Does Age of the Firm Determine Capital Structure Decision?
Evidence from Malaysian Trading and Service Sector

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Abstract: Trading and services sector has been identified as the next engine growth for Malaysia, since the country's manufacturing sector has lost its ability to sustain its export-led growth. Similar to other sectors, optimal capital structure is also a pertinent issue for trading and services sector. Hence, this study aims to uncover the firm-specifics determinants that have significant influence on the capital structure decision of companies in trading and services sector. The sample comprises of 181 trading and services companies listed in Bursa Malaysia Main Market. The data covers the period from the year 2007 until 2011. Three pooled Ordinary Least Square (OLS) equations are estimated using three different leverage proxies. The findings reveal that tangibility, profitability, firm size, firm growth, non-debt tax shield, earning volatility, liquidity and firm age are able to explain capital structure decision of firm in trading and services sector in Malaysia. Age of the firm, also play an important role in the firm's decision to seek for debt financing. Although, three capital structure theories can jointly explain the capital structure of Malaysia's trading and services companies, however, the pecking order theory tends to dominate the other theories for the trading and services companies.

Key words: Capital structure, tangibility, firm age, profitability, Static Trade-off Theory, Pecking Order Theory

INTRODUCTION

Managers are very concerned with the level of optimal capital structure that could maximize the value of their companies. Raising capital through debt could either increase or lower the share prices of companies. Geczy et al. (1997), Mustapha et al. (2011) and Myers (1984) pointed out that certain level of debt financing could result in higher rate of return. However if the level of debt financing is too high then this will lead to bankruptcy's risk that eventually affect the company's value (Kraus and Litzenberger, 1973). Sabir and Malik (2012) indicate that determinants of capital structure may differ not only from one country to another but also from industry to industry). Trading and service companies are said to encounter difficulty in securing funds particularly when their companies activities are based on intangible assets. However, based on the performance of service sector in Second Industrial Master Plan (IMP2), it is found that the service sector in the Malaysian has been contributing to the economy development. In lieu of this progress, policy makers has laid out the Third Industrial Master Plan (IMP3) (2006-2020) in an effort to build a stronger and dynamic services sector in acknowledging

this sector to be the next prime driver for Malaysia economy (MoITI, 2010). However, the merger between main board and second board as one known as the main market and incorporation of the MESDAQ market into the ACE Market on 3rd August, 2009 had changed the Malaysian capital market structure. These changes altered business conditions requiring decision on financing and strategies to shift, thus, forcing theories on capital structure to switch from one theory to another theory (Eldomiaty, 2007).

Literature review: Three capital structure theories have often been used to rationalize managers decisions on their companies sources of financing: Static Trade-off Theory (ST), Pecking Order Theory (POT) and Agency Theory (AT). The theories explicated various causes that could influence company decision to raise capital between debts and equity.

Static Trade-off Theory (ST): Myers (1984) introduced the Static Trade-off Theory (ST) to explain the rationale for using debt financing. He emphasized that the decision to resort to borrowing depends on the costs and benefits of this form of financing. Company can obtain optimal

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capital structure if financial distress costs is lower than the net tax advantage from debt financing (Abor, 2005). In addition, firm is able to maximize shareholder wealth if optimal debt-equity ratio is achieved (Morri and Beretta, 2008). The theory also suggested that firm will use more debt if debt tax advantage would enhance owners return (Amidu, 2007).

The Pecking Order Theory (PT): Myers and Majluf (1984) had proposed Pecking Order Theory (POT) as an alternative to the Static Trade-off Theory (ST) in explaining the company's capital structure decision. Sheikh and Wang (2011) pointed out that POT applies under two assumptions. First, the managers are well informed about the potential business opportunity for their firm than investors outside the firm. Secondly, the managers act on behalf of the existing shareholders to serve their best interest. The theory further explained that managers normally have a financing decision hierarchy in which they will use retained earnings before deciding to go for external financing. In deciding to go for external financing, managers will consider debt financing as an alternative before equity financing (Eldomiaty, 2007). Equity financing is the last option, since the cost of raising funds via new equity is relatively more expensive than issuing new debt (Abor, 2007).

