Impact of Capital Structure on Banking Performance
(A Case Study of Pakistan)

Muhammad Muzaffar Saeed¹
MS/MBA (Banking & Finance)
GC University Faisalabad, Pakistan

Ammar Ali Gull²
MS/MBA (Banking & Finance)
GC University Faisalabad, Pakistan

Muhammad Yasran Rasheed³
MS/MBA (Banking & Finance)
GC University Faisalabad, Pakistan

Corresponding Author
Muhammad Muzaffar Saeed
MBA/ MS (Banking & Finance)
GC University Faisalabad, Pakistan

Abstract
This paper examines the impact of capital structure on performance of Pakistani banks. The study extends empirical work on capital structure determinants of banks within country over the period of five years from 2007 to 2011 by utilizing data of banks listed at Karachi stock exchange. Multiple regression models are applied to estimate the relationship between capital structure and banking performance. Performance is measured by return on assets, return on equity and earnings per share. Determinants of capital structure includes long term debt to capital ratio, short term debt to capital ratio and total debt to capital ratio. Findings of the study validated a positive relationship between determinants of capital structure and performance of banking industry.

Keywords: Capital, Long term Debt, short term Debt, Return on Assets, Return on Equity and Earnings per share.

1. Introduction
Capital structure consists of debt and equity used to finance the firm. Capital structure is one of the major topics among scholars in finance. The ability of the organization to carry out their stakeholders need is closely related to the capital structure. Capital structure in finance term means the way a firm finances his assets across the blend of debt, equity or hybrid securities (Saad, 2010). Capital structure of the organization is very hard to determine. Financial managers are facing difficulties in precisely determining the optimal capital structure. Optimal capital structure means with a minimum weighted average cost of capital and thus maximize the value of organization. A business utilizes various kinds of financing to operate a company efficiently. Funds Framework (CS) is really associated with various kinds of funding utilized by a company to get assets essential for its procedures as well as development. Funds framework mainly includes long-term financial debt, preferred share and interest really worth. It may be quantified if you take just how much of every kind of funding a business retains as a portion of its funding. Funds Framework differs from monetary framework because it includes short-term financial debt, company accounts payable, and other debts. The majority of the businesses boost account through collateral or even financial
debts. Financial debt arises as relationship or even long-term information payable, while collateral is actually categorized because typical share, favored share, or even maintained income. Both funding offers pros and cons more than one another. The actual creators contain the possession privileges as well as manage from the organization when they increase funds through financial debt. The organization needs to spend the main as well as curiosity towards the worried financial debt cases. This particular opportunity is going to be dropped within collateral, since the investors turn out to be a fundamental element of the organization. Financial debt funding is simpler as well as more affordable with regard to little companies. Repayment associated with curiosity upon normal gets load for any organization as well as decreases their own income. There isn't any responsibility within collateral funding to settle the cash. Investors have an opportunity upon plans with regard to much better development possibilities from the organization.

Pakistani financial field observed extreme modifications since independence in 1947. At first it was suffered by political and socioeconomic problems. Insufficient educated human sources and professionals resulted in to low quality associated with services and products. Financial dimension is a tool which point out the financial strengths, weaknesses, opportunities and threats. Modigliani and Miller (1958) recommended that in the world without abrasion, there is no modification between debt and equity financing as glance the value of the firms. Thus ruling decisions adds no value and are of no concern to the managers. Indication would suggest that this does not exist in reality. On the other hand today capital structure is one of the most important financial decisions for any business and firm. This decision is imperative because the organization need to enhance return to different organizations and also have an effect on the value of the organization. Modigliani and Miller (1958) have tentatively proved that capital structure is irrelevant in the perfect market condition, characterized by the capital market with no taxes, no transactional costs and homogeneous anticipations other works that assume several market imperfections on the conflicting suggest that capital structure decisions are relevant meanwhile it can influence shareholders wealth. Modigliani and Miller (1963) by studying corporate taxes suggested that firms should use as much as debt capital as possible in order to use to the full their value by increasing the interest tax shield. In the economic growth of the country commercial banks play a vital role in the process. Pakistani banking industry was on top during 55 years of the banking history especially in late 1970s after the nationalizing of the banking industry and insurance corporations in 1974. The financial sectors of the Pakistan became one of the most important industries in the country. The time from 1974 to 1991 axiom increase public sector involvement in decision making of the financial institutions. Due to that very reason it has a negative impact on investment environment in banking industry.

