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The Interrelationship between Corporate Ownership Structure and Leverage

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ABSTRACT

Previous studies on the agency model of the firm extensively recognize the managerial ownership and external debt as important tools in mitigating agency conflicts and enhancing firm value. They also find that increase in the external monitors, for example the institutional investors, can actually play a useful role in limiting agency problems in the firm. This paper, using 1351 companies from UK between 2004 and 2008 explores the impact of institutional holdings on managerial ownership and debt policy in an integrated framework by using a simultaneous equations estimation procedure (2SLS). The findings show that there is a significant negative relationship between institutional ownership and corporate leverage. This escalates the agency costs of debt because debt holders increase the rate of borrowing when they realize that institutional ownership increases in such a way as to jeopardize their wealth because using the control power they accumulate from their ownership, institutional shareholders may engage in riskier projects.In addition, corporate leverage is also governed by managerial ownership and revealed a statistically significant negative relationship. At the same time, debt appears as a key governance variable as it moderates private benefits extraction from corporate free cash flows as reported in the results of this paper that companies with higher average debt ratios accumulate less free cash flows as opposed to companies with lower average debt ratios.

Keywords: *Debt, Institutional Ownership, Managerial Ownership*

1. INTRODUCTION

Corporate Governance mechanisms have recently been considered as successful tools for reducing agency conflicts. Most writers in Corporate Governance literature concentrate on internal governance variables in an attempt to justify the role of corporate governance in mitigating agency problem. While literature suggests that debt and managerial ownership serve to resolve agency conflict between managers and company's shareholders, it is also recognized that the extent to which managerial ownership and debt are used is a function of the existence of other internal and external monitoring mechanisms that control the managerial selfish behavior. According to Jensen and Meckling (1976), internal monitoring mechanisms which work hand in hand with managerial ownership and debt policy include competition among managers within the firm, auditors, and the board of directors while external monitoring mechanisms include the stock market and the takeover market.

In literature institutional shareholding has been recognized to play a greater role in monitoring companies' managers. Agrawal and Mandelker (1990) recognize institutional investors to be the key external monitors in the stock market. According to the authors, institutional investors on the other hand are an important group of agents of change towards improving corporate governance in the market for corporate equity.

Different writers on firm theory suggest debt as a useful tool in reducing agency conflict between majority shareholders and minority shareholders. According to Jensen (1986) bonding due to debt to the firm (periodic payments of interest and repayment of principal) tend to reduce the managers' control over the firms' free cash flows and the incentives to misuse company's funds for their private benefit. The similar argument comes from Grossman and Hart (1982) that the existence of debt prevents managers from misusing firms' cash flows for their own interests and this reduces the probability of bankruptcy and the loss of control and reputation.

Although the use of debt into the firm's capital structure controls the managerial selfish behaviors, too much of it threatens the firm to extreme financial risk of going bankrupt. This has a greater impact to debt holders than it has for shareholders. Due to their nature on risk- taking, shareholders have the tendency to prefer riskier projects. By accepting riskier projects, shareholders have an ability to pay off the debt holders at the agreed rate and benefit from the residual gain if the projects are successful. According to Grossman and Hart, However, if the projects fail, the debt holders bear the higher risk. Generally, the agency theory indicates that both debt and managerial ownership have ability to reduce agency costs of the firm and improve firm value.

The role of debt in the free cash flow problem mitigation is to ensure that minority shareholders become comfortable of the common worries that majority shareholders may collude with the managers to misuse the company's resources and therefore the introduction of debt is used to shift management monitoring role from shareholders to creditors, Jensen and Meckling(1976),Jensen (1986) and Faccio et al (2002).The feeling which minority shareholders may have if they become comfortable about the protection of their rights will lead them to believe that the shares issued in the capital market is an attractive investment to them, Faccio et al (2002).

This paper puts emphasis on the Jensen' free cash flow hypothesis which emphasizes on the role of debt in mitigating the free cash flow agency cost without loss of consciousness about the size of the firm since debt levels have different impacts across different firm sizes.