Agency Theory (AT): Jensen and Meckling (1976) pointed out that the capital structure decision can be explained by the Agency Cost Theory. In their studies, they found out two types of conflicts that could affect the capital structure decision: between firm's managers and shareholders and between debt and equity holders. These conflicts happen because the managers actions are not in line with the firm's objectives that results in loss in the value of the firm (Kyereboah-Coleman, 2007). Thus to alleviate these conflicts, managers need to balance between using debt and equity as their source of financing.

Relationship between capital structure theories and determinants of capital structure
Tangibility: Both Static Trade-off Theory and Pecking Order Theory suggest a positive relationship between asset tangibility and leverage. Under the Static Trade-off Theory, managers use debt financing when they posses high levels of tangible assets. From the pecking order theory's point of view when collateral is used to raise debt, it reduces the asymmetric information related costs. Hence, a direct relationship is expected between leverage and tangibility (Myers, 1984, 1976). Empirical researches by Sabir and Malik (2012), Wiwattanakantang (1999) and

Rajan and Zingales (1995) document positive relationship between tangibility and debt. Nevertheless, studies of Welch (2011) and Abor (2007) found inverse relationship between two variables.

On the other hand, agency theory suggested that the relationship between the two variables can be either positive or negative. Jensen and Meckling (1976) argued that agency cost of debt could be lessen if managers utilize secured debt. However, Um (2001) disproved this statement and argued that company will source for debt financing even when it has low level of tangible assets in order to avoid equity agency costs. Therefore, there is negative relationship between debt and tangibility of assets.

Profitability: Studies conducted by Serrasqueiro (2011) and Abor (2005) supported the static trade off theory that claims a positive relationship between leverage and firm's profitability. They explained that a profitable company has a better chance of securing debt from the financial institution. Highly profitable firms prefer to use its internal funds rather than external funds as indicated by the Pecking Order Theory (POT).

Jensen and Meckling (1976) claimed that profitable companies prefer to use debt financing in order to lessen equity agency cost. This supports the second assertion above.

Firm size: Friend and Lang (1988) studied on the impact of managerial self-interest on corporate capital structure and discovered that since large firms have better credit access, they are able to employ more debt as compared to small firms. This finding is supported by Shivdasani and Zenner (2005). Researchers argued that large size firms are more diversified and are less exposed to bankruptcy. The studies are consistent with the Static Trade-off Theory (ST). Unlike a study done by Titman and Wessels (1988) on the determinants of capital structure choice, they found out that leverage, namely short-term and long-term debts have negative relationship with firm size. This was due to high equity issuance costs for small firm and relatively low costs for large firm. This resulted in the small firms seeking short-term debt, especially bank loans because the fixed costs are lower than equity issuance costs. The results are parallel with the Pecking Order Theory (POT) hypothesis.

Firm growth (growth opportunity): According to a study done by Myers (1984) due to information asymmetry with outside equity, a firm's new equity issue tend to be undervalued that makes the cost of the new issue relatively more expensive. Thus, a firm prefers not to issue

new equity that caused the firm to lose investment with positive NPV. That is why a firm tends to employ debt rather than issue new equity because of least changes in its future value when inside information is available in the market. Therefore, this explains the significant, positive relationship between firm growth and debt which is in accordance with the Pecking Order Theory (POT). Firms with high growth will have more investment opportunities as compared to firms with low growth. However, Titman and Wessels (1988) argued that growth opportunities could not be used for collateral, although, it adds to a firm value. Besides that growth opportunities does not contribute to further tax deduction, thus, supporting the theory of Static Trade-off (ST) prediction of significant negative relationship between firm growth and debt.

Non-debt tax shield: Companies should avoid their income to fall under high tax brackets in order to increase their equity value. This can be achieved using Non-Debt Tax Shield (NDTS) that has become a substitute for debt tax shield (DeAngelo and Masulis, 1980). Researchers discovered that firm's corporate tax could be reduced to zero with the tax shield on company's related investment. Low corporate tax does not necessarily imply that the company is in financial distress. Titman and Wessels (1988) suggested that saving on corporate tax decline with an increase in debt as tax shield. Thus, this implies that there is negative relationship between leverage and non-debt tax shield which is in line with the Static Trade-off Theory (ST). However, empirical evidences from Delcoure (2007), Huang and Song (2002) and Titman and Wessel (1988) revealed positive relationship with Non-Debt Tax Shield (NDTS) which contradicted with the Static Trade-off Theory (ST) prediction. Their arguments are that Non-Debt Tax Shield (NDTS) is associated with investment in securable assets that result in company using those assets as collateral to secure debt financing.

