

The Effect of Accounting Variables And Firm-Specific Factors on Capital Structure: The Accepted Companies in Tehran Stock Exchange

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Abstract: The purpose of this study is to investigate the effect of accounting variables and firm-specific factors on capital structure accepted companies in Tehran Stock Exchange (TSE) during the years of 2009-2013. For this purpose, the systematic elimination method was used and 142 companies have been selected as sample. This type of research is descriptive-correlation and in this study, panel data is used. For testing hypotheses, we have used multivariate regression model and for selecting the most appropriate model among panel data, we have used Chow and Hausman test. The results show that there is a significant positive relationship between the size, dividend payout ratio and earnings volatility and capital structure of accepted companies in TSE and there is a significant negative relationship between profitability, age, growth opportunities, tangible assets and liquidity and capital structure the accepted companies in TSE. But, there is no significant relationship between the non-debt tax shield and capital structure of the accepted companies in TSE.

Key words: Accounting variables, TSE (Tehran Stock Exchange), firm-specific factors, capital structure, leverage

INTRODUCTION

Today, companies operate in an environment that is competitive business environment. Companies need to survive in such environments; corporate executives have been forced to use the updated technology and expert human force etc. Necessary to achieve the influential factors in the competitive arena is having a strong financial backing. Only then the companies can best meet the interests of their share holders and maximize their wealth. Therefore, it is important for companies to determine the optimal capital structure and financing. Different definitions have been provided for the capital structure that each of these definitions refers to an aspect of the method of financing to capital structure.

Cooper believes that capital structure is the ratio of older long-term securities to the total investments and Brealey and Myers defined capital structure as a mix of securities issued by a firm, ranging from pure debt to pure equity and any hybrid securities such as convertible debt. The primary objective of capital structure decisions is to maximize the market value of the firm through an appropriate mix of long-term sources of funds. This mix, called the optimal capital structure.

Therefore, it is more important for companies determine the optimal capital structure and financing because it directly affects the value of shares in the

securities market. Choose the combination between debt and equity in companies depends on many factors that can be classified into two categories: internal and external factors.

Internal factors related to the company's operations, resulting from the activities and characteristics of the company, i.e., type of industry, business risk, the changes in demand, variation range of products price, change the inputs, technology and production process, operating leverage, etc. External factors affecting the company's capital structure include: taxes, interest rates, the level of business activity, the availability of funds in the market, the behavior of lenders and rating agencies, financial and regulatory common pattern and so on (Harris and Raviv, 1991).

Therefore, the capital structure decision of a firm is not only the product of its own characteristics but also the result of environment and tradition in which it operates (Antonioni *et al.*, 2006). To this end, managers should be aware well from the impact of variables that could affect the company's capital structure; up with the right attitude, conscious actions arising from scientific theories in order to achieve an optimal capital structure to do.

In this study, the theoretical foundations of the capital structure and then is provided empirically test the impact of accounting variables (dividend payout ratio, profitability, liquidity, tangible assets, tax shield non-debt

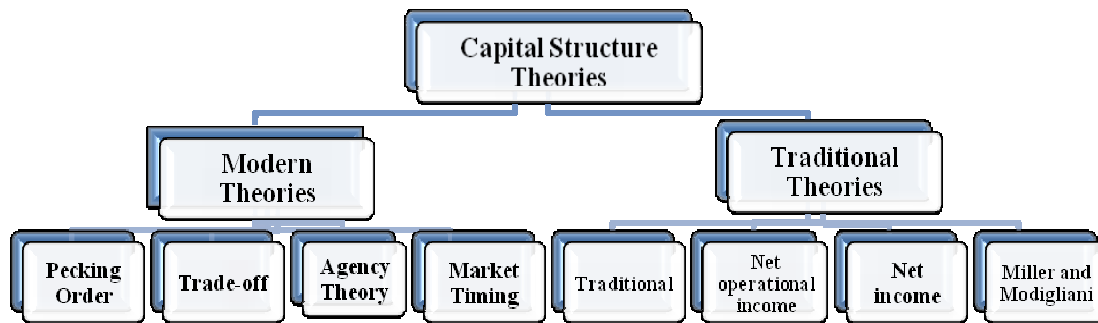


Fig. 1: Theories of capital structure

2, growth opportunities) and firm-specific factors (size, age, volatility profit) on capital structure of accepted companies in TSE. Knowing these factors could help predict the financial structure of a firm.