1.1, Aim of Research

The purpose of conducting the study is to measure the impact of capital structure on banking performance to provide empirical evidence regarding Pakistani banking sector over a period of 2007 to 2011.

2. Literature Review

Ebaid (2009) examined the capital structure and performance of firms, basically the aim was to check the relationship between debt level and financial performance of companies (listed at Egyptian stock exchange during the period of 1997 to 2005). By using the three accounting based measure of performance (ROA) return on assets (ROE) return on equity and gross profit margin. He found that there is negative significant influence of short term debt (STD) and the Total debt (TD) on the financial performance measured by the return on asset (ROA) but no significant relationship fond between long term debt (LTD) and this measure of financial performance. He also proposed that there is not significant influence of the debt (TD, STD and LTD) on financial performance measured by both of gross profit margin and Return on equity. The results also indicated that control variable firm size has no significant effect on the firm’s performance. In this research paper least squares regression model was used to check the performance of the firms.

San and Heng (2011) they examined that the relationship of capital structure and corporate performance of firms before and during 2007 crisis, all 49 construction companies are taken from Malaysia which were listed in Main board of Bursa Malaysia from 2005 to 2008 these forty nine companies are divided in three units like small, medium and large or big size. Always financial crisis are occurred by the poor corporate performance, in the Malaysia construction industries and construction activates are the major source of growth and development in Malaysia, in this research (capital structure) independent variables are used Long term debt to capital (LDC), debt to capital (DC), debt to asset (DA), debt to equity market value (DEMV), debt to common equity (DCE), long term debt to...
common equity (LDCE) and (Corporate performance) dependent variables are return on capital (ROC), return on equity (ROE), return on asset (ROA), earnings per share (EPS), operating margin (OM) and net margin (NM). The pooling regression model is employed to test the influence of capital structure on the company’s performance method of ordinary least square (OLS) is used to estimate the regression line (OLS) is used to minimize the error in estimated and actual points. The result shows that, there is relationship between capital structure and corporate performance, in the interim the results also indicate that there are no relationship between the various variables that are examined in this study. For the big construction companies only return on capital (ROC) and Earnings per share (EPS) for large construction companies have significant relationship with capital structure, mean while Return on capital (ROC) and Debt equity to market value (DEMV) are the most correlated and showing the strongest relationship among all the variables examined. Basically, debt equity to market value (DEMV), long term debt to capital (LDC) and debt to capital (DC) have direct influence on corporate performance of the large companies and other independent variables don’t affect the dependant variables. Debt to capital (DC) has direct impact on corporate performance of small companies and yet other in-dependant variables don’t affect the dependent variables.

Ahmad and Abdullah and Roslan (2012) investigated the impact of capital structure on firm performance by analyzing the relationship between operating performance of Malaysian firms. Modigliani and Miller (1958) have theoretically argued and proved that capital structure is irrelevant in a perfect market condition, characterized by the capital market with no taxes, no transaction costs and homogenous expectations; other works that assume several market imperfections on the contrary suggested that capital structure decisions are relevant since it can affect shareholders wealth. Modigliani and Miller (1963) in existence of corporate taxes suggested that firms should use as much debt capital as possible in order to maximize their value by maximizing the interest tax shield. The dependent variables used in this research are ROA( Return on asset), ROE (return on equity) and control variable are firm size (SIZE), sales growth (SG), growth (AG), firm efficiency and independent variables are long-term debt (LTD), short-term debt (STD) and total debt (TD). All the companies are public listed organizations in the Malaysia, specifically the Modigliani-Miller theorem; trade-off theory and pecking order theory were reviewed to provide sufficient understanding of how much capital structure could affect firm’s performance. This study covers tow major sectors consumers and industrials sectors 58 firm’s sample starting from 2005 to 2010 with total of 358 observations and two general pooled regression models are used. Findings of the study validated that STD and TD have significant relationship with return on asset (ROA) while Return on equity (ROE) and all capital structure indicators have significant relationship. The significant relationship between short-term debt, long-term debt and total debt with ROE is consistent with the findings of (Abor 2005; Mesquita and Lara 2003). The positive significant relationship between long-term debts with ROA is coherent with the findings of (Philips and Sipahioglu 2004; Grossman and Hart 1986). Which indicates that higher levels of debt in the firm’s capital structure is directly, associated with higher performance levels and other finding is that Return on Equity (ROE) is not significant associated with all the capital structure variables.