Earning volatility: Bradley *et al.* (1984) carried out an optimal capital structure model simulation to examine the relationship between earnings volatility and debt financing. Results of his study revealed an inverse relationship between the two variables. Researchers pointed out that present value of debt related costs increased with earning volatility and led to low optimal debt level. Similar results were found by Delcoure (2007) where he discovered that company with high earnings volatility is likely to experience financial distress which would led to higher bankruptcy costs. Their studies tend to agree with the Static Trade-off Theory. However study

by Afzal (2012) on the public and private firms produced indicate a different results. In his findings, earnings volatility has a direct link with leverage.

Liquidity: Deesomsak *et al.* (2004) stated that the liquidity position of a company influenced, its capital structure decision. High liquidity firms will employ less debts, since these liquid assets are at the managers discretion able to be manipulated to favor the shareholders against the debt holders interest causing agency costs of debt. Pinkova (2012) did a study on Czech Republic automotive industry for large and medium-sized enterprises and found a negative relationship between liquidity and leverage (total, short-term and long-term). These companies preferred to use equity financing when liquidity position is high. The empirical findings supported the Pecking Order Theory (POT). In contrast, findings from Sabir and Malik (2012) and Morri and Beretta (2008) are in line with the static trade off theory that postulate a positive relationship between liquidity and debt ratio. Their arguments are that companies with high liquidity ratios have the ability to meet its contractual obligation and therefore, resort to debt financing.

Firm age: The theoretical relationship between firm's capital structure decision and age is still not clear. Empirical evidences by Dewaelheyns and Van Hulle (2010), Sakai *et al.* (2010) and Ezeoha and Botha (2012) discovered significant relationship between age and the capital structure. Their findings tend to support the Static Trade-off Theory and Agency Cost Theory that postulate a positive relationship between age and leverage. Companies that have been in the industry for longer period of time have better access to borrowing, since they have established relationship with the lenders who keep track of their financial record and reputation. On contrary, findings by Michaelas *et al.* (1999) and Petersen and Rajan (1994) are parallel with the Pecking Order Theory hypothesis that state the usage of debt financing decreases with age of firm. The argument for this hypothesis is that firms are able to build up a substantial amount of retained earnings as they aged and therefore, found no reason to seek external funding via debt or equity.

Decision on the capital structure of companies has attracted interest among researchers and academician. Many studies have used tangibility, non-debt tax shields, profitability, size, growth opportunities and liquidity as their independent variables to identify the determinants of capital structure of companies. In essence, the results

differ in terms of industry, the type of organization and the countries studied. In addition, relatively very few studies have incorporated age as one of the factors that attribute to Malaysian firm's capital structure decision. Hence, this study attempts to fill that gap as well as to expand the existing literature on the determinants of capital structure of trading and service sector in Malaysia. This study also uses total debt ratio, long-term debt ratio and short-term debt ratio as proxies for dependent variable. Sheikh and Wang (2011) and Bevan and Danbolt (2002) argued that a clearer picture is obtained when these three proxies are used.

MATERIALS AND METHODS

Pooled ordinary least square equations: This study uses the annual closing prices of 181 trading and services companies listed in Bursa Malaysia Main Market. The data covers the period from the year 2007 until 2012 and are obtained from datastream. Three pooled Ordinary Least Square (OLS) equations are run to estimate the three different leverage proxies. Podesta (2000) proposed the use of pooled ordinary least square as this method considered all cross-section units through time rather than testing all cross-section units at one point of time or one cross-section at a given point of time. The three equations are formulated as given:

$$TD_{i,t} = \beta_0 + \beta_1 TANG_{i,t} + \beta_2 PRF_{i,t} + \beta_3 LSZE_{i,t} + \beta_4 GRW_{i,t} + \beta_5 NDTS_{i,t} + \beta_6 EV_{i,t} + \beta_7 DAGE_{i,t} + \beta_8 CR_{i,t} + \varepsilon_{i,t}$$