Theoretical framework and empirical evidences: Several theories have been developed to determine the optimal capital structure over the years. Despite numerous studies conducted on the theory of capital structure but did not provide a single model that managers can use determining the optimal capital structure. It may also arise from the fact that theories of capital structure in a matter of emphasis differ. However, these theories provide guidance on understanding the behavior of finance companies and identify potential factors in influencing capital structure (O'Boyle *et al.*, 2012). The traditional approach to common belief was that the capital structure of a company according to its characteristics is of normal capacity for debt. The purpose of the capacity level of debt that reduces the company's financial expenses. At that time it was thought that changes in the cost of capital of the company to the brink of the capacity is very low. Because it was not practical determining the company's debt capacity and financing decisions on experience and gut feeling was on the company's financial managers.

The formation of the internal sense, based on a set of golden rules took place in financial decisions (e.g., matching the maturity date of the debt and the useful life of the asset) and factors such as the value of corporate assets (mainly real estate) the ability to repay debt in the future, debt management method was used in the past, etc. Therefore, in accordance with the traditional approach an optimal capital structure exists where the weighted average cost of capital is minimized and market value is maximized. Modern theory of capital structure began with the celebrated study by Modigliani and Miller (1963). Modigliani-Miller (MM) proved, under a very restrictive set of assumptions that a firm's value is unaffected by its capital structure. Put another way,

MM results suggest that it does not matter how a firm finances its operations, hence capital structure is irrelevant (Brigham, 2002). In other words, the MM theorem states that, in the absence of taxes, bankruptcy costs and asymmetric information and in an efficient market, a company's value is unaffected by how it is financed, regardless of whether the company's capital consists of equities or debt or a combination. The theorem is also known as the capital structure irrelevance principle.

Although, they later because of criticism on it had revised his theory but their method to prove their theory was very innovative and a new approach forward of financial research. The two experts proved that despite restrictive set of assumptions and discard taxes and the cost of the contract, the policy is ineffective of company's financing the its current market value. Titman and Wessels (1988), assuming lack of tax expenses put aside and the importance of non-debt tax shield benefits introduced. MM argued that since the calculation of corporate income tax, interest payments would be deducted however, in the context of debt capital increases, lower corporate tax debt and thus, increases the company's market value (Fig. 1).

The trade-off theory: Affirms that firms have optimal capital structures which they determine by trading off the costs against the benefits of the use of debt and equity (Luigi and Sorin, 2009). The benefits of debt issuance could be interest tax savings and reduce conflicts of interest between share holders and managers and debt issuance costs could include the costs of bankruptcy potential and conflicts of interest between shareholders and creditors (Fama and French, 2005; Jensen and Meckling, 1976; Myers and Majluf, 1984). The static trade-off hypothesis claims that the optimal level of a firm's leverage is achieved by weighing the benefits of debt financing against the cost of potential financial distress. The pecking order theory assumes that there is no target capital structure. According to the pecking order

theory, firms may be financially constrained due to the information asymmetry between managers/owners and investors and so firms adopt a hierarchy in selecting sources of finance.

In the first place, firms use retained profits if it is necessary to turn external finance, firms use debt with little or no risk which usually corresponds to short-term debt and in the last stage, firms will select external equity (Serrasqueiro and Caetano, 2014). The pecking order theory of capital structure is among the most influential theories of corporate leverage (Frank and Goyal, 2003). Due to adverse selection, firms prefer internal to external finance. When outside funds are necessary, firms prefer debt to equity because of lower information costs associated with debt issues. Equity is rarely issued (Myers, 1977). This theory was first suggested by Donaldson (1961) and later on modified by Myers and Majluf (1984). Jensen and Meckling (1976) agency theory presented. According to agency theory of the company's capital structure, through the agency costs will be determined of conflict of interest between the company's various stakeholders. Jensen and Meckling identify two types of conflicts. Firstly, conflicts between shareholders and managers. Secondly, conflicts between debt holders and equity holders.

