

The Theory and Practice of Capital Structure: A survey of Libyan Companies

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1. Introduction

The mainstream approach in most previous empirical studies of capital structure has been to estimate regression equations with proxies for dependent and independent variables. These studies test for relationships between leverage variables and other factors. This methodology, however, has been criticised by Hempel (1983) among others, because the explanatory variables are restricted to those which can be quantified. Barton and Gordon (1987) argue that this restriction leads to oversimplification of how the firm works. This quantitative analysis tends to ignore managerial preferences in capital structure decisions, and Barton and Matthews (1989) state that a new paradigm is needed which includes the qualitative factors which have an impact on the firm's financing decisions.

Barton and Gordon (1987) argue that if the aim is to get a better understanding of capital structure policy, capital structure models should include the role of management preferences, beliefs and expectations. Furthermore, Matthews et al, (1994) argue that analysis of capital structure decisions should incorporate strategic management, decision sciences, and social psychology to build a conceptual model for understanding capital structure decisions. Furthermore, a new paradigm is needed due to the fact that some of the conclusions of the agency, pecking order and signalling theories, as pointed out by Norton (1990), are difficult to test without using a survey-based analysis.

This paper attempts to examine the factors influencing capital structure in Libyan companies using evidence provided by

questionnaires. Several factors were hypothesised to impact on capital structure from a review of the relevant literature and previous published capital structure studies, which also adopted questionnaires. These factors deal with the implications of the different capital structure theories including the static trade-off, agency cost, and asymmetric information theories. In other words, this paper examines whether firms actions in Libya are consistent with these capital structure theories.

The remainder of the paper is organised as follows: the next section outlines a review of the relevant literature on capital structure. This is followed by a description of the methodology and data. Current capital structure practises in Libya are illustrated in section four while section five concludes the paper.

2. Capital Structure Theory

Myers (2001) argues that there is no general capital structure theory that can explain the financing patterns of all companies but that there are several theories that can explain the different financing behaviours of different

companies. Capital structure theories differ, as stated by Myers (2001), in terms of their emphases on taxes (the trade-off theory), differences in information (the pecking order theory) and agency problems (the agency cost theory).

Capital structure theories, according to Nuri (2000) and Brounen et al, (2004), are divided into two categories. Firstly, theories that attempt to explain how firms can obtain optimal debt to equity ratios (the static trade-off theory and the agency cost theory) and secondly, theories that attempt to explain why firms may have a preference between the types of finance, whether they chose long or short term debt and how companies can use their financing decisions to send signals to their investors and other interested parties (the pecking order theory and the signalling theory). Myers (1984 and 2001) and Antoniou, *et al* (2002) state that in the capital structure theories that have target debt ratios, the company sets a target capital structure and gradually moves towards it in order to achieve their target capital structure.

2.1 Trade-off theory

The trade-off theory of capital structure states that the optimal debt-equity ratio is determined by balancing off the benefit of debt with the costs. Tax and bankruptcy issues are considered as the most important factors that affect capital structure decisions. In this regard, Graham and Harvey (2001) state that the tax advantage of interest deductibility is the chief benefit of debt and the primary costs are those costs that are associated with bankruptcy.

The trade-off theory began with the unrealistic MM's (1963) conclusion, which implies that firms could benefit by increasing the level of debt, even reaching to a 100% debt ratio, if possible, but, according to MM (1963), shareholder would require a higher return as debt increased to compensate for their increased risk. Baxter (1967) argues that the effect of over-leveraging might result in larger fixed interest payments arising due to the greater amount of debt in the firm's capital structure. Such a circumstance, as stated by Baxter (1967), decreases the firm's earnings available for shareholders and will, eventually, cause financial distress

for the firm. Baxter (1967) also argues that the debt related costs, such as bankruptcy costs, might exceed the debt's tax advantages. Therefore, financial economists argue that firms should use debt until the tax advantages of using debt equals the cost of using more debt and expected bankruptcy costs.

The static trade-off theory, as stated by Myers (2001), would work well if the aim of companies was to maximise shareholders wealth. This is because value maximising managers should never pass up tax deductibility from interest payments as long as the probability of financial distress is relatively low.

2.2 Agency cost theory

The agency cost theory states that financing with risky debt creates an agency problem for firms, and optimal capital structure is determined by minimizing the costs arising from conflicts between the stakeholders of the firm. Jensen and Meckling (1976) identified two types of conflicts: conflict between shareholders and managers, and conflict between shareholders and debtholders.

Investment decisions can be affected, as stated by Myers(1977), by the use of long-term debt because the conflict between the stakeholders of the firm might lead managers to pass up profitable projects if shareholders perceive that the gains from the new investment will be used to pay off existing debtholders rather than increase their own wealth. Myers referred to this as the underinvestment problem, and argued that it could be minimised by limiting total debt, or using short-term debt. Debt agency problems may be less severe with short-term debt as it reduces the potential for expropriation from debtholders to shareholders. Suppliers of debt financing can withhold further financing if expropriation is expected.