Amidu (2007) conducted a study to investigate the dynamics involved in the determination of the capital structure of the Ghana banks. The dependent variables used in this paper are the leverage (LEV) is total debts divided by total capital; short-term debt ratio (SHORT) is total short-term debt to capital while long-term debt ratio (LONG) is the total long-term debt divided by total capital. The explanatory variables include (PRE) profitability, (RSK) risk, and asset structure (AST), tax (TAX), size (SZE) and sales growth (GROW). The regression line model is use in this research and the result was a negative relationship between profitability and leverage. The results of prior studies show that higher profits increase the level of internal financing(Titman and Wessels 1988; and Barton 1989).Profitable banks accumulate internal reserves and this enables them to depend less on external funds. The results of this study show that profitability, corporate tax, growth, asset structure and bank size influence bank’s financing or capital structure decision. The significant finding of this study is that more than 87 percent of the banks, assets are financed by debts and out of this short-term debt appear to constitute more than three quarters of the capital of the banks. This highlights the importance of short-term debts over long-term debts in Ghanaian banks financing.

Pal and Soriya (2012) suggested that intellectual capital (IC) performance of Indian pharmaceutical and textile industry. The data was gathered from the 105 pharmaceutical companies and 102 textile companies. Dependent variables used in this study includes MB (market to book value), ROA (return on Asset), ATO (asset turnover ratio) and ROE (return on equity), independent variables are PC, DER, VAIC and sales. Correlation and regression
analysis were conducted to find the results. The use of MB as the market valuation is also debatable because the market sentiments of the stakeholders may not always consider financial statements of the company. Yongvanich and Guthrie (2005) and Abeysekera and Guthrie (2005) classified intellectual capital into three components: external capital, internal capital and Human capital. Profitability measured by ROA clearly indicates that; profitability of the companies is reflected through intellectual capital performance. Findings of the study may be exercised by the managers to organize and utilize ‘intellectual capital’ to have additional profitable output. Return on equity is found to be positively influenced by ‘intellectual capital’ in case of pharmaceutical industry indicating that these firms are generating profits from every unit of shareholders’ equity.

Abor (2007) examined that Industry classification and capital structure of Ghanaian SMEs. The analytical technique employed was regression. The dependent variables were LDR, SDR and TDR, independent variables in the model are defined as: industry dummy (IND) = constructed as a categorical variable; (= 0 if manufacturing, 1 if agriculture, 2 if construction and mining, 3 if hospitality, 4 if information and communication, 5 if pharmaceuticals and medical services, 6 if wholesale and retail trading, 7 if general business services). The control variables (C) include firm age = number of years, since commencement of business, firm size = log of total assets, asset structure = fixed tangible assets divided by total assets (i.e. the proportion of total assets that has collateral value. It is a measure of the firm’s collateral value), profitability (PRE) = profit before interest and taxes/total assets, growth (GROW) = average growth in sales. The outcomes of the research show which little as well as moderate businesses within the farming field show the very best funds framework as well as resource framework or even security worth, since the at wholesale prices as well as list industry business possess the lowermost financial debt percentage as well as resource framework. The actual regression outcomes shows that farming, pharmaceutical drug as well as healthcare sectors rely much more upon long-term (LTD) as well as short-term financial debt (short term debt) compared to the actual production field. The outcomes additionally display how the building as well as exploration business is actually not as likely in order to rely on short-term financial debt (STD), whilst resort as well as food rely much more upon long-term financial debt (LTD) and less upon short-term financial.

Chen (2009) Impact associated with funds framework as well as functional danger upon success associated with life insurance coverage business within Taiwan. Staking and Babbel (1995) supported the hypothesis found by Modigliani and Miller. Jou (1999) found that value of a firm initially increasing with financial leverage and then falling with financial leverage.