(1)

$$LD_{i,t} = \beta_0 + \beta_1 TANG_{i,t} + \beta_2 PRF_{i,t} + \beta_3 LSZE_{i,t} + \beta_4 GRW_{i,t} + \beta_5 NDTS_{i,t} + \beta_6 EV_{i,t} + \beta_7 DAGE_{i,t} + \beta_8 CR_{i,t} + \varepsilon_{i,t}$$

(2)

$$SD_{i,t} = \beta_0 + \beta_1 TANG_{i,t} + \beta_2 PRF_{i,t} + \beta_3 LSZE_{i,t} + \beta_4 GRW_{i,t} + \beta_5 NDTS_{i,t} + \beta_6 EV_{i,t} + \beta_7 DAGE_{i,t} + \beta_8 CR_{i,t} + \varepsilon_{i,t}$$

(3)

The variables descriptions and measurement are displayed in Table 1.

Statistical tests for unit root, multi-collinearity, heteroskedasticiy and serial correlation: In addition, stationarity, multi-collinearity, heteroskedasticity and serial correlation tests are done before the models are estimated. The following study explains the results of those tests. Im, Pesaran and Shin (IPS) unit root tests are carried out to identify the presence of stationary of the variables studied. Based on the results, the null hypothesis of the presence of unit root is not accepted at 5% level of significant. Hence, it can be concluded that the data series is stationary (Table 2).

Table 1: Measurement of variables

Variables	Measurement
Dependent	
Total debt (TD$_{i,t}$)	Ratio between book value of total debt to total assets
Long-term debt (LD$_{i,t}$)	Ratio between book value of long-term debt to total assets
Short-term debt (SD$_{i,t}$)	Ratio between book value of short-term debt to total assets
Independent	
Tangibility (TANG$_{i,t}$)	Ratio of net fixed assets to total assets
Profitability (PRF$_{i,t}$)	Return on equity ratio
Firm Size (LSIZE$_{i,t}$)	Log of total assets
Firm Growth (GRW$_{i,t}$)	Percentage change in total assets
Non-Debts Tax Shield (NDTS$_{i,t}$)	Ratio of annual depreciation to total assets
Earning Volatility (EV$_{i,t}$)	Standard deviation of firm's net profits divided by total number of years
Current Ratio (CR$_{i,t}$)	Current asset/current liabilities
Firm Age (DAGE$_{i,t}$)	Firm years of establishment from base date. A dummy variable is used where 1 for firms with age ≥ 8 years and 0 for firms with age <8 years
Error term ($\varepsilon_{i,t}$)	Effects of other variables that are excluded from the regression

Table 2: Results of Im, Pesaran and Shin W-STAT

Variables	Statistics	Probability
TD	-27.30170	0
LD	-8.98974	0
SD	-8.01137	0
TANG	-21.48780	0
PRF	-12.17850	0
LSZE	-6.29940	0
GRW	-66.13380	0
NDTS	-9.80714	0
EV	-36.19260	0
CR	-8.38436	0

A correlation of more and equal to 0.70 implies the presence of multi-collinearity (Sekaran and Bougie, 2010). Results of the correlation test detected no multicollinearity problem with exception to the correlation between TANG and NDTS (Table 3). To confirm whether there is a presence of multi-collinearity between the two variables, a partial correlation analysis is carried out. Although, the results revealed that they are positive and significantly correlated, however, the correlation value is below the cut-off points of 0.70 (Table 4). This shows the absence of multicollinearity issue.

Bartlett, Levene and Brown-Forsythe tests are employed to determine if heteroscedasticity is presence. Results from Table 5 failed to reject the null hypothesis.

When Eq. 1-3 are estimated, the Durbin-Watson (D-W) tests for all the three equations point towards the presence of serial correlation. Boyd suggested to include Auto Regressive of lag 1, AR (1) with other independent variables in all the equations to address this problem. Durbin-Watson statistics are at an acceptable level after the equations are re-estimated using AR (1).