The conflict between managers and shareholders can be, as stated by Jensen (1986) , mitigated by debt financing because more debt means higher cash outflows and reduces the level of free cash available to managers to execute possible firm value decreasing activities such as the misuse of cash by consuming perquisites or making inefficient investment decisions.

2.3 Asymmetric information theory

The asymmetric information theory is based on the argument that managers have information that investors do not have. The main theories derived from this argument are the pecking order theory and the signalling theory.

One approach of this theory starts with Myers and Majluf (1984) and Myers (1984) , and states that the choice of a firm's capital structure is aimed to mitigate inefficiency in the firm's investment decisions that are caused by information asymmetry. Myers (1984) suggests that managers will be reluctant to issue equity if they feel it is undervalued in the market. If new equity is undervalued, wealth will be transferred from existing shareholders to new investors and shareholders will prefer managers to reject positive net present value projects if their financing requires an issue of undervalued equity. Myers and Majluf (1984) point out that this underinvestment can be avoided if financing sources, which are less susceptible to undervaluation such as retained earnings and debt, can be used to finance the new projects. In such circum-

tances, therefore, internal funds and debt will be preferred to equity. Myers (1984) refers to this as a pecking order theory of financing, which states that firms prefer to finance new investment, first internally with retained earnings, then with debt, and finally with an issue of new equity.

Another approach to this theory began with Ross (1977) and Leland and Pyle (1977) who state that the choice of the firm's capital structure signals information from insiders to outside investors. They added that investors interpret the increase in leverage as a signal of higher quality, as managers will only increase leverage if the company is likely to be able to meet the interest payments and/ or that the firm has investment opportunities over and above what can be financed by internally generated funds. If investors perceive either of these to be the case they are likely to react positively to an announcement of increased leverage.

Myers (2001) argues that the announcement of issuing new shares might be perceived by investors as good news if it reveals growth opportunities with positive NPVs but may be per-

ceived as bad news if they perceived that managers are issuing overvalued equity.

3. Methodology

Graham and Harvey (2001) argue that survey based analysis, similar to analysis based on mathematical models, can utilise a large sample and broad crosssection of firms. In addition, surveys can allow for asking very specific and qualitative questions.

The survey approach provides further information about how firms operate. For example, Bancel and Mittoo (2002) state that the survey approach allows for the collection of data that may be difficult to obtain otherwise. Furthermore, Norton (1990) states that questionnaires can provide evidence about factors that affect capital structure choice that mathematical models cannot. He added that the ability to obtain information about manager's attitudes and beliefs on one side and the problem of unavailability of "hard" data on the other side provide the most justification for the use of survey instruments in financial research.

3.1 Design

The questionnaire was developed after reviewing the capital structure literature and after studying the questionnaires that were conducted by previous studies in capital structure including Graham and Harvey (2001), Bancel and Mittoo (2004) and Brounen et al, (2004). The benefit from taking questions from other works, as pointed out by Norton (1990), is to mitigate much of the complications inherent in survey design and any potential criticisms of the questionnaire and the ability to compare results. Four point Likert scale were used in order to ask respondents to rate their agreement/disagreement with, or importance/ unimportance of, different statements. The use of a four-point scale instead of a five-point scale is to avoid neutral answers such as "do not know" or "cannot decide".

3.2 Delivery and response

The questionnaires were distributed in person to the respondents for two reasons. Firstly, the postal services are not good enough to send postal questionnaires to all sectors of the economy in all Libyan cities, seco-

ndly, to improve the response rate.

To improve the response rate to the questionnaire, it was accompanied by a covering letter which emphasised the importance of the survey, assured anonymity and stated the sponsorship of the study. According to Scott (1961) official sponsorship may increase the response rate. The length of the questionnaire was limited to four pages, again in an attempt to improve the response rate.

To make the sample as representative of the Libyan companies as possible, companies from different sectors of the economy were selected. Out of 150 copies of questionnaires that were sent out, 72 were completed and returned, giving a response rate of 48%.