The conflicts between managers and shareholders leads to agency costs of equity and the conflicts between shareholders and debt holders leads to agency costs of debt. They argued that the existence of agency costs provides strong reasons for arguing that the probable distribution of future cash flows is not independent of capital and ownership structure. They also believe that by creating balance between the benefits of debt and debt agency costs can be optimal leverage achieved. The market timing pattern, Lucas and McDonald (1990) timing pattern have provided the issuance of stock based on information asymmetry between management and investors. According to market timing theory, managers believe that can be based on market conditions, the timing of the share issue.

It means that the, firms will be more likely to issue equity when the market values of their shares are high and to repurchase equity when the share prices are low. Accordingly, there should be an inverse relationship between capital structure and market value and that the adjustment of the capital structure to its target level is a long and slow process. In general, the results of this theory suggest that capital structure is affective on firm value and there is optimal capital structure that upon which is the maximum firm's value. But the capital structure puzzle namely how to achieve an optimal capital

structure. The following variables shall be considered in this study as accounting variables and firm-specific factors determinants of the capital structure. We discuss the relevant literature for each of these variables.

Profitability: Profitability plays an important role in capital structure decisions. In the framework of trade-off theory by reducing company's profitability the expected costs of bankruptcy increases. Increasing costs of bankruptcy, the companies that have lower profitability will lead to less financial leverage. In front pecking order theory explains that companies that have less profitability, sufficient internal funds do not have for their investment programs and hence as a first priority use of debt financing. However, the relationship between profitability and firm's leverage are unclear. For example, Titman and Wessels (1988), Harris and Raviv (1991), Rajan and Zingales (1995), Booth *et al.* (2001) and Umer (2014) all have found a negative relationship between book leverage and profitability. Which is consistent with the pecking order theory. Whiles (Jensen and Meckling, 1992) all have found a positive relationship between book leverage and profitability.

Liquidity: According to the pecking order theory, firm with high liquidity retained earnings would prefer to foreign borrowing. Therefore can be expected that there is a negative relationship between leverage and liquidity (Lovisuth, 2008). For example, Titman and Wessels (1988), Rajan and Zingales (1995), Bevan and Danbolt (2002) and Ozkan (2001) supports this view. According to the trade off theory, leverage increases the likelihood of bankruptcy and expected for companies that have high leverage to reduce financial risk, they hold more cash. Thus, positive relationship expected between leverage and firm liquidity. For instance finding by Williamson (1988), Shleifer and Vishny (1992), John (1993) Maksimovic and Phillips (2001) and Harford *et al.* (2008) all have found a positive relationship between book leverage and liquidity. However, the relationship between the leverage and liquidity can not be explained to carefully.

Dividend payout ratio: Dividend is part of net profit that is paid to shareholders. The signaling theory explains that a firm paying more dividends sends a message about its strong financial performance which increases the credit standings of the firm. Moreover, dividends paying companies decrease the information gap between managers and investors. Such firms can raise more debt hence dividend payment is determinant of

leverage. Therefore on the basis of this argument it can be said that dividend payout positively related leverage. This argument is parallel to the arguments by Bhaduri (2002).

On the other hand, the general assumption in analyzing dividend policy is that firms have to satisfy the financial needs of existing and future investment through external financing which is going to be costly for the corporation. The firms that go through new long term debt will have to cut the dividend payouts. This that means there is negative relation between leverage and dividend payments. Because firms with more debt prefer to retain more in order to repay loan instead of paying more dividends. Highly levered firms have more risk of financial distress and this risk may lead to less dividend payments. This relationship is supported by Keshar (2004), Al-Najjar and Hussainey (2011). However, there are various theories and ideas on this topic.

Growth opportunity: Growth opportunities play a prominent role in the theory of corporate finance. Companies that have more growth opportunities, more capital will be needed. In such cases, according to the pecking order theory more preference for external financing, especially debt will be there. This that means a growing firm will have a high level of leverage. Based on this theory a positive relationship is expected between growth opportunities and leverage. For example, the results of experimental studies (Harris and Raviv, 1991) is consistent with this view. According to the trade-off theory, firms are more future growth opportunities, compared to companies with low growth (holding more tangible assets) tend to borrow less. Because, growth opportunities as an intangible asset cannot be used as collateral (Chen, 2004). Therefore, a negative relationship is expected between growth opportunities and debt. Jensen and Meckling (1976), Rajan and Zingales (1995), Frank and Goyal (2003), find that debt ratios vary inversely with growth opportunities.