Table 3: Multi-collinearity test results

Spearman correlation (p-value)	TANG	PRF	SZE	GRW	NDTS	EV	CR
TANG	1						
PRF	0.0077 (0.9331)	1					
LSZE	0.3298 (0.0002)***	0.14741 (0.1096)	1				
GRW	-0.0279 (0.7630)	0.242651 (0.0078)***	-0.0484 (0.6007)	1			
NDTS	0.7758 (0.0000)***	0.2038 (0.0262)**	0.2021 (0.0275)**	0.0200 (0.8287)	1		
EV	0.1256 (0.1735)	0.1944 (0.0341)**	0.0843 (0.3617)	-0.0979 (0.2893)	0.0237 (0.7973)	1	
CR	-0.1046 (0.2576)	0.1477 (0.1090)	-0.1128 (0.2221)	0.1441 (0.1180)	-0.0427 (0.6446)	-0.0756 (0.4137)	1

Table 4: Partial correlation analysis

Correlation (p-value)	TANG	NDTS
TANG	1 (-------)	
NDTS	0.4349 (0)	1 (-------)

Table 5: Test for equality of variances between series

Methods	Degree of freedom	Values	Probability
Bartlett	181	4.35E-11	1
Levene	(181, 13650)	3.60E-28	1
Brown-Forsythe	(181, 13650)	3.60E-28	1

RESULTS AND DISCUSSION

Capital structure trend of trading and service companies: Figure 1 disclosed the capital structure trend of the Malaysian trading and services companies. Although, the leverage ratio for all three measurements have increased slightly after 2007, it experienced significant contraction in year 2012. Several possible reasons could contribute to the sudden decrease of usage of debt financing. The aftermath of world financial crisis that started in 2007 that eventually led to the 2012 sovereignty debt crisis in European countries prompted trading and services companies to take precautionary measure by reducing their risk exposures via borrowing means. In addition, with upcoming of the country's 13th general election in 2013, most companies from various sector (including trading and services) are very cautious about their capital structure decision.

Descriptive statistics: Table 6 reports the descriptive statistics of the variables. On average 21.3% of the companies assets are financed via debt (TD), out of which on average 9.02% of the debt is from Short-term Debt (SD) and 12.28% are from Long-term Debt (LD). This shows that trading and services companies, it indicated that firms in trading and services sector have planned weight for its debt structure because to reduce risk with debt financing through combining 2 types of debt with different maturity. Perhaps, this a common practice for trading and services industry that tend to match its assets and liabilities maturity (Myers, 1976). Eldomiaty (2007) also pointed out that long-term debts are usually related to fixed assets while short-term debts are attached to current assets. Fixed assets (TANG) of trading and services companies
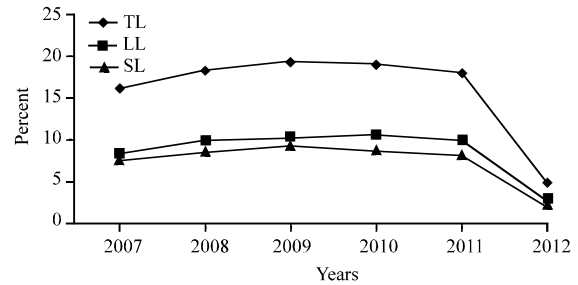

Fig. 1: Capital structure trend of trading and service sectors from 2007 until 2012

made up 31.23% of their total assets and this sector appeared to experience high investment opportunities of about 601%. On average, these Firms experienced a Profit (PRF) of 13.95%. Trading and services companies liquidity position (represented by Current Ratio (CR)) are two times greater than its current liabilities.