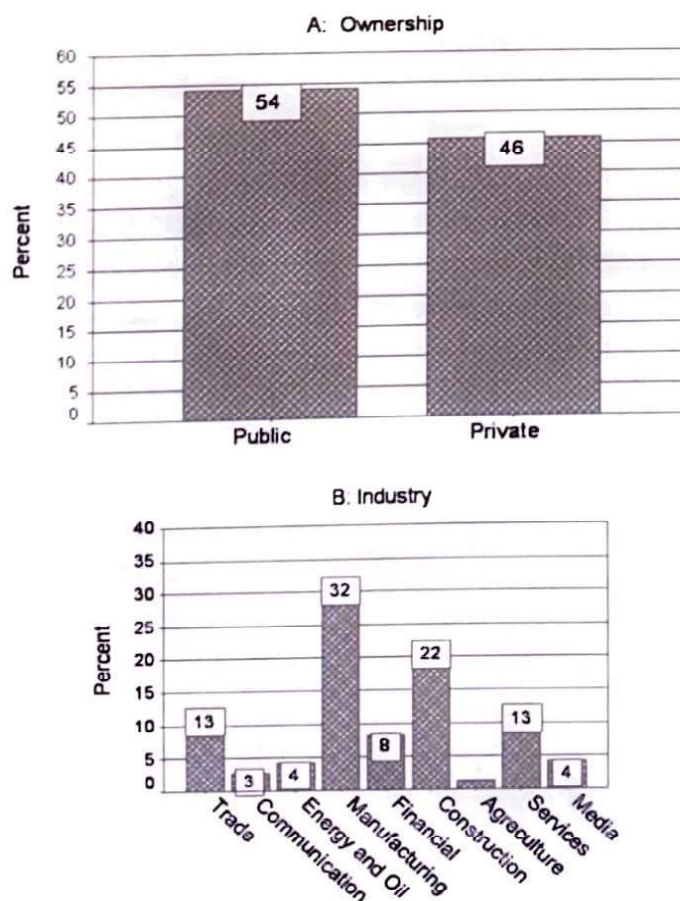
3.3 Summary statistics of responding companies

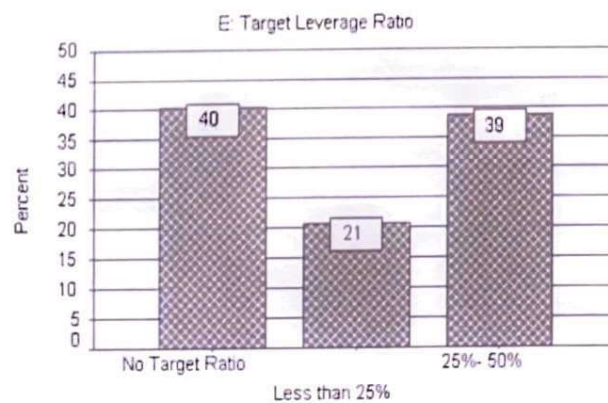
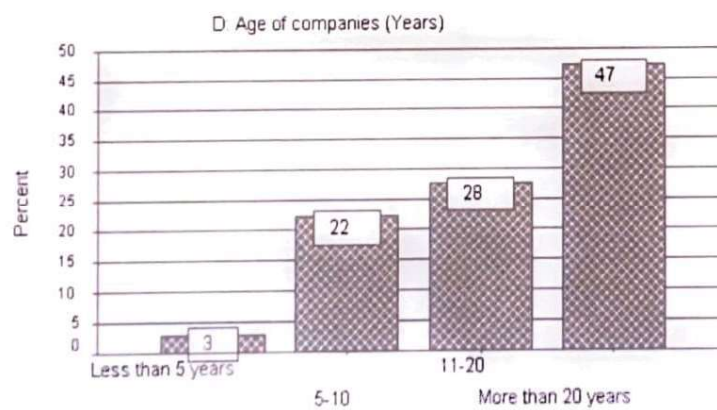
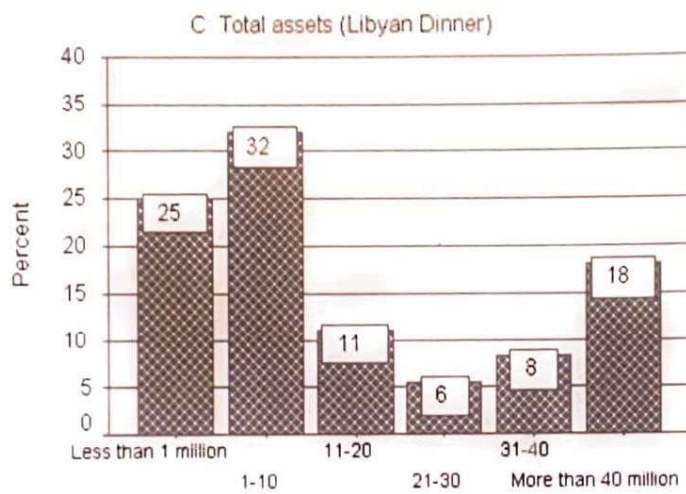
Figure 1 presents the summary information about the companies in the sample. The sample consists of 39 public (state-owned) companies and 33 private companies from different industries. Manufacturing and mining constitutes 31.9 % of the sample