Non-debt tax shield: The effect of taxes on the financing choice of the firm has been extensively researched in the company finance literature. Both the pecking order and trade-off theories imply that non-debt tax shields and leverage ratio are negatively related (Karadeniz *et al.*, 2009). De Angelo and Masulis a model for the optimal structure of capital raised in which model the optimal debt ratio, into the tax savings except debt like research and development expenditures and depreciation depends. They predicted that, there is a negative relationship between non-debt tax shields and debt ratio. The results of empirical studies by Titman and Wessels (1988) and

Ozkan (2001) confirmed this suggestion. On the other hand, Bradley *et al.* (1984) argue that firms that invest heavily in tangible assets, generate relatively high levels of depreciation and tax credits, tend to have higher financial leverage. They find a significant positive correlation between leverage ratio and non-debt tax shields.

Tangible assets: Much research have proved that there is a positive relationship between leverage and tangibility. Huang and Song state if a firm's tangible assets are high, then these assets can be used as collateral, diminishing the lender's risk of suffering such agency costs of debt. Hence, a high fraction of tangible assets is expected to be associated with high leverage.

According to the trade-off theory offixed assets are tool to financing debt. Therefore when increased the collateral value the tangible assets, the possibility of corporate financing increases through the debt. Because companies that their assets are value of more collateral, more ability have to issue guarantee debts (Chang *et al.*, 2009). The trade-off theory suggests a positive relationship between the tangible assets and debt ratio. Williamson (1988), Harris and Raviv (1991), Shah and Khan (2007) suggest that is positively correlated between leverage and tangibility assets. Whiles, in the pecking order theory, firms that own more fixed assets have less asymmetrical information. Therefore, they tend to have on equity financing. When we consider maturity, the pecking order theory suggests tangible assets is positively related to long-term debt financing and negatively to the short-term debt financing (Karadeniz *et al.*, 2009). Huang and Song found that companies with more tangible assets tend to use less debt ratio.

Firm size: From theoretical viewpoint, the relationship between firm size and debt ratio is unclear. Size is also an indicator of borrowing capacity for firms. Larger firms have higher borrowing capacity and lower cost of borrowing with better access to capital markets. As a general rule, governments are more prone to protect larger firms and banks lend more capital to these firms than smaller firms. According to the trade-off model, larger firms are expected to have a higher debt capacity and are able to be more highly geared (Chen, 2004). In this theory there should be a positive relationship between firm size and debt ratio, because larger firms are better diversified and have a lower probability of exposed to the risk of bankruptcy (Karadeniz *et al.*, 2009; Chen, 2004). Bhaduri (2002), states that large firms use more long term debt while small firms use more short term debt because of high

transaction costs related to long term debt. Haugen and Senbet explains that large firms are less probability to experience financial distress and have more capacity to repay loans as compared to smaller ones.

The results of studies (Booth *et al.*, 2001; Chen and Strange, 2005; Al-Najjar and Hussainey, 2011; Patra, 2012); generally support for the trade-off theory. Furthermore, according to the Pecking order hypothesis, informational asymmetries between insiders within a firm and capital markets are expected to be lower for large firms so large firms should be more capable of issuing informationally sensitive securities like equity (Hall *et al.*, 2004). Therefore, there should be an inverse relationship between firm size and leverage because large firms, well known companies are as the result of lower with information asymmetry problem faced, unlike small firms can easily in take to issued equity. The findings by Rajan and Zingales (1995), Frank and Goyal (2003) are consistent with the above theoretical prediction.

Firm age: Firm age is a important determinant of firm's capital structure. There is theoretical ambiguity concerning the exact relationship between a firm's age and its debt financing pattern. For example, Petersen and Rajan argued that long term debt decreases with age because the older firms tend to use the accumulated retained earnings. Therefore, there should be a negative relationship between age and long term debt. Similarly, Dollinger, Esperanca and Faris, all support this argument. On the other hand, older companies have a longer track record and stronger reputation and should have better relationships with lenders, lowering the cost of debt. By their lasting reputation, older firms, unlike newer ones, may be faced with fewer adverse selection and moral hazard problems and relatively lower degrees of uncertainty which endear them to investors and lenders. Given the resource-based hypothesis as firms get older, theoretically, it is likely that their access to financial resources will improve. Berger and Udell states that as the firm matures it could have increased fixed assets in the form of land and building on which it may secure mortgage finance an long-term debt and also may accumulated assets uses as debt collateral in the form of inventory, account receivable and equipment. In addition, according to Ezeoha and Botha the gains of long corporate existence that arise from strong reputation, possible establishment of lender borrower relationship and lower transaction costs. Moreover, Ramalho and Silva, the older is the firm (and the greater is its reputation), the lower is the cost of debt as long as

creditors believe that the firm will not undertake projects that imply the substitution of assets. Therefore when the age increase the amount of external finance will increase. Thereupon, there is expected be a positive relationship between age and leverage.