Cummins and Harrington (1988) used the CAPM model to examine the property-liability insurance industry, and subsequently found a significant relationship between the expected return and systematic risk and unsystematic risk. Dependent variables are used reserve to liability ratio and equity ratio and independent variables are profit margin and returns on assets (ROA) as well as Structural formula modeling that involve factor-analysis as well as path-analysis. The research proposed 4 crucial results. Very first, based on the empirical outcome, the study design offers superb goodness-of-fit. In other words, utilizing several monetary indices superbly steps the particular monetary elements. 2nd, the administrative centre framework exerts an adverse as well as substantial impact on functional danger. 3rd, there isn’t any reciprocal relationship however the one-way impact in between funds framework as well as functional danger. 4th, the actual functional danger exerts an adverse as well as substantial impact on success.

Komnenic and Pakrajic (2012) purpose of their paper was to empirically investigate the impact of intellectual capital (IC) on organizational performance as well as to identify the IC components that may be the drivers of the traditional indicators of business success. Dependent variables are used in this research (HEC) Human capital efficiency and (SCE) structural capital efficiency and independent variables are (ROA) return on asset, (ROE) return on equity and control variable were (CEE) capital employed efficiency. Regression results of this study reveal that human capital is positively associated with all three corporate performance measures. The hypothesis regarding a positive association between structural capital and MNCs’ profitability and productivity has been confirmed only partially since the results indicate that the structural capital variable shows a statistically significant and positive relationship only with the performance measure return on equity.

Pratheepkanth (2011) conducted a study his finding regarding the capital structure (CS) and its impact on financial performance during 2005 to 2009 of business organizations in Sri Lanka. The result of research validated a negative relationship between capital structure (CS) and financial performances of the Sri Lankan companies.
The arguments of prior researchers have well-balanced views on the determination of capital structure and firm performance. This study attempts to seek the extant up to which capital structure has affected the corporate performance particularly banking sector of Pakistan.

3. Research Methodology

A methodology is not a formula but a series of choices from which, we choose specific methods to solve specific problems. To investigate the impact of corporate governance characteristics on firm performance in Pakistan, this study is conducted by using the methodologies adopted in earlier research work on this issue. As other studies have discussed these relationships, conceptual frame work of our study is based on deduction method and for analysis of data collected from secondary sources quantitative techniques were employed. Descriptive statistics, correlation matrix and regression models are generally used for analysis of data. Methodology had been adopted to get the objectives, which is analyzing the changes in debt level towards affecting the firm performance. The data for the study is collected from financial statement of listed banks, website of Karachi stock exchange (KSE) and State bank of Pakistan (SBP).

3.1. Data and Sample

All banks operating in Pakistan are the population of the study. Sample of study include 25 banks, which are listed at (KSE) or schedule banks in (SBP) state bank of Pakistan over a period of 2007, 2008, 2009, 2010 and 2011.

3.2. Variables

The independent variables consist of long-term debt, short-term debt, total debt and control variables consist of firm size, asset Growth and dependent variables are Return on Equity (ROE), Return on Asset (ROA) and earnings per share (EPS).

3.2.1, Long term Debt to Capital

Mesquita and Lara (2003) and Abor (2005) have used long term debt to capital (LTDTC) as a measure of capital structure and it is calculated by following formula.

\[
\text{Long term Debt to Capital} = \frac{\text{Long term Debt}}{\text{Capital}}
\]

3.2.2, Short term Debt to Capital Ratio

Abor (2005; 2007) said that short-term Debt to capital ratio (STDTC) is measured by dividing short-term debt with total capital.

\[
\text{Short term Debt to Capital} = \frac{\text{Short term Debt}}{\text{Capital}}
\]

3.2.3, Total Debt to Capital Ratio

For the purpose of study, this ratio is calculated by dividing total debt on capital.

\[
\text{Total Debt to Capital} = \frac{\text{Total Debt}}{\text{Capital}}
\]

3.2.4, Return on Assets

Return on Assets (ROA) measures the profitability of the firms and calculated as

\[
\text{Return on Assets} = \frac{\text{Operating Income}}{\text{Total Assets}}
\]
3.2.5, Return on Equity
Return on Equity (ROE) is used to calculate a firm’s profitability by revealing how much profit a firm generates with money invested by shareholders and its formula is given below.