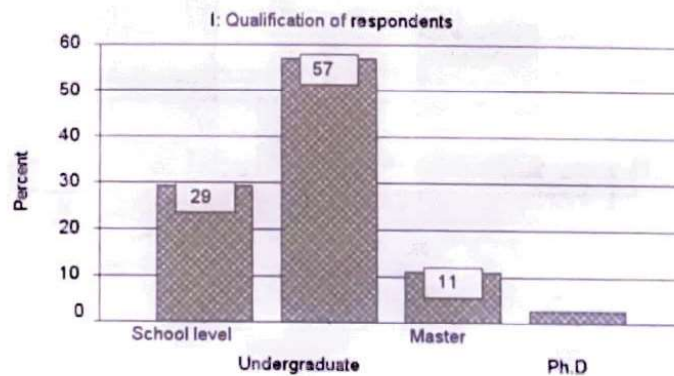
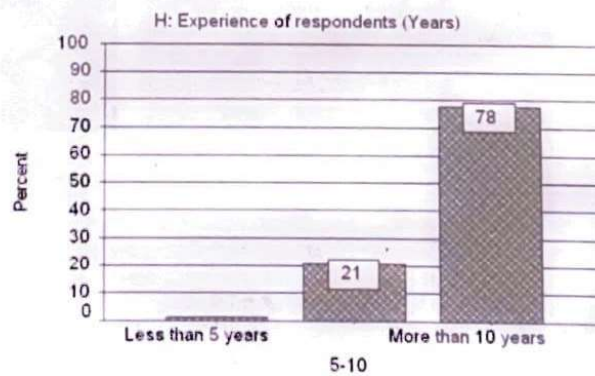
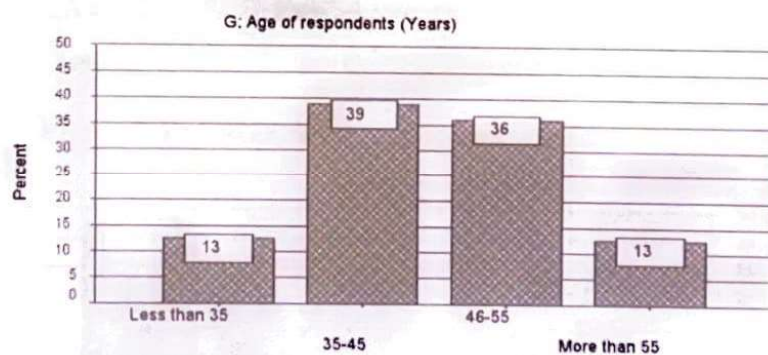
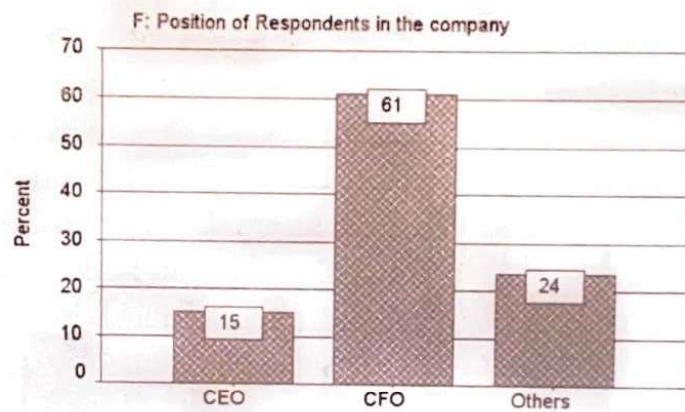
while non-manufacturing companies constitutes 68.1%. The companies range from small (25% of the responding companies have assets of less than 1 million Libyan Dinner LD) to very large (18.1% have assets of at least 40 millions LD). In subsequent analysis, we refer to companies with assets less than 1 million LD as "small". Nearly half of the respo-

nding companies are over 20 years old. The descriptive statistics also show approximately 21% of the respondents would prefer to have leverage ratios (the ratio of total debt to total assets) below 25%, while 38.9% of the respondents target leverage ratios are between 25% and 50%. The rest (40.3%) do not have desired leverage ratios.

Figure 1: Data and sample Characteristics







The letters and questionnaires were addressed to Chief Finance Officers (CFOs) and Chief Executive Officers (CEOs) but, in some cases, other officers completed the questionnaires. Approximately 61% of the respondents are CFOs, while 15% are CEOs. The remaining respondents represent other management positions. According to the age classification, 12.5% of the respondents are less than 35. A further 38.9% are between the ages of 35 and 45. Approximately 36% are between the ages of 46 and 55. The remaining respondents are over 55 years old. The responses to the questionnaire suggest that the respondents do not change careers frequently. Approximately 78% of the respondents have been in their careers or similar posts more than 10 years. Nearly 57% of the respondents have an undergraduate degree as their highest qualification. Another 13.9% have postgraduate degrees. The remaining 29.2% have school level qualifications.