Earning volatility: Earning volatility is described as the inherent business risk in the operation of a firm or a result of inefficient management practices (Umer, 2014). Firms that have higher earnings volatility and greater likelihood of bankruptcy. Consequently, these firms to avoid the costs of financial ravages reduce their level of debt. Because, any increase in the level of debt causes an increase in bankruptcy. Therefore, according to trade-off theory a negative relation is expected between firms' level of risk and debt. Firms that have high operating risk can lower the volatility of the net profit by reducing the level of debt.

Therefore, from a picking order theory perspective a negative relation between earning volatility and leverage is expected. Empirical studies show conflicting results for example, Titman and Wessels (1988), Bhaduri (2002), Frank and Goyal (2003), Sogorb-Mira (2005), Shah and Khan (2007) all found a negative relationship between earning volatility and leverage. However, a positive relationship between those two variables was found by Kim and Sorensen (1986), Jordan *et al.* (1998), Michaelas *et al.* (1999), Serrasqueiro and Caetano (2014).

Research hypothesis: According to theoretical principles presented and reviewed research hypothesis is formulated as follows:

- H₁: there is a significant relationship between profitability and leverage accepted companies in Tehran Stock Exchange
- H₂: there is a significant relationship between size and leverage of accepted companies in Tehran Stock Exchange
- H₃: there is a significant relationship between age and leverage the accepted companies in Tehran Stock Exchange
- H₄: there is a significant relationship between growth and leverage accepted companies in Tehran Stock Exchange
- H₅: there is a significant relationship between tangible assets and leverage accepted companies in Tehran Stock Exchange
- H₆: there is a significant relationship between non debt tax shield and leverage the accepted companies in Tehran Stock Exchange

- H_7 : there is a significant relationship between liquidity and leverage accepted companies in Tehran Stock Exchange
- H_8 : there is a significant relationship between dividend payout ratio of accepted companies in Tehran Stock Exchange
- H_9 : there is a significant relationship between earning volatility and leverage of accepted companies in Tehran Stock Exchange

MATERIALS AND METHODS

Sample and data collection: Data were collected mainly from secondary sources. The main sources of secondary data collected specifically from TSE database and the audited financial reports of the firms. Data for an extended period is considered necessary to draw clear statistical estimations of the relationships between variables.

The sample of this study consists of accepted Companies in Tehran Stock Exchange (TSE) for the period between 2009 and 2013, a total of 5 consecutive years. The companies included in this study should be characterized by certain conditions such as:

- Company to be listed on the exchange before 2009
- Financial period they are in accordance with the solar year (19th March)
- Excluding financial companies (investment, banking, insurance and leasing)
- During the period under review does not change the fiscal year
- There is information required in the period under review

Based on the previous conditions, the study reached to a sample of (142) companies and the total observations included in the analysis was (710) panel data. In the panel data analysis to select the appropriate model, the Chow test to determine for fixed and non-fixed effects model, Hausman test for fixed or random effects panel data model been used. To examine significant statistical regression model, F-statistic, student's t-test for significant coefficients of the regression model to examine the auto correlation between observations of Durbin-Watson statistic and to evaluate the explanatory power of them $odelad$ justed R^2 is used.

Research variables: Leverage is used as a dependent variable while profitability, size, age, tangible assets, growth opportunity, non-debt tax shield, liquidity,

Table 1: Variables and their measurement

| Variables | Symbol | Definition |
|------------------------------|--------|--|
| Independent variables | | |
| Profitability | PROF | Operating income (EBIT) divided total assets |
| Size | SIZE | Ln (total assets) |
| Age | AGE | The number of years a firm stays in the business |
| Tangible assets | TANG | Fixed assets divided total assets |
| Growth opportunity | GROW | Market to book value ratio |
| Non-debt tax shield | NDTS | Depreciation divided total assets |
| Liquidity | LIQ | Current ratio (current asset to current liabilities) |
| Dividend payout ratio | DIV | Cash dividend divided net income |
| Earning volatility | EV | Square root of the standard deviation of EBIT |
| Dependent variables | | |
| Leverage | LEV | Long term debt divided total assets |

dividend payout ratio and earning volatility are used as independent variables. How to measure the variables are summarized in Table 1.