Results of pooled OLS Regression Models: Table 7 displays the results of the three estimated pooled OLS equations. Both total debt and long-term debt have positive significant relationship with tangibility but no significant relationship exists between short-term debt and tangibility. This means that company that posses high tangible assets is inclined to use debt financing and prefers to source for long-term financing rather than short-term financing. Profitability is inversely related to long-term debt and short-term debt. The results concur with those by Huang and Song (2002) that supported the pecking order theory that explain firm will exhaust its internal financing before resorting to debt financing to reduce costs. Size has a positive relationship with debt ratio, long-term debt and short-term debt. However, the relationship between size and short-term debt is significant at 10% level. This implies that large trading and service firms seek long-term debt to finance the company. When debt ratio is used, there appears no significant relationship with non-debt tax shields. When the debt ratio is classified into long-term debt and short-term debt, interesting results emerged. Non-Debt Tax Shields (NDTS) is negatively related to long-term debt but on the other hand is positively related short-term debt. This

Table 6: Descriptive statistics

Variables	TD	SD	LD	TANG	PRF	LSZE	GRW	NDTS	EV	CR
Mean	0.2130	0.0902	0.1228	0.3123	0.1395	13.8019	6.0069	0.0336	9.1117	2.3304
Median	0.2185	0.0460	0.0682	0.2662	0.1306	13.6101	0.0840	0.0216	8.9446	1.6011
Max	0.7146	0.4310	0.6638	0.8329	1.0544	18.2982	403.0764	0.2222	15.3489	13.9568
Min	0	0	0	0	-1.3420	9.8655	-0.9923	0	1.8245	0.4488
Std. Dev.	0.1639	0.1047	0.1446	0.2210	0.2705	1.9524	44.7477	0.0364	2.4699	2.2530
Skewness	0.5403	1.3123	1.3867	0.7949	-0.7431	0.4479	7.8758	2.6207	0.0834	2.9639
Kurtosis	2.8016	3.7826	4.6266	2.7440	12.4426	2.5005	64.8206	11.1374	3.0443	12.7678
Obs.	119	119	119	119	119	119	119	119	119	119

Table 7: Estimated results of pooled OLS Regression Models

Independent variables	Dependent variable (coefficient p-value)			Related capital structure theory		
	TD	LD	SD	ST	POT	AT
TANG	0.2488 (0)***	0.1951 (0)***	0.0131 (0.3559)	/	/	/
PRF	-0.0027 (0.1704)***	-0.0039 (0.0406)**	-0.0026 (0.0384)**	-	/	-
LSZE	0.0516 (0)***	0.0213 (0)***	0.0087 (0.0962)*	/	-	/
GRW	0.0001 (0.0132)**	0.0001 (0.0003)***	0.0005 (0)***	-	/	-
NDTS	-0.0190 (0.6679)	-0.1260 (0.0009)***	0.1367 (0)***	/	/	-
EV	-0.0027 (0)***	-0.0007 (0.0900)	-0.0006 (0.2414)	/	/	-
CR	-0.0001 (0.0008)***	-0.0005 (0.0797)*	-0.0003 (0.0830)*	-	/	-
DAGE	-0.0247 (0)***	-0.0145 (0)***	-0.0090 (0)***	-	/	-
C	-0.6318 (0)***	-0.2643 (0)***	-0.0684 (0)***			
AR(1)	0.9217 (0)***	0.81416 (0)***	0.8632 (0)***			
Adjusted R-squared	0.9815	0.9515	0.9152			
F-statistic	3360.84***	1240.85***	672.10***			
Durbin-Watson stat	1.9517	1.8357	2.2259			

***, **, * indicate significance at 1, 5 and 10% level, respectively; ST = Static Trade-off Theory; POT = Pecking Order Theory; AT = Agency Theory

implies that increases in tax rates will prompt trading and services firms to reduce using long-term debt and seek short-term debt as an alternative. Huang and Song (2002) and Titman and Wessel (1988) reported similar findings based on these two relationships.

Relationship between earnings volatility and all the three leverage proxies are negatively relatively. This illustrates that trading and services firms tend to avoid debt financing when earnings are more volatile for fearing that they might not be able to fulfil their financial obligations (Shivdasani and Zenner, 2005). The results seem to support the both static trade off theory and pecking order theory. Higher liquidity position (CR) leads to trading and services companies to use its internal source of financing rather than debt financing (either in the form of long-term debt or short-term debt). The findings concur with those by Sabir and Malik (2012) and Shah and Khan (2007).

Furthermore, this study discovered that age of the firm played an important factor in influencing the capital structure decision of this sector. As indicated in Table 7 companies that have been established for >8 years will rely on other financing alternative rather than debt, since they have developed good relationship with bank and perhaps gather sufficient retained earnings. The findings is in tune with those of Petersen and Rajan (1994) but contradict with Zare et al. (2013)'s results. The results supported the Pecking Order Theory that explained if company has sufficient retained earnings, it will use this internal financing before turning to external financing such as debt and equity.