4. Practices of capital structure

The results of some empirical studies in capital structure are consistent with two or more theories. Myers (2001) states that

this is because each of these theories works for a sub-sample. He added that testing a hypothesis by segregating the sample into sub-samples might be useful. Furthermore, ownership structure, as stated by Bancel and Mittoo (2004), may effect company's financing decisions. Therefore, the responses are analysed based on sector (public and private). The public companies are defined as companies where the state owns more than 50% of their shares, whereas, the private companies are where the companies majority is owned by individuals, families and/or institutions.

There are some differences between private and public companies in terms of goals, employment of staff, and receipt of the government subsidies. In this regard, Sun et al, (2002) argue that public companies differ in terms of choice of social and political goals over profit maximization; they added that the private companies are more concerned about the ability to perform in the employing of staff than public companies. On the other hand, Sun et al, (2002) and Dewenter and Malatesta (2001), among others, provide empirical support for the proposition that public owners-

hip is less efficient than private ownership. Dewenter and Malatesta (2001) report that the leverage of public companies tends to exceed that of private companies. They added that this is because public companies may borrow at favourable rates due to loan guarantees that are provided through government ownership. Consequently, investigating the determinants of capital structure in both Libyan private and public companies may provide a usefulness

comparison for the factors that affect the capital structure of these two types of companies.

Table 1 shows the classification of the sample in terms of industry and size. Of responding Libyan public companies 53.8% is manufacturing companies and 94.9% is also considered as larger companies while the vast majority of responding private companies (93.3%) is non-manufacturing companies from different sizes.

Table 1: Industry and Size Classifications of the Sample

	Public	Private
Manufacturing	21 (53.8%)	2 (6.3%)
Non-manufacturing	18 (46.2%)	31 (93.3%)
Total	39 (100%)	33 (100%)
Large	37 (94.9%)	17 (51.5%)
Small	2 (5.1%)	16 (48.5%)
Total	39 (100%)	33 (100%)

Manufacturing companies as those companies, which produce goods through different ways and the non-manufacturing companies otherwise. Small companies are defined as those companies, which have less than one million Libyan Dinners of assets.

4.1 Sources of Finance

Michaelas (1998) argues that companies will be more dependent on bank credit as they develop. The respondents of the questionnaires were, therefore, asked to explain how they financed their investments. The responses are summarised in Table 2.

most widely used source of finance in percents terms and has the higher overall ranking.

There are some differences in the average rankings between public and private companies. For example, bank overdrafts are used more than the other sources

**Table 2: Survey Responses to the Question:
“What source (s) of finance does your firm use?”**

Rank	% Used or used to a very large extent	Mean score	Sector		T-test for Difference in Means	
			Public	Private	t-statistic	P-value
c) Bank overdraft	73.6	3.15	3.20	3.09	0.377	0.71
f) Retained earnings	63.9	2.94	2.92	2.96	-0.140	0.88
a) Trade credit	59	2.75	2.35	3.21	-2.629	0.01*
b) Bank loans	50	2.51	2.79	2.18	1.775	0.08
d) External equity	37.5	2.13	1.17	3.27	-8.299	0.00*
e) Government subsidies	8.3	1.23	1.43	1.00	2.602	0.01*
g) Foreign sources	8.3	1.20	1.20	1.21	-.041	0.96
h) Affiliated companies	4.2	1.15	1.12	1.18	-0.393	0.69

Respondents are asked to rate on a scale of 1 (not used) to 4 (used to a very large extent). The letters represent the rank of the statements in the questionnaire. P-values marked with * indicate to the significant differences between public and private companies.

Table 2 provides evidence of the percentage of companies employing particular sources of finance and the mean of the rankings reported by the respondents as to the usage of the particular source of finance. Bank overdraft is the

of finance by public companies while private companies rely more heavily on trade credit and external equity. Private companies differ significantly from public companies in using trade credit and external equity which

is perhaps not surprising given their higher tendency to be non-manufacturing companies (see Table 1) and higher dependence on equity than public companies respectively.

These results support the findings of Alqadhafi (2002) in that as most Libyan public (state-owned) companies suffer from shortages of cash flow, they use bank overdrafts in an attempt to cover their expenses. The other possible explanation might be that Libyan banks treat public companies more favourably because the banks take government involvement in companies' ownership as more reliable collateral and, thus, they are more willing to extend overdraft facilities to public companies. Furthermore, the policy adopted by the Libyan government, however, might be responsible for reducing the use of government subsidies. The Libyan government issued Act no 9/1992 to introduce some liberalisation measures including the privatisation of business operations. The overall aim of these measures, as suggested by Saleh (2001), was to reduce public spending and gradually withdraw government subsidies.