Regression model: In order to test the study hypotheses, multiple linear regression analysis is employed:

$$LEV_{i,t} = a + \beta_1 PROF_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 AGE_{i,t} + \beta_4 TANG_{i,t} + \beta_5 GROW_{i,t} + \beta_6 NDTS_{i,t} + \beta_7 LIQU_{i,t} + \beta_8 DPR_{i,t} + \beta_9 EV_{i,t} + U_{i,t}$$

RESULTS AND DISCUSSION

Descriptive statistics: This study presents the empirical results pertaining to the effect of accounting variables and corporate characteristics on capital structure. The descriptive statistics of the sample firms includes the number of observations; mean distribution, standard deviation, minimum and maximum values of study variables as presented in Table 2.

Based on Table 2, the average leverage proportion in financing the total asset of accepted companies in TSE is 38.54%. Which means 61.46% of the total asset invested is left as a buffer being from short-term debt and equity claim. The standard deviation 31.08% indicates a wide variation in leverage ratio among sample companies. The minimum and the maximum value of leverage ratio are 3.06 and 45.2%, respectively.

Model specification: The results of choose appropriate model is provided in Table 3. Results of Table 3 Chow test F statistics and the corresponding probability value (0.91) that is greater than the 0.05 model is without fixed effects, since the test does not suggest the use of combined data with fixed effects. Therefore, there is no need to examine the Hausman test.

Table 2: Descriptive statistics

| Variables | Observation | Mean | Max. | Min. | SD |
|-----------|-------------|-----------|-----------|-----------|----------|
| LEV | 710 | 0.385473 | 0.452025 | 0.030683 | 0.31078 |
| PROF | 710 | 0.137588 | 0.321147 | 0.022483 | 1.89539 |
| SIZE | 710 | 12.767200 | 17.398310 | 10.095500 | 3.44080 |
| AGE | 710 | 38.000000 | 65.000000 | 12.000000 | 18.49679 |
| GROW | 710 | 1.704153 | 2.851170 | -0.374513 | 0.76012 |
| TANG | 710 | 0.560518 | 0.863876 | 0.340582 | 0.09778 |
| NDTS | 710 | 0.135873 | 0.154758 | -0.103015 | 0.25873 |
| LIQ | 710 | 3.387059 | 5.051180 | 0.340582 | 10.83624 |
| DIV | 710 | 0.575791 | 2.250000 | 0.000000 | 0.23481 |
| EV | 710 | 0.000280 | 0.006400 | 0.000100 | 0.00015 |

Table 3: The result of the model test

| Effects test | Statistic | df | Prob. |
|--------------|-----------|-----------|--------|
| F | 0.4818 | (141,559) | 0.9114 |

Table 4: The result of multiple regression analysis

| Independent variables | Coefficients | SE | t-statistic | Prob. |
|-----------------------|--------------|-----------|-------------|---------|
| Cons. | -20.441150 | 13.204090 | -1.548092 | 0.1216* |
| PROF | -4.416055 | 0.716639 | - 6.162174 | 0.0000 |
| SIZE | 7.213333 | 0.954453 | 7.557557 | 0.0000 |
| AGE | -7.442908 | 0.919743 | - 8.092378 | 0.0000 |
| GROW | -3.323087 | 1.753706 | - 1.895340 | 0.0359 |
| TANG | -1.336720 | 0.172187 | - 7.763186 | 0.0000 |
| NDTS | -0.023378 | 0.039990 | - 0.584450 | 0.5589* |
| LIQ | -1.245300 | 0.172823 | -7.205674 | 0.0000 |
| DIV | 50.606490 | 5.850088 | 8.650553 | 0.0000 |
| EV | 1.77e-05 | 3.48e-06 | 5.093857 | 0.0000 |

Researcher's calculation is not significance at 5% level; dependent variables: leverage; adjusted $R^2 = 0.219567$; $F = 6.307797$ (0.0000); $DW = 2.16388$

Table 5: Diagnostic checking

| Auto correlation | Heteroscedasticity |
|------------------|--------------------|
| 0.75435 (0.4712) | 0.89739 (0.6581) |

Researcher used the statistical program E views to perform the statistical analysis. The results of the without fixed effects model presented in Table 4.