\[
\text{Return on Equity} = \frac{\text{Net Profit attributed to shareholders}}{\text{Total Shareholders Equit}}
\]

3.2.6, Earnings per Share
Earnings per share (EPR) measure shareholders profitability by revealing how much profit a share generate with money shareholders have invested and calculated by this formula.

\[
\text{Earnings per Share} = \frac{\text{Net Earnings}}{\text{Number of Shares}}
\]

3.2.7, Firm Size
To measure firm size (SIZE) different methods are used by scholars. According to Titman and Twite (2003) firm size is calculated as natural log of total book value of assets. In this study we will use the book value of the total assets to calculate the firm size (SIZE).

\[
\text{Firm Size} = \ln(\text{Book value of total assets})
\]

3.2.8, Assets Growth
Assets growth is used by many scholars in their studies and for the purpose of this research; it is calculated by the following formula.

\[
\text{Assets Growth} = \frac{\text{Assets of current year} - \text{Assets of previous year}}{\text{Assets of current year}}
\]

3.3 Research Hypothesis
Following hypothesis are developed to investigate the impact of capital structure on banking performance.

\[H_{01} = \text{Capital structure has not significant impact on banking performance.}\]

\[H_{02} = \text{Capital structure has significant impact on banking performance.}\]

3.4 Model Specification
Multiple regression models are used to find out the association between capital structure characteristics and firm performance in the context of Pakistan. Three regression models are formulated to check the relationship between capital structure and banking performance. Our base models take the following form:

\[Y_{it} = \alpha + \beta X_{it} + \mu_{it}\]

Where:

\[Y_{it}\] is the dependent variable.
\[\beta_{0}\] is the intercept.
\[X_{it}\] is the independent variable.
\[\mu_{it}\] are the error terms.
\[i\] is the number of firms and
\[t\] is the number of time periods.

Return on asset
 ROA\_t = \beta_0 + \beta_1 STDTC\_t + \beta_2 LTDTC\_t + \beta_3 TDTC\_t + \beta_4 SIZE\_t + \beta_5 AG\_t + \mu_t \\
Return on equity \\
ROE\_t = \beta_0 + \beta_1 STDTC\_t + \beta_2 LTDTC\_t + \beta_3 TDTC\_t + \beta_4 SIZE\_t + \beta_5 AG\_t + \mu_t \\
Earnings per share \\
EPS\_t = \beta_0 + \beta_1 STDTC\_t + \beta_2 LTDTC\_t + \beta_3 TDTC\_t + \beta_4 SIZE\_t + \beta_5 AG\_t + \mu_t \\

4. Results and Discussion

Tables 1, 2 and 3 explain the results that are found by applying descriptive statistics, correlation and regression technique. Descriptive statics of study are given in table 1. The values of Mean, Median and Standard Deviation of independent (LTDTC, STDTC and TDTC) dependent (ROA, ROE and EPS) and control variables (AG and SIZE) of sample of 25 banks are calculated from 2007 to 2011.

Table 2 shows the correlation matrix which tells us relationship among variables in this study. Correlation is also defined as dependence of one variable upon other. The diagonal elements which are the correlations of the variables with themselves are always equal to one. Short term debt to capital (STDTC) has positive association with all variables except firm size (SIZE). Long term debt to capital (LTDTC) has positive correlation with all measures. TDTC has favorable association with firm size (SIZE) and negative association with assets growth (AG). According to findings of correlation analysis firm size (SIZE) and asset size (AG) are positively correlated.

Table 3 is used to explain the results of regression analysis. To examine the impact of capital structure on profitability of banks researchers used regression model, already used by many scholars. R Square for ROE is 0.511611 which means 51% of sample describes ROE, While 51% variation in dependent variable is explained by the independent variables and 49% variation in ROE remains unexplained by the independent variables of the study. F-Statistics of return on assets is 8.246738 and it shows the overall significance of model. T-statistics tells us the significance of regression results. Outcomes of regression analysis showed a positive significant relationship among return on equity and STDTC, TDTC, SIZE and negative association with LTDTC and AG. Regression model of return on assets produces highest value of R- square 73% as compare to other models and value of F- statistic is 12.531268. STDTC, TDTC and SIZE are found to have a strong favorable impact on profitability as measured by ROE. LTDTC and AG have a negative but insignificant impact on ROE. Value of R square is 67% for earnings per share which means sample defines the dependent variables up to 67% and F statistic for earnings per share is 14.623751. As per regression results earnings per share have a strong optimistic connection with all independent and control variables, except long term debt to capital (LTDTC) and assets growth (AG).