4.2 Maturity of Debt

Short-term debt finance is often used to minimise the agency problems between shareholders and debtholders because if shareholders attempted to expropriate funds from debtholders, borrowers would insist on short-term to minimise these wealth expropriation attempts by restricting company's access to short-term debt in the immediate future. The respondents were, therefore, asked to specify whether they have a preference between short-term and long-term debt finance and to identify why they would raise short-term and long-term debt finance. As illustrated in Tables 3, almost 50% of the respondents indicated that they prefer to use short-term debt, while only 11% of respondents prefer to use long-term debt. About 26% of the respondents prefer to use a mix of short and long-term debt. The remaining respondents do not reveal any preference.

Table 3: Survey Responses to the Question: "Does the firm have any preference between short-term and long-term debt?"

	All %	Sector	
		%Public	%Private
Prefer short-term finance	50	41	60.6
Prefer long-term finance	11	12.8	9.1
Prefer to have a mix of short and long-term finance	26.5	23.1	30.3
No Preference	12.5	23.1	0

As can be seen in Table 3, 41% of the respondents in public companies prefer short-term debt finance, while 60.6% of the respondents in private companies have the same preference. The inability to offload shares in a secondary market may have more impact on agency costs for private companies than on agency cost for their counterparts.

Managers of such companies might be encouraged by shareholders, due to inability to offload their shares, to expropriate funds from debtholders to themselves. Therefore, their preference for using short-term debt might be due to borrowers insisting on shortterm debt to minimise attempts by shareholders to expropriate wealth from debtholders.

Table 4: Survey Responses to the Question: "If there is preference between short and long term debt, what factors affect your firm's preference?"

Rank	% Important or very important	Mean score	Sector		T-test for Difference in Means	
			Public	Private	t-statistic	P-value
b) We borrow short-term debt so that returns from new projects can be captured more fully by shareholders	48.6	2.44	1.51	3.54	-8.145	0.00*
a) Matching the maturity of our debt with the life of our assets	36.1	2.06	2.20	1.90	0.869	0.38
c) We borrow long-term debt to minimise the risk of having to refinance in "bad time"	36.1	2.11	2.23	1.96	0.775	0.44

Respondents are asked to rate on a scale of 1 (Not important) to 4 (very important). The letters represent the rank of the statements in the questionnaire. P-values marked with * indicate to the significant differences between public and private companies.

In order to specify the preference between short-term and long-term debt finance, respondents were asked to indicate the factors driving their choices. Table 4 shows that there is evidence to suggest that agency problems may be an issue between shareholders and debtholders in the Libyan business environment as evidenced by the percentage of

companies employing short-term debt and the mean of the ranking reported by the usage of the short-term debt for strategic or tactical reasons. As shown in Table 4, respondents indicated that debt is used for strategic or tactical reasons as 48.6% of the sample were raising short-term debt to capture the returns from new projects for shareholders.

There are some differences in preference and reasons for preference between long and short-term debt based on the subsample but the only significant difference is that private companies are more concerned about the use of short-term debt for strategic or tactical reasons than the public companies as evidenced by the significant P-value in Table 4.

Private companies, however, tend to issue short-term debt to capture returns from new projects for shareholders. This may imply that private companies, due to their higher dependency on equity, may suffer more from agency problems than their counterparts. Although public companies seem to be more concerned about matching principles and about issuing long-term debt to minimise the risk of having to finance in bad times than the private companies these differences appear to be not significant.

As public companies tend to be manufacturing and larger companies as shown in Table 1, consequently they also tend to have more fixed assets such as, plants and heavy equipments. This might explain why these

companies were more concerned about matching principles. Regarding their less concern about issuing long-term debt to minimise the risk of having to finance in bad times, both private and public companies seem to be affected by the absence of a secondary stock market as the non-existence of a secondary stock market might prevent investors from raising long-term finance.

4.3 Problems in Obtaining External Finance

Respondents were asked to specify whether they have experienced any problems in obtaining an adequate level of external finance. Respondents were asked to indicate the importance of a list of problems that could be linked to obtaining external finance. The responses are summarised in Table 5.

Table 5: Survey Responses to the Question: "Do you currently face any problem in obtaining and adequate level of external finance? If yes, what is the problem (s)?"

Rank	% Agree or Strongly agree	Mean score	Sector		T-test for Difference in Means	
			Public	Private	t-statistic	P-value
b) Deterioration in the state of the economy	81.9	3.83	3.81	3.85	-0.118	0.90
c) Absence of stock market	77.8	3.72	3.69	3.75	-0.150	0.88
h) Inability in getting enough debt	62.5	3.16	3.09	3.25	-0.362	0.71
d) The suppliers of finance are in small and/or undeveloped sector	56.9	2.98	3.57	2.28	2.889	0.00*
g) Inability in convincing lenders of the profitability of the investments	51.4	2.75	2.60	2.92	-0.732	0.46
a) Lack of collateral (security)	50	2.78	3.03	2.50	1.122	0.26
e) Poor relationships with banks	29.2	2.04	1.72	2.42	-1.731	0.03*
f) Lack of good trading record	16.7	1.57	1.24	1.96	-2.185	0.08

Respondents are asked to rate on a scale of 1 (strongly disagree) to 4 (strongly agree). The letters represent the rank of the statements in the questionnaire. P-values marked with * indicate to the significant differences between public and private companies.