The broad objective of this paper is to examine the impact of Corporate Ownership on Corporate Financial Leverage and the role of leverage in mitigating agency problem for UK data set.

It has been common in the recent literature to take for granted board structure and managerial ownership as the only internal corporate governance mechanisms and most literatures have traditionally considered it that way especially in non-US markets, notably UK. Debt as an internal corporate governance mechanism has not received proper attention in recent literature. This paper includes debt as one of the important corporate governance internal mechanism and provides an empirical support to the common notion in literature especially US-based literature that presence of strong institutional monitoring reduces the managerial ownership concentration and debt ratio in UK public corporate firms. The paper is important because it suggests UK firms to consider the institutional shareholdings as the controlling mechanism for unfavorable levels of managerial ownership and debt ratios in an attempt to reduce both agency costs of debt and equity.

Furthermore, similar to the way minority shareholders are ignored in firms' managerial decisions, so is the way writers put less attention in the existing literature about the conflict of interest between minority shareholders and majority shareholders, instead much focus is put on the conflict between managers and the company's shareholders. This sheds light on the relevance of corporate leverage to mitigate the agency conflict between majority shareholders and minority shareholders. The paper contributes to the literature in two different ways. One, few studies in UK address this issue of low shareholders protection and therefore the paper adds literature on this area. Two, splitting the sample based on Combined Code for corporate Governance (2010) is a new approach not used before and in this case the paper also contributes methodologically.

2. RELATED LITERATURE AND HYPOTHESES DEVELOPMENT

Agency costs between managers and shareholders are real, and very difficult to effectively reduce. One way to control these costs is for firms to issue debt. Debt is considered as a bonding mechanism for managers to act in the honest way to serve the interests of the outside shareholders .Issuing debt shows the commitment of managers because it validates that managers are willing to risk losing control of their firm if they fail to perform effectively. As a bonding mechanism, debt will reduce agency cost of equity but increase the agency cost of debt, Megginson, (1997).

To appropriately deal with the agency problem some external control mechanisms have to operate hand in hand with the internal mechanisms. Agrawal and Mandelker (1990) recognize institutional investors to be the key external monitors in the stock market. According to the authors, institutional investors on the other hand are an important group of agents of change towards improving corporate governance in the market for corporate equity.

Institutional investors in their attempt to monitor the performance of managers may either opt to be active or passive if managers try to run companies in favor of their own interests. Historically, institutional investors who are dissatisfied with managers' performance may just sell their shares and exit. However, since 1990s the behaviors of this group of investors changed. They have become active monitors than passive since then, Black et al (1994). According to Black et al (1994), institutional investors avoid the exit policy because it is more expensive as they must accept substantial discounts in order to liquidate their significant holdings.

The level of institutional investors' activism is supported by the way they hold accountable managers through various ways such as board classification, poison pills and other anti-takeover measures to regulate managers' selfish behaviors .In an attempt to monitor managers' unpleasant behaviors, institutions have increased their attention on monitoring companies by formation of shareholders' advisory committees which increases the efficiency and performance of the firm, Sattar A. Mansi (2008).

As previously seen in Jensen and Meckling (1976), corporate management has the incentive to involve itself in self-serving value-reducing activities such as entrenchment, perquisite consumption and empire building to expropriate the assets of the firm since it has no complete ownership of the firm. These unfavorable activities which invite agency conflict can be reduced by involving institutional investors in the ownership structure of the firm, Shleifer and Vishny (1997).

Another way that management can favor their self -interest is their tendency to hide insider information that will have adverse effect on the corporate risk. Some studies such as, Chung et al (2002) report that, the presence of institutional ownership can effectively suspend this problem. The authors find that management reduces its earnings manipulation through discretionary accrual choices in the presence of institutional investors. On the other hand, Rajgopal and Venkatachalam (1998) suggest a positive relationship between the in formativeness of accounting earnings and the level of institutional ownership.

The above identified risks, under the Jensen and Meckling (1976) framework, can be grouped as the agency conflict of interest between management and all external stakeholders – both shareholders and debt holders. The reduction of these risks is of joint benefit to both groups.