CONCLUSION

This study investigates the determinants of capital structure decisions of Malaysian trading and services sector. Pooled ordinary least square method is used to analyze the relationship of the identified independent variables on the debt financing decision. Empirical evidence shows that Tangibility (TANG), Size (LSZE), firm Growth Rate (GRW), Earnings Volatility (EV), Current Ratio (CR) and age of the firm significantly influence these companies to use debt financing. Tangibility, size, growth rate variables have direct relationship with total debt ratio while profitability, earnings volatility and current ratio are negatively related with total debt ratio.

When this study decomposes the Total Debt ratio (TD) into Short-term Debt ratio (SD) and Long-term Debt ratio (LD), a better insight of the relationship between the independent variables and leverage was revealed. Large companies with higher total assets and higher growth rate will seek long-term debt financing. There is an inverse relationship between non-debts tax shield with long-term debt and a direct relationship with short-term debt. The empirical findings indicate that trading and services companies do not use long-term debt when they have large non-debt tax shields but instead used short-term debt as an alternative. It is found that firm age is negatively related to all the debt ratio measurement. This implies that company tend to use less debt financing when they have been in the industry for a long period of time.

Additionally, empirical evidence from this study indicates most of the decision to use debt financing by trading and services companies can be best explained by the Pecking Order Theory, where these companies will attempt to finance their investments using internal funding before resorting to external funding such as debt.

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REFERENCES

Abor, J., 2005. The effect of capital structure on profitability: An empirical analysis of listed firms in Ghana. J. Risk Finance, 6: 438-445.

Abor, J., 2007. Debt policy and performance of SMEs: Evidence from Ghanaian and South African firms. J. Risk Finance, 8: 364-379.

Afzal, Z., 2012. The determinants of capital structure: A comparative study of public and private firms. Master Thesis, Tilburg University, Netherlands.

Amidu, M., 2007. Determinants of capital structure of banks in Ghana: An empirical approach. Baltic J. Manage., 2: 67-79.

Bevan, A.A. and J. Danbolt, 2002. Capital structure and its determinants in the UK-a decompositional analysis. Applied Financial Econ., 12: 159-170.

Bradley, M., G.A. Jarrell and E.H. Kim, 1984. On the existence of an optimal capital structure: Theory and evidence. J. Finance, 39: 857-878.

DeAngelo, H. and R.W. Masulis, 1980. Optimal capital structure under corporate and personal taxation. J. Financial Econ., 8: 3-29.

Deesomsak, R., K. Paudyal and G. Pescetto, 2004. The determinants of capital structure: Evidence from the Asia Pacific region. J. Multinational Financial Manage., 14: 387-405.

Delcoure, N., 2007. The determinants of capital structure in transitional economies. Int. Rev. Econ. Finance, 16: 400-415.

Dewaelheyns, N. and C. Van Hulle, 2010. Internal capital markets and capital structure: Bank versus internal debt. Eur. Financial Manage., 16: 345-373.

Eldomiaty, T.I., 2007. Determinants of corporate capital structure: Evidence from an emerging economy. Int. J. Commerce Manage., 17: 25-43.

Ezeoha, A. and F. Botha, 2012. Firm age, collateral value and access to debt financing in an emerging economy: Evidence from South Africa. J. Econ. Manage. Sci., 15: 55-71.

Friend, I. and L.H.P. Lang, 1988. An empirical test of the impact of managerial self-interest on corporate capital structure. J. Finance, 43: 271-281.

Geczy, C., B. Minton and C. Schrand, 1997. Why firms use currency derivatives? J. Finance, 52: 1324-1354.

Huang, S.G.H. and F.M. Song, 2002. The determinants of capital structure: Evidence from China. Hong Kong Institute of Economics and Business Strategy, Working Paper, The University of Hong Kong.

Jensen, M.C. and W.H. Meckling, 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. J. Financial Econ., 3: 305-360.

Kraus, A. and R.H. Litzenberger, 1973. A state-preference model of optimal financial leverage. J. Finance, 28: 911-922.