The most important overall problem associated with obtaining external finance is the deterioration in the state of the economy as indicated by 81.9% of the respondents with an average rating of 3.83. As the profitability of a firm may be influenced by the

state of the economy, the deterioration in the state of the economy may affect the amount of earnings available to be retained and consequently the firms' capital structure.

The absence of a secondary stock market is ranked as the second most important problem in obtaining external finance followed by an inability to issue sufficient debt. Poor relationships with lenders and the lack of a good trading record are ranked as the least important problems in obtaining external finance.

There are some significant differences between public and private companies as shown in Table 5. For example, although it is surprising that public companies are influenced more than the private companies by an undeveloped finance sector, they are less influenced by poor relationships with lenders. The public companies may have good relationships with lenders due to government intervention guarantees. The responses to the problems listed in Table 5 indicate that the public companies and the private companies face nearly the same problems in obtaining external finance. This is consistent with Huang and Song' (2002) results which indicate that state ownership does not prevent public companies from displaying the same behaviour as private companies in terms of external financing.

The existence of a secondary capital market, as stated by Atkin and Glen (1992) , may affect the range of financing options available to companies. In this regard, private companies again seem to be more affected by the non-existence of a secondary market than their counterparts. This may reflect that the agency cost may be more of a problem for private companies.

It is apparent from Table 5 that responding companies are more influenced by problems that reflect the supply-side of finance (the deterioration in the state of the economy and the absence of a secondary stock market) than by problems that reflect the demand-side (lack of collateral, poor relationships with lenders, and the lack of a good trading record).

4.4 Financing Policy

In the following two sections, respondents were asked to specify their opinions on various factors that are likely to influence the capital structure policies of companies.

4.5.1 Debt Policy

The static trade-off theory, as stated by Brounen et al, (2004), suggests companies are concerned with balancing the costs of financial distress against the tax

advantages of debt. These two influences were reported to be important by 66.7% and 45.8% of the respondents respectively. These choices of debt policy indicate to strong support for the static-trade-off theory.

Table 6: Survey Responses to the Question: "To what extent does each of the following affect the amount of debt for your firm?"

Rank	% Reason or major reason	Mean score	Sector		T-test for Difference in Means	
			Public	Private	t-statistic	P-value
h) We use debt when our recent profits (internal funds) are not sufficient to fund our activities	93.1	3.75	3.74	3.75	-0.079	0.93
a) The potential costs of bankruptcy, or financial distress	66.7	2.88	3.00	2.75	0.753	0.45
j) The Interest rate	65.3	2.95	3.46	2.36	3.439	0.00*
e) We limit debt so our customers/ suppliers are not worried about our firm going out of business	50	2.61	2.15	3.15	-3.286	0.00*
d) We limit our borrowing so that profits from new /future projects can be captured fully by shareholders and do not have to be paid out as interest to debtholders	45.8	2.45	1.84	2.18	-4.788	0.00*
e) The tax advantage of interest deductibility	45.8	2.19	2.33	2.03	0.997	0.32
i) A high debt ratio helps us bargain for concessions from our employees	33.3	1.94	2.00	1.87	0.406	0.68
f) If we use debt our competitors know that we are very unlikely to reduce our output	16.7	1.56	1.84	1.24	2.680	0.00*
g) Using debt gives investors a better impression of our firm's prospects than issuing shares	11.1	1.47	1.61	1.30	1.474	0.14

Respondents are asked to rate on a scale of 1 (not reason) to 4 (major reason). The letters represent the rank of the statements in the questionnaire. P-values marked with * indicate to the significant differences between public and private companies.

There are no significant differences between public and private companies in their concern about potential bankruptcy costs and the tax advantage of interest deductibility than public ones. This may indicate that the static trade-off theory of capital structure is relevant capital structure theory for both public and private companies.

Drobetz and Fix (2003) and Brounen et al, (2004) argue that the validity of the static trade-off theory can be also evidenced by the presence of target leverage ratios. According to the responses analysed, approximately 60% of the respondents have desired leverage ratios as shown in Figure (1-E). This evidence may support the static trade-off theory of capital structure.

The highest ranked factor is the need to issue debt when profits are not sufficient to support the firm's investment activities (93.1%). This can be interpreted as being consistent with the pecking order theory, but that desire may not be driven by the asymmetric information problems. Ang and Jung (1993), Chirinko and Singha (2000) and Graham and Harvey (2001) argue that the

starting point for testing the pecking order theory is the existence of asymmetric information between managers and investors. Therefore, it is difficult to conclude that the pecking order theory is supported without testing the existence of asymmetric information problems and, on the other hand, the presence of desired leverage ratios also cast doubt on the pecking order interpretation of the results for the need to issue debt when profits are not sufficient for financing the current investments.