According to Jensen and Meckling (1976), these are not the only risks; there is an additional risk that is only faced by debt holders, namely the conflict between shareholders and debt holders. Jensen and Meckling

claim that, in firms whose capital structure involves debt, shareholders normally have the incentive of transferring debt holders' wealth to themselves by either increasing dividend payments or share repurchases and investing in risky projects. If institutional investors, using their voting power, entertain management to engage in wealth transferring activities, then contribution of institutional ownership would not be notable because debt holders would charge higher rates on corporate debt to cover additional risk exposure resulting to agency cost of debt (conflict of interest between shareholders and debt holders).Another implication of this conflict according to Jensen and Meckling is that, misalignment of interest between shareholders and the management might benefit debt holders because the management won't act in the best interests of shareholders all the times, resulting in a lower probability of wealth transfer from debt holders to shareholders.

As noted in few paragraphs above, from Meckling's arguments, institutional investors have the tendency to impair the interest of debt holders by struggling to transfer wealth from them. The higher the institutional ownership level in the firm, the more powerful these investors are in firms' decision making processes and the higher the likelihood that self-serving value-reducing activities will take place. Ceteris paribus, this will cause debt holders to charge higher rates to cover for additional agency cost of debt

As it can be observed in the previous discussion, it is safe to say that, too much of anything is harmful. Therefore, managers are expected to defend the shareholders' interests so as to minimize the total agency costs in the firms. While managers cannot control the level of institutional shareholdings, they are capable of managing managerial ownership and debt financing levels. The arguments on substitutability proposed above suggest that, as institutional ownership and monitoring increases, firms may find it optimal to utilize lower level of debt and managerial ownership to control agency conflicts in the firm.

Because of their concentrated ownership, institutional investors will actively engage in the monitoring and disciplining of managers. As a result of their active role in corporate governance, firms' risk level and managerial ownership level will decrease as institutional ownership increases .This will be reflected by a negative relationship between the corporate debt level and institutional ownership followed by another similar relationship between institutional ownership and managerial ownership. From the recent arguments, it can therefore be hypothesized that;

As institutional Ownership increases both corporate debt ratio and managerial ownership decrease**.**

Coming back to the protection of minority shareholders' right, it is learnt from the previous literature that, the control role of debt is more significant in companies which generate more cash flow than they can identify growth opportunities. In companies like these, the risk that the companies' free cash flows to be misallocated is larger, Jensen (1986).Jensen, therefore suggests the debt policy to be the useful tool to mitigate such risk of misappropriation of companies' cash flow by managers. He generated a hypothesis on the control power the debt has on the mitigation process and named it the control hypothesis. Since then several researchers have been referring to this hypothesis as Jensen's hypothesis of free cash flow.

According to Jensen, the debt issue does not always have positive control effect across all firm sizes. He claims that firm size has a greater impact on the control effect of debt. According to him, the theory is much more effective for smaller firms or less rapidly growing firms with no large and highly profitable investment projects but have free cash flow. Those firms with highly profitable investment or rather larger companies will usually have no free cash flow hence they are expected to go regularly to the financial markets to obtain funding.

Jensen's free cash flow hypothesis implies that, smaller firms are subject to idle cash, hence they are more likely to face greater free cash flow agency problem, and thus debt is an important monitoring device for these firms. These firms are expected normally to over invest, unlike larger firms which are characterized as growth firms. Larger firms are rarely found with free cash flows because of the numerous investment opportunities they may have. It is further argued that, growth firms rarely face free cash flow problem because they are always run short of cash which results them to extend to external financing to meet their financial needs, Jensen (1986).

It can be derived from the above discussion that; as debt ratio increases, for smaller firms, the agency cost of free cash flow decreases because the free cash flow accumulated in the firm will be allocated to servicing the company's debt obligation, therefore, less or nothing remains for misappropriation. While, as debt level increases, for larger firms, the agency costs of free cash flow also increases because larger firms can have access to more debt which may be used to explore all available investment opportunities exposing the available free cash flow (if any) to potential misappropriation .