Kyereboah-Coleman, A., 2007. The impact of capital structure on the performance of Microfinance institutions. J. Risk Finance, 8: 56-71.

Michaelas, N., F. Chittenden and P. Poutziouris, 1999. Financial policy and capital structure choice in UK SMEs: Empirical evidence from company panel data. Small Bus. Econ., 12: 113-130.

MoITI., 2010. Third industrial master plan (IMP3). Ministry of International Trade and Industry (MoITI), Kuala Lumpur, Malaysia.

Morri, G. and C. Beretta, 2008. The capital structure determinants of REITs. Is it a peculiar industry? J. Eur. Real Estate Res., 1: 6-57.

Mustapha, M., H. Ismail and B. Minai, 2011. Determinants of debt structure: Empirical evidence from Malaysia. Proceedings of the 2nd International Conference on Business and Economic Research, Volume 2, March 14-16, 2011, Langkawi, Malaysia, pp: 2523-2540.

Myers, S.C., 1976. Determinants of corporate borrowing. Ph.D. Thesis, Sloan School of Management Massachusetts Institute of Technology.

Myers, S. and N. Majluf, 1984. Corporate financing and investment decisions when firms have information that investors do not have. J. Financial Econ., 13: 187-221.

Myers, S.C., 1984. The capital structure puzzle. J. Finance, 39: 574-592.

Petersen, M.A. and R.G. Rajan, 1994. The benefits of lending relationships: Evidence from small business data. J. Finance, 49: 3-37.

Pinkova, P., 2012. Determinants of capital structure: Evidence from the Czech automotive industry. Acta Universitatis Agriculturae Mendelianae Brunensis Silvicultur, 60: 217-224.

Podesta, F., 2000. Recent developments in quantitative comparative methodology: The case of pooled time series cross-section analysis. DSS Papers Soc., 3: 5-44.

Rajan, R.G. and L. Zingales, 1995. What do we know about capital structure? Some evidence from international data. J. Finance, 50: 1421-1460.

Sabir, M. and Q.A. Malik, 2012. Determinants of capital structure: A study of oil and gas sector of Pakistan. Interdiscipl. J. Contemp. Res. Bus., 3: 396-400.

Sakai, K., I. Uesugi and T. Watanabe, 2010. Firm age and the evolution of borrowing costs: Evidence from Japanese small firms. J. Bank. Finance, 34: 1970-1981.

Sekaran, U. and R. Bougie, 2010. Research Methods for Business: A Skill Building Approach. 5th Edn., John Wiley and Sons, New York, USA., ISBN-13: 9780470744796, Pages: 488.

Serrasqueiro, Z., 2011. Are capital structure decisions of service SMEs different? Empirical evidence from Portugal. Manage. Res. Rev., 34: 34-57.

Shah, A. and S. Khan, 2007. Determinants of capital structure: Evidence from Pakistani panel data. Int. Rev. Bus. Res. Purpose Papers, 3: 265-282.

Sheikh, N.A. and Z. Wang, 2011. Determinants of capital structure: An empirical study of firms in manufacturing industry of Pakistan. Manage. Finance, 37: 117-133.

Shivdasani, A. and M. Zenner, 2005. How to choose a capital structure: Navigating the debt-equity decision. J. Applied Corporate Finance, 17: 26-35.

Titman, S. and, R. Wessels, 1988. The determinants of capital structure choice. J. Finance, 43: 1-19.

Um, T., 2001. Determination of capital structure and prediction of bankruptcy in Korea. Ph.D. Thesis, Cornell University, Ithaca, New York.

Welch, I., 2011. Two common problems in capital structure research: The financial-debt-to-asset ratio and issuing activity versus leverage changes. Int. Rev. Finance, 11: 1-17.

Wiwattanakantang, Y., 1999. An empirical study on the determinants of the capital structure of Thai firms. Pac. Basin Finance J., 7: 371-403.

Zare, R, F. Farzanfar and M. Boroumand, 2013. Examining the firm age, size and asset structure effects on financial leverage in the firms listed in Tehran stock exchange. Int. J. Econ. Manage. Soc. Sci., 2: 256-264.