The use of issuing debt to send signals to competitors about the impossibility of reducing companies' outputs, giving investors a better impression about companies' future prospects, a concern of costumers/suppliers about the companies' stability and factors that relate debt to strategic or tactical reasons such as bargaining for concessions from employees are rated as less important factors that affect debt policy in Libyan companies. This can be interpreted as being inconsistent with the signalling theory which indicates that investors interpret the increase in leverage as a signal of higher quality.

Limiting total debt or using short-term debt can mitigate agency problems between parties involved. Of the respondents, 45.8% limit their amount of debt to capture profits from new projects for shareholders, not debt-holders and again private companies are more concerned about this factor than public companies.

There are also some significant differences in the average rankings between public and private companies. For example, while private companies are more concerned about limiting debt to send signals to their customers/suppliers about companies' going concern, public companies are more concerned about the costs of interest payments and about using debt to send signals to competitors about the impossibility of reducing companies' outputs.

4.5.2 Issuing Shares Policy

Libyan companies issue shares for various reasons but to fulfil the legal requirements regarding capital is ranked as the most important reason. Private companies place higher values on this reason probably due to their higher dependency on equity. The

other possible explanation is that Libyan private companies are required to offer shares to at least 50 shareholders in order to expand the ownership base.

Table 7: Survey Responses to the Question: "What factors affect your firm's decisions about issuing shares?"

Rank	% Agree or strongly agree	Mean score	Sector		T-test for Difference in Means	
			Public	Private	t-statistic	P-value
f) Fulfil some legal requirements regarding the capital	83.3	3.45	3.25	3.69	-1.845	0.06
a) Whether our recent profits have been sufficient to fund our activities	81.9	3.40	3.17	3.66	-2.040	0.04*
i) Inability to obtain funds using other sources of finance	69.4	3.11	2.53	3.78	-5.178	0.00*
h) Issuing shares give investors a better impression of our firm's prospects than using debt	69.4	3.06	2.51	3.72	-4.817	0.00*
g) Shares are our "least risky" source of funds	47.2	2.36	2.15	2.60	-1.329	0.18
c) Shares are our cheapest source of funds	33.3	1.98	2.23	1.69	1.785	0.07
e) Diluting the holding of certain shareholders	27.8	1.87	1.61	2.18	-1.800	0.07
j) Earning per share dilution	23.6	1.69	1.69	1.69	-0.019	0.98
d) Maintaining a target debt-to-equity ratio	20.8	1.61	1.66	1.54	0.483	0.63
b) Providing shares as dividends	16.7	1.69	1.71	1.66	-1.246	0.21

Respondents are asked to rate on a scale of 1 (strongly disagree) to 4 (strongly agree). The letters represent the rank of the statements in the questionnaire. P-values marked with * indicate to the significant differences between public and private companies.

About 82% of the responding companies ranked the need to issue shares when their profits are not sufficient to support their activities as the second most important reason for issuing shares and private companies appear to be more concerned about this reason than public companies. There are two other significant differences between public and private companies. For instance, private companies are more concerned about issue shares than

public companies because private companies appear to be unable to obtain funds from other financing sources and because they believe that issuing shares might be considered as good news by investors than issuing debt.

It can be also argued that there is more supply-side effects influencing financing policy than demand-side effects in the Libyan business environment as the respondents place a high value on the

factor relating to the inability to obtain funds using other sources of finance.

5. Conclusion

This paper examined the implications of capital structure theories in order to infer whether firm's actions in Libya are consistent with theoretical predictions of capital structure theories.

Due to the drawbacks inherent with survey data, such as, potential biases and measurement problems, the results should be interpreted with some concerns. The test for non-response bias was not performed because it was very difficult to separate the early and late responses as the questionnaires were collected through the assistance of many persons. Furthermore, due to the lack of the official statistics about the precise number of companies and the number of companies in each industry in Libya, it is difficult to ascertain whether the sample are fairly representative of the entire population of this study.

Nevertheless, our study attempts to shed more lights on capital structure practices in Libyan companies. This study is the first

of its kind in the Libyan business environment. The results, however, indicate that the static trade-off theory and the agency cost theory are pertinent theories for Libyan companies while there is little support for the asymmetric information theory.

The deterioration in the state of the economy and the absence of a secondary stock market are considered by the respondents as the most important problems associated with obtaining external finance. It may imply that Libyan companies are more influenced by problems that reflect such supply-side effects rather than by problems that reflect demand-side effects such as poor relationships with banks and the lack of a good trading record.

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