According to Chen et al (2005), larger firms have easy access to debt facility, relative to smaller firms, due to several reasons such as availability of collateral; better bargaining power they have and higher level of profitability which describes their quality. The light of these arguments results to the following hypothesis;

The increase in corporate debt ratio has a greater control effect on reducing Agency Costs of Free Cash Flow for smaller firms than for larger firms.

3. DATA AND EMPIRICAL METHODOLOGY

3.1 Sample Selection

The sample of this paper comprises All Share Index non-financial companies quoted on the London Stock Exchange over the period 2004-2008.The paper adapts the tradition in literature of eliminating financial companies because their financial reporting is different from other industrial companies as well as utility companies as they are highly regulated. The final sample includes about 1351 quoted companies. Any company which was in the index at least once over the research period was included in the sample regardless of whether it exited and joined again later. To arrive at the final sample, companies which are either deregistered or dissolved during the period are not included.

The paper also includes only companies with at least two years information in the sample set. Data for corporate governance variables is manually collected from the companies' financial statements as it is not available in machine-readable form and this has limited the sample period. Financial Data for Control variables and proxies for agency costs are available from Thomson One Banker. These are relatively easily available as compared to corporate governance data.

3.2 Variables Definition

VARIABLE	DEFINITION	NATURE OF VARIABLE	ADOPTED FROM
Managerial ownership	The amount of share owned by executive directors/managers	Independent Variable	(Morck et al (1988) and Short and Keasey (1999)
Institutional Ownership	The percentage of total firm equity capital owned by institutions where ownership exceeds 3%.	Independent Variable	Short, (2002)
Free Cash Flows	Earnings +Depreciation – Capital expenditure) scaled by total assets	Dependent Variable	Boone et al (2007)
Financial leverage	Debt to asset ratio	Dependent Variable	Ross (1997).
Market Value of Equity	Price of a share at the year-end multiplied by the outstanding number of shares at the end of particular year	Control Variable	Maury and Pajuste (2005)
Assets Growth Rate	Three years assets growth rate	Control Variable	Laeven and Levine (2008)
Firm size	The natural logarithm of Sales	Control Variable	Laeven and Levine (2008), Faccio et al (2002)
Profitability	the ratio of earnings before interest, taxes and depreciation to total assets	Control Variable	Jensen et al. (1992) and Fama and French (1983)
Non debt tax shields	The ratio of annual depreciation scaled by total assets.	Control Variable	Brailsford et al., (2002)
Stock Return Volatility	Standard deviation of monthly stock returns estimated over five years	Control Variable	Fiend and Lang (1988)

3.3 Empirical Methodology

Several studies which examine the impact of firm size on the relationship between corporate governance variables and agency costs use the firms' market capitalizations or sales value to control the firm size. This paper relies on the Combined Codes' recommendation to split firms into two groups, smaller and larger firms and results compared separately. According to the Combined Code (2010), a smaller company is one that is below the FTSE 350 throughout the year immediately prior to the reporting year. Therefore data sample is split into two parts; larger firms, which are firms above the FTSE 350 and smaller firms which are firms below.

This paper employs an ordinary least square estimation method. A major concern for most of studies in corporate governance is endogenity problem which is widely discussed in several previous works e.g. Hermalin and Weisbach (1998).

It is derived from the literature that ownership variables and leverage can be endogenously determined. To solve the problem of endogenity, the system of

simultaneous equations is employed. Like in Bathala et al (1994), a two-equation model with managerial ownership and debt ratio as the dependent variables is proposed. Debt ratio will appear as the independent variable in the managerial ownership equation and managerial ownership as the independent variable in the debt ratio equation. In both equations institutional ownership is included as explanatory variable in additional to other control variables. According to the authors, institutional ownership is treated as the exogenous variable in the two equations because it is the external decision variable unlike debt ratio and managerial ownership which are integral aspects of managerial decision making in the agency framework. This implies that managers can control the level of managerial ownership and debt but the target level of institutional ownership is out of their control.