According to Table 4, the possibility of significant F statistic is equal to 0.0000, this value is <0.05 . Therefore, the estimated regression model is significant at 95% confidence level. Adjusted R^2 is equal to 0.21956. This means that 22% of the variability the dependent variable leverage by the independent variable is expressed. The Durbin-Watson statistic is equal to 2.16. Values between 1.5 -2.5 show slack of residual autocorrelation.

By examining Table 5, the linear correlation is equal to 0.471 and the amount of variance heteroscedasticity is equal to 0.658. Therefore, the linear correlation and variance heteroscedasticity hypothesis is rejected. Thus, the above equation is accurate and results from it the certainty is high. Through the empirical study of the 142 the accepted companies in TSE, we find the following results.

The first hypothesis: As shown in Table 4, t-statistics between the independent variable profitability and the dependent variable leverage the accepted companies in

TSE-6.16 and its significance level is 0.0000, the null hypothesis that there is no significant relationship between profitability and leverage the accepted companies in TSE is rejected. Therefore, there is a significant relationship between profitability and leverage the accepted companies in TSE.

Since is negative the coefficient of this variable. This relationship is negative. In other words, there is significant negative relationship between profitability and leverage the accepted companies in TSE. According to the pecking-order theory; firms prefer using surplus generated by profits to finance investments. Retained earnings is the quickest and easiest source of finance for most companies compared with new equity issuance due to the transaction costs associated with share issuance and the restrictions on firms' operating performance for applying for new equity issuance. Furthermore, since the majority of new equity is issued through share allotments, new issues usually lead to a decline in the firm's stock price.

Therefore, retained profit is the preferred primary method of raising additional capital (Chen, 2004). Meanwhile, most of the management of the accepted companies in TSE prefers equity financing rather than debt financing because the former is not binding as a company with higher profit are easily to obtain equity financing than those else wise. This finding is in line with the results observed by Titman and Wessels (1988), Booth *et al.* (2001), Chen (2004) and Umer (2014).

The second hypothesis: According to Table 4, t-statistics between the independent variable company size and the dependent variable leverage of accepted companies in Tehran Stock Exchange 5.56 and its significance level is 0.0000, the null hypothesis that there is no significant relationship between size and leverage the accepted companies in Tehran Stock Exchange is rejected. Therefore, there is a significant relationship between size and leverage of accepted companies in Tehran Stock Exchange. Since is positive the coefficient of this variable. In other words, there is significant positive relationship between size and leverage of accepted companies in Tehran Stock Exchange.

The larger company's scale is the more stable its profitability will be as the larger company has lower risk of bankrupt and it has a higher debt capability. This finding suggests that large firms have the ability to use more debt on their capital structure than equity related securities; perhaps they can have a greater bargaining power towards creditors. The finding by Booth *et al.* (2001), Shah and Khan (2007) shows a significant positive correlation between company size and leverage.

The third hypothesis: In accordance to Table 4, t-statistics between the independent variable and the dependent variable leverage the accepted companies in TSE-8.09 and its significance level is 0.0000, the null hypothesis that there is no significant relationship between age and leverage the accepted companies in TSE is rejected. Therefore, there is a significant relationship between age and leverage the accepted companies in TSE. Since is negative the beta coefficient of this variable. In other words, there is significant negative relationship between Age and leverage the accepted companies in TSE. According to the trade-off theory, there is a positive relationship and under the picking order theory, there is a negative relationship between age variable with leverage. This outcome confirms with picking order theory and the findings of Esperance.

The fourth hypothesis: Based on Table 4, t-statistics between the independent variable growth opportunity and the dependent variable leverage the accepted companies in TSE-1.90 and its significance level is 0.036, the null hypothesis that there is no significant relationship between growth opportunity and leverage the accepted companies in TSE is rejected. Therefore, there is a significant relationship between growth opportunity and leverage of accepted companies in TSE. Since is negative the coefficient of this variable. In other words, there is significant negative relationship between growth opportunity and leverage of accepted companies in TSE. According to the trade-off theory, there is a negative relationship and under the picking order theory, there is a positive relationship between growth opportunity variable with leverage. This outcome confirms with trade-off theory and the findings by Jensen and Meckling (1976), Myers and Majluf (1984), Rajan and Zingales (1995) and Umer (2014).

