 8(1), 3-29.

Donaldson, G. (1961). *Corporate debt capacity: A study of corporate debt policy and the determination of corporate debt capacity.*Boston: Division of Research, Harvard School of Business Administration.

Frank, M.Z. & Goyal, V.K. (2009). Capital structure decisions: Which factors are reliably important? *Financial Management, 38(1),* 1-37.

Gaud, P., Jani, E., Hoesli, M. & Bender, A. (2005). The capital structure of Swiss companies: an empirical analysis using dynamic panel data. European Financial Management, 11(1), 51-69.

Graham J.R. (2000). How big are the tax benefits of debt? *The Journal of Finance*, *55(*5), 1901-1942.

Grinstead, C. M. & Snell, J. L. (2000). Introduction to Probability, *American Mathematical Society*. Retrieved 05/01/2018, from https://math.dartmouth.edu/~prob/prob/prob.pdf

Huang, S. G. & Song, F. M. (2002).The Determinants of Capital Structure: Evidence from China. *Hong Kong Institute of Economics and Business Strategy, Working Paper*, 2002, no. 1042.

Kariuki, S.N. & Kamau, C.G. (2014). Determinants of Corporate Capital Structure among Private Manufacturing Firms in Kenya: A Survey of Food and Beverage Manufacturing Firms. International Journal of Academic Research in Accounting, Finance and Management Sciences, 4(3), 49-62.

Karacaer, S., Temiz, H. & Gulec, O.F. (2016). Determinants of Capital Structure: An Application on Manufacturing Firms in Borsa Istanbul.International Academic Journal of Accounting and Financial Management, 3(2), 47-59

Kester, W. (1986). Capital and ownership structure: a comparison of United States and Japanese manufacturing corporation. *Financial Management*, 15(1) 5-16.

Kraus, A., & Litzebnerger, R. (1973). A State-Preference Model of Optimal Financial Leverage. *Journal of Finance*, 28, 911-922.

Miller M. (1977). Debt and Taxes. The*Journal of Finance,* 32(2), 261-275.

Ogbulu, O.M. & Emeni, F.K. (2012). Determinants of Capital Structure in Nigeria. International Journal of Economics and Management Science, 1(10), 81-96

Rajagopal, S. (2010). The portability of capital structure theory: Do traditional models fit in an emerging economy? *Journal of Finance & Accountancy*, *5*, 1-17

Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *The journal of Finance*, *50*(5), 1421-1460.

Sola, O., Obamuyi, T.M., Adekunjo, F.O. & Ogunleye, E.O. (2013). Manufacturing Performance in Nigeria: Implication for Sustainable Development. Asian Economic and Financial Review, 3(9), 1195-1213

Masulis, R. W. (1980). Effect of Capital Structure Change on Security Prices: A Study of Exchange Offers. Journal of Financial Economics, 8(2), 139-178.

Modigliani, F. & Miller, M. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review*, 48(3), 261-297.

Myers S. (1977). Determinants of corporate borrowing. *Journal of Financial Economics* 5, 147–76.

Myers, S.C. (1984). The Capital Structure Puzzle. *Journal of Finance*, 39(3), 575–92.

Myers, S. (2001). Capital Structure. *The Journal of Economic Perspectives*, 15(2), 81-102.

Myers, S.C. and Majluf N.S. (1984). Corporate Financing and Investment Decisions When Firms Have Information the Investors Do Not Have. *Journal of Financial Economics*, 13(2), 187–221.

Psillaki, M. & Daskalakis, N. (2009). Are the determinants of capital structure country or firm specific? *Small Business Economics*, *33*(3), 319-333.