The following two -equation model is therefore suggested;

$$\mathbf{LV} = \alpha + \beta_1*(\mathbf{MANOWN}) + \beta_2*(\mathbf{INSTOWN}) + \beta_3 (PROF) + \beta_4 (FSZ) + \beta_5 (NDTS) + \beta_6 + \beta_7 (MTB) + \beta_9(INDUMY) + \beta_{10}(YRDUMY) + eit \quad (1)$$

$$\mathbf{MANOWN} = \alpha + \beta_1*(\mathbf{LV}) + \beta_2*(\mathbf{INSTOWN}) + \beta_3 (STKVOL) + \beta_4 (AGRTH) + \beta_5 (FSZ) + \beta_6 (INDUMY) + \beta_7 (YRDUMY) + eit \quad (2)$$

Where;

MANOWN=Managerial Ownership
INSTOWN=Institutional Ownership
LV=Corporate leverage ratio
PROF=Profitability
FSZ=Firm SIZE
MVE=Market value of Equity
AGRTH=Rate of growth of Assets
STKVOL=Stock Return Volatility
INDUMY=Industry Dummy
YRDUMY=Year Dummy
α = Overall intercept term
e_{it} = The unobserved error component

For the role of corporate debt policy in reducing the free cash flow cost, the following model will be tested applying a simple Ordinary Least Square (OLS) method, using a sample of larger firms and smaller firms separately;

$$\mathbf{FCF} = \alpha + \beta_1*(LV) + \beta_2*(PROF) + \beta_3*(SIZE) + \beta_4*(NDTS) + \beta_5*(MTB) + \beta_6*(INDUMY) + \beta_7*(YRDUMY) + eit$$

Where;

LV=Leverage
PROF=Profitability
NDTS=Non Debt Tax shield
AGRR=Asset Growth rate
MTB= Market to book value
INDUMY=Industry Dummy
YRDUMY=Year Dummy

3.4 Empirical Results

The empirical analysis starts by descriptive statistics which is presented in table 1. Table 1 shows that on average corporations in UK have mean institutional ownership of 36.11% and managerial ownership of 7.15%. This percentage of institutional ownership depicts the sufficient power institutional investors have to influence the managerial decisions especially that of borrowing. It is reported in the UK Company's act 2006 that outside ownership beyond 33% is sufficient to control managerial decisions. The maximum institutional ownership in table1 is reported to be 89.1% and managerial ownership being 70.28%. This shows that there are some family companies managed by owners with up to 70% ownership while other companies are almost wholly owned by institutions i.e. larger companies.

Table 1: Statistical Description of ownership variables

	INSTOWN	**MANOWN**
Mean	36.11	7.15
Std Deviation	18.15	13.53
Minimum	0	0
Maximum	89.1	70.28
Observations	1356	1356

The association between variables was also analyzed using a covariance analysis and the results are summarized in a covariance matrix in table 2. The table shows a negative and significant association between managerial ownership and leverage (25%), managerial ownership and institutional ownership (27%). A similar negative association between institutional ownership and leverage is also observed in covariance matrix table 2 with covariance of 19%. Institutional ownership also showed a significant negative association with the firm size (26%) and managerial ownership also showed a similar negative association with the firm size (28%). This preliminarily shows that firm size has a great impact on ownership variations. Another negative significant association is between leverage and firm size (21%), leverage and non-debt tax shield (14%). Firm size has also a negative significant association with firm value; MTBV (11%) and non-debt tax shield (18%)

Table2: Covariance Matrix for Ownership variables, other control variables and corporate leverage
*,**and *** stand for statistical significance at 10%, 5% and 1% respectively

	LEVERAGE		**INSTOWN**
MANOWN	**Ln (sales)**	**NDTS**	**MTVB**
LEVERAGE	1.0000		
INSTOWN	-0.1919 *	1.0000	
MANOWN		-0.2589**	-0.2717**