The fifth hypothesis: As shown in Table 4, t-statistics between the independent variable tangible assets and the dependent variable leverage the accepted companies in TSE is -7.76 and its significance level is 0.036, the null hypothesis that there is no significant relationship between tangible assets and leverage the accepted companies in TSE is rejected. Therefore, there is a significant relationship between tangible assets and leverage of accepted companies in TSE. In other words, there is significant negative relationship between tangible assets and leverage the accepted companies in TSE. Based on the trade-off theory, there is a positive relationship and under the picking order theory, there is a negative relationship between tangible assets variable with leverage. This outcome confirms with picking

order theory and the findings by Myers and Majluf (1984), Rajan and Zingales (1995), Shah and Khan (2007).

The sixth hypothesis: According to Table 4, t-statistics between the independent variable non-debts tax shields and the dependent variable leverage the accepted companies in TSE-0.58 and its significance level is 0.56; the null hypothesis that there is no significant relationship between non-debts tax shields and leverage the accepted companies in TSE is accepted is confirmed. Despite both picking order and trade-off theories suggests that there is a negative relationship between non-debts tax shields and leverage therefore, it can be stated that among the accepted companies in TSE with none of the picking order and trade-off theories do not conform.

The seventh hypothesis: In accordance to Table 4, t-statistics between liquidity variable and leverage the accepted companies in TSE-7.20 and its significance level is 0.0000, the null hypothesis that there is no significant relationship between liquidity and leverage the accepted companies in TSE is rejected. Therefore, there is a significant relationship between liquidity and leverage of accepted companies in TSE. There is significant negative relationship between liquidity and leverage of accepted companies in TSE. This implies that the more the companies are able to meet short term obligation the more they use long term debt securities in their capital structure. If a company has more current assets, the fund can be used to invest instead of external short-term indebted fund.

The eighth hypothesis: Based on Table 4, t-statistics between dividend payout ratio and leverage the accepted companies in TSE 8.65 and its significance level is 0.0000, the null hypothesis that there is no significant relationship between liquidity and leverage the accepted companies in TSE is rejected. Therefore, there is a significant relationship between liquidity and leverage the accepted companies in TSE. Since is positive the beta coefficient of this variable, can be said, there is significant positive relationship between liquidity and leverage the accepted companies in TSE. This shows that accepted companies in TSE instead of retained earnings to meet their financial needs, distribute high dividends as a result, they borrow to meet their financial needs. The same result was obtained by Salawu and Agboola (2008) from the large non-financial firms in Nigeria.

The ninth hypothesis: In accordance to Table 4, t-statistics between earnings volatility and leverage the

accepted companies in TSE 5.10 and its significance level is 0.0000, the null hypothesis that there is no significant relationship between earnings volatility and leverage the accepted companies in TSE is rejected. Therefore, there is a significant relationship between earnings volatility and leverage the accepted companies in TSE. Since is positive the beta coefficient of this variable can be said, there is significant positive relationship between liquidity and leverage the accepted companies in TSE. This implies that among the accepted companies in TSE when is high the earnings volatility, companies maintain more leverage in their capital structure. This entails that accepted companies TSE with high degree of volatility in their operating income maintain low level of leverage in their capital structure. In such situations, companies to avoid financial ravages and bankruptcy costs should maintain low leverage in their capital structure. The same result was obtained by Kim and Sorensen (1986) and Jordan *et al.* (1998).

CONCLUSION

Generally favorable situation in the company related into two groups of issues. One of the company's own internal issues that affect and control the company's management and other issues that are outside of the normal company's management has no influence on them. This study examines only the effect of accounting variables and firm-specific factors on capital structure the accepted companies in TSE. Some other important Macroeconomic variables such as inflation, exchange rate, real GDP growth rate, interest rate and Gross National Product (GNP) could have a role in determining the capital structure choice should be included in the equation. Further, research is required to develop new hypotheses for the capital structure choice decisions accepted companies in TSE and to design new variables to reflect the Macroeconomic variables influence.

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