1.0000				
Ln (sales)		0.2091**	-0.2609**	-
0.2777 **	1.0000			
NDTS		0.1362*	-0.0284	-
0.0286	-0.1772*	1.0000		
MTVB		0.0582	0.0059	-
0.0262	-0.1069 *	0.6294***	1.0000	

The theoretical perspective of corporate governance which portrays the agency conflict between block holders and debt holders suggests that block holders have the tendency to impair the interest of debt holders by transferring wealth from them, if they have sufficient voting power. It is said that, when the block holders' power increases their likelihood to transfer wealth from debt holders increases. This may force debt holders to charge higher rates to cover for additional agency cost of debt. This ultimately makes the debt expensive hence lower debt. This is supported by regression results presented in table 3. From the table it can be seen that institutional ownership and leverage have negative relationship and the relationship is significant at 1% significant level. That is to say firms with a large percentage of their shares held by institutions, on average, have relatively low leverage ratios. The results strongly support capital structure theories that predict a substitutive relationship between leverage and institutional holdings.

Table 3: 2SLS Regression results for corporate leverage vs. Institutional Ownership

REGRESSION TABLE(For Leverage-Dependent variable)	COEFFICIENT	STD ERROR	t-Value	p-Value
Constant	10.74542	2.818481	**3.81 *** **	0.000
Institutional Ownership	**-.0476128**	**.0317593**	**-2.50** **	**0.004**
Managerial Ownership	.0029183	.0444069	0.07	0.948
Non-debt taxable shield	.0009319	.000157	**5.94 *** **	0.000
Ln(Sales)	1.655865	.4529851	**3.66*** **	0.000
MTBV	-.0172371	.0104701	**-1.65***	0.100
Profitability	.0000166	.0000772	0.22	0.830

F-Statistic=9.714045 , R-Squared=0.0933, *** Indicates significant at 1% level.

On the other hand results from table 4 suggest that there is a negative and significant relationship between institutional ownership and managerial ownership. This can be argued that as the managerial ownership decreases proportionately the level of institutional ownership increases. This is reflected by the fact that institutional ownership nurtures additional monitoring and acts as a control to the opportunistic behavior on the part of managers. Consequently, the need to utilize managerial ownership to control agency costs is reduced. The finding is in line with the finding of Agrawal and Mandelker (1990). The institutional block may be more capable of monitoring the corporate management hence contributing to corporate performance. This finding is similar to that found in the famous paper by Shliefer and Vishny (1986). The weakly significant positive coefficient for leverage is similar to that reported by Jensen, Solberg, and Zorn (1992).

In order to ensure the robustness of the result, we included number of control factors (exogenous) namely profitability, depreciation to reflect corporate tax shield, corporate size into the system of equations.

The coefficient for profitability abbreviated by PROF is positive and statistically marginally significant at the 0.1 level in managerial ownership equation but positive and statistically insignificant in leverage equation. This is reflected in table 4.

The PROF proxy for performance and was expected to be positively related to the debt ratio and managerial ownership. The similar results are also documented in Fama and Jensen (1983) in their paper. The positive and statistically significant association at 1% significant level between depreciation as non-debt tax shield and leverage suggest that firm having non-debt related source of tax shield likely utilize more debt to take advantage of such tax shield. This is consistent to the non-tax shield DeAngelo and Masulis (1980) hypothesis. The non-debt tax shield is negatively related to managerial ownership and statistically significant at 1% significant level. This is reflected in table 4.

The firm size measured by natural logarithm of sales is negatively related to managerial ownership and is statistically significant at the 0.01 level reported in table 4. The negative coefficient is consistent with previous studies that document a lower managerial ownership level in larger firms owing to limited human resources. Weakly significant positive coefficient at 10% significant level for leverage is similar to that reported by Jensen, Solberg, and Zorn (1992). In line to the way they interpreted, the findings suggest that corporate managers do not choose their ownership level based on debt leverage but the causality goes in the other direction from managerial ownership to corporate leverage.

Table 4: 2SLS Regression results for corporate Managerial ownership vs. Institutional Ownership

REGRESSION TABLE(For managerial ownership-Dependent variable)	COEFFICIENT	STD ERROR	t-Value	p-Value
Constant	32.32077	1.513435	**21.36 *** **	0.000
Institutional Ownership	**-.2356576**	**.0185892**	**-3.68*** **	**0.000**
Leverage	.0011194	.017034	1.67*	0.0234
Non-debt taxable shield	-.0002993	.0000982	**-3.05*** **	0.002
Ln(Sales)	-.9658712	.2807148	**-3.44 *** **	0.001
MTBV	.0022799	.006491	0.35	0.725
Profitability	.0000795	.0000478	**1.66 ***	0.096

F-Statistic=23.08523, R-Squared=0.1964 , *** Indicates significant at 1% level,
* indicates significant at 10 %, **Indicates significant at 5%

In an attempt to compare the control effect of debt between large firms and small ones, firms were categorized as large or small using the clause provided in the combined code of corporate governance (2010). Firms below FTSE 350 are considered small while those above are considered large. We started with the univariate analysis by testing the difference between the mean leverage and free cash flows of the two groups to confirm whether smaller firms have lower debt ratios and higher free cash flows and larger firms have higher debt ratios and lower free cash flows as predicted.

Table 5 reports that, larger firms, firms with higher debt ratios accumulate lower levels of free cash flow while smaller firms have relatively lower debt ratios and higher free cash flows. The difference in debt ratios and free cash flows between the two groups of companies is reported to be strongly statistically significant at 1% significant level for debt ratios and 5% significance level for free cash flows. It is also reported that companies with a higher level of free cash flow are associated with lower debt ratios (smaller firms). A company with higher levels of free cash flow is more likely to be associated with the corporate value destruction if the debt level of such a company is lower because debt is considered as the monitoring mechanism towards misappropriation of corporate wealth.

Regression was further run to compare the monitoring effect of debt in preventing the misuse of corporate free cash flows between larger and smaller firms.

Table 5: Univariate Tests on the debt ratios and free cash flows for larger and smaller firms

VARIABLES	Mean Larger Firms	Mean smaller firms	Difference between means
Debt ratios	0.37	0.19	3.16***
Free cash flows	0.690	0.873	2.17**

In this table, the mean values of the debt ratios and free cash flows are compared using standard t-tests on means. Information from World scope and firms' annual reports for the period 2004-2008 is used to build the variables. The mean values of the debt ratios for observations related to larger firms are compared to the mean values of the same variables for observations of smaller firms and the same analysis is repeated for the free cash flows (Total free cash Flow/Total Assets). *, ** and *** stand for statistically significant at 10%, 5% and 1% respectively.

Table 6 presents the regression results for larger firms while table 7 presents the regression results for smaller firms. The results show that as debt ratio increases, for smaller firms, free cash flows decreases. This relationship is statistically significant at 5% significance level. The same relationship for smaller firms is negative and strongly statistically significant at 1% significance level.

The results depict that the use of debt seems to reduce the accumulation of free cash-flows. Hence debt is used as a mechanism to prevent accumulation of free cash flows which result into increase in agency cost of debt. The comparison of these results across smaller and larger companies show that the control effect of debt over accumulation of free cash flows is greater for larger firms than for smaller firms as reflected by the significance levels reported in tables 6 and 7.

While, as debt level increases, for larger firms, the agency costs of free cash flow also increases because larger firms can have access to more debt which may be used to explore all available investment opportunities exposing the available free cash flow (if any) to potential misappropriation . According to Chen et al (2005), larger firms have easy access to debt facility, relative to smaller firms, due to several reasons such as availability of collateral; better bargaining power they have and higher level of profitability which describes their quality

Table 6: 2SLS Regression results for Free cash flow vs. corporate leverage for larger firms

REGRESSION TABLE(For Free Cash Flow-Dependent variable)	COEFFICIENT	STD ERROR	t-Value	p-Value
Constant	-7.235487	3.233149	**-2.24 ****	0.025
Dividend yield	-.0152562	.0526858	-0.29	0.772
Leverage	**-.1407384**	**.0417654**	**-2.37 ****	**0.006**
Non-debt taxable shield	.0477262	.0215088	**2.22 ****	0.027
Ln(Sales)	1.360094	.4356803	**3.12 *****	0.002
Assets growth rate	.2276206	.0409581	**5.56 *****	0.000
Profitability	.000491	.0001187	**4.14*****	0.000
Capital expenditure	-.0557601	.014199	**-3.93*****	0.000

F-Statistic=14.33582 , R-Squared=0.1874 , *** Indicates significant at 1% level, * indicates significant at 10 %, **Indicates significant at 5%

Table 7: 2SLS Regression results for Free cash flow vs. corporate leverage for smaller firms

REGRESSION TABLE(For Free Cash Flow-Dependent variable)	COEFFICIENT	STD ERROR	t-Value	p-Value
Constant	6.163216	4.842151	1.27	0.204
Dividend yield	.5107561	.2593882	**1.97 ****	0.050
Leverage	**-.2171296**	**.0476526**	**-4.56 *****	**0.000**
Non-debt taxable shield	-.0009048	.0002062	**-4.39 *****	0.000
Ln(Sales)	.8833841	.5360268	**1.65 ***	0.100
Assets growth rate	-.1830772	.0862182	**-2.12 ****	0.034
Profitability	.0983763	.0521797	**1.89 ***	0.060
Capital expenditure	-.0825326	.0343925	**-2.40****	0.017

F-Statistic=7.653371 , R-Squared=0.1679 , *** Indicates significant at 1% level,
* indicates significant at 10 %, **Indicates significant at 5%

4. CONCLUSIONS

This paper investigates the impact of corporate ownership on leverage, using 1351 sample firms in UK. The sample used is selected from the London Stock Exchange listed companies. The paper concludes that the managerial ownership is inversely proportional to the extent of monitoring by institutional investors. Consistent with the main hypothesis of the paper, institutional ownership is found to be negatively related to the level of managerial equity holdings in the firm. Thus the results support the notion that institutional investors serve as effective monitoring agents and help in curbing the agency costs.

Additionally, the paper confirms the prediction that institutional ownership and leverage have negative statistically significant relationship. That is to say firms with a large percentage of their shares held by institutions, on average, have relatively low leverage ratios. The results strongly support capital structure theories that predict a substitutive relationship between leverage and institutional holdings.

Finally, using both univariate and multivariate analysis it was confirmed that larger firms have more debt ratios and lower free cash flows accumulation while smaller firms record lower debt ratios and higher free cash flows accumulation. This supports the Jensen's free cash flows hypothesis that debt may be used to reduce the possibility of misappropriating the corporate free cash flows. This was confirmed by grouping the sample firms into larger and smaller firms. Capital structure theoretical perspective was supported by the results of the analysis as larger firms, firms with large borrowing capacity, recorded average larger debt ratios as opposed to smaller firms, firms with lower borrowing capacity, which recorded lower debt ratios. Ultimately, it was held that larger firms, due to their higher control effect through debt as a control mechanism accumulate less free cash flows as opposed to smaller firms whose control effect is relatively low due to their lower ability to borrow.

The results of this paper are relevant in Tanzanian environment because Tanzania is one of the African countries which had formulated its laws and institutions based on already advanced corporate models like the OECD, Delaware and the European Union in which UK is part of the Union.

As the paper reflects the substitutive effect of institutional ownership on corporate leverage it is paramount to believe that if debt is substituted by institutional ownership the firms are said to be free from risk associated with usage of debt hence potential investors are attracted to invest corporate shares.

Like in the UK, according to Melyoki (2005), Tanzanian listed companies (limited to his sample) all have controlling shareholders holding over 50% of the shares which provide them with control rights and incentives to exercise control. These holders are institutional in nature, according to Melyoki. It is, therefore, imperative to believe that such holdings reduce the usage of debt as source of finance. The future research is recommended to see whether the substitution effect of institutional ownership on corporate debt is applicable in Tanzanian environment.

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