5. Conclusion and Recommendations

The intended aim of conducting this study was to provide an empirical evidence regarding influence of capital structure on profitability of banking sector in Pakistan. The findings of study validated a strong positive dependence of short term debt to capital (STDTC) on all profitability measures (ROA, ROE and EPS). Long term debt to capital (LTDTC) having a negative relationship with return on assets (ROA), return on equity (ROE) and earnings per share (EPS). Total debt to capital and firm size (SIZE) experienced a strong optimistic connection with all dependent variables (ROA, ROE and EPS). Assets growth (AG) proposed a negative insignificant impact upon return on asset and return on equity, while a negative significant impact on profitability as measured by earnings per share. Now by analyzing the results of each variable we can conclude that there exist a positive relation relationship among capital structure and profitability of Pakistani banks.

5.1. Recommendations

It is suggested that further research addressing a longer period of time with having a broader selection of capital structure and profitability measures can expose some new issues. This study can be extended by adding more banks or by conducting a study on global level with inclusion of all banks around the world. Future research could include more variables such as taxation. A comparative analysis of Islamic banking and conventional banks may be included in further research. There is also an opportunity to conduct a comparative study to check the relationship among capital structure and profitability of Foreign and Domestic Banks in Pakistan.
References


Annexure

List of Tables

*Table 1: Descriptive Statistic*

<table>
<thead>
<tr>
<th>Variables</th>
<th>AG</th>
<th>EPS</th>
<th>LTDTC</th>
<th>ROA</th>
<th>ROE</th>
<th>SIZE</th>
<th>STDTC</th>
<th>TDTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>28.256</td>
<td>35.385</td>
<td>1.892</td>
<td>0.958</td>
<td>1.246</td>
<td>12.426</td>
<td>7.249</td>
<td>9.148</td>
</tr>
<tr>
<td>Median</td>
<td>15.358</td>
<td>10.842</td>
<td>1.346</td>
<td>1.119</td>
<td>0.624</td>
<td>7.891</td>
<td>5.272</td>
<td>5.273</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>40.823</td>
<td>57.248</td>
<td>1.215</td>
<td>2.451</td>
<td>3.152</td>
<td>2.426</td>
<td>4.129</td>
<td>2.782</td>
</tr>
<tr>
<td>Observations</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
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</table>

*Table 2: Correlation Matrix*

<table>
<thead>
<tr>
<th>Variables</th>
<th>STDTC</th>
<th>LTDTC</th>
<th>TDTC</th>
<th>SIZE</th>
<th>AG</th>
</tr>
</thead>
<tbody>
<tr>
<td>STDTC</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTDTC</td>
<td>0.253015672</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDTC</td>
<td>0.353214678</td>
<td>0.582673159</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.472346812</td>
<td>0.332567823</td>
<td>0.623472497</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AG</td>
<td>0.172567138</td>
<td>0.273549234</td>
<td>-0.261347422</td>
<td>0.473872481</td>
<td>1</td>
</tr>
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</table>
Table 3: Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>ROE Coefficient</th>
<th>ROE t-Statistic</th>
<th>ROA Coefficient</th>
<th>ROA t-Statistic</th>
<th>EPS Coefficient</th>
<th>EPS t-Statistic</th>
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</thead>
<tbody>
<tr>
<td>C</td>
<td>-0.285905</td>
<td>-7.634672</td>
<td>-0.196349</td>
<td>-3.964367</td>
<td>-0.851349</td>
<td>-8.187234</td>
</tr>
<tr>
<td>STDTC</td>
<td>0.152417</td>
<td>4.375138*</td>
<td>0.082563</td>
<td>5.071441*</td>
<td>0.553672</td>
<td>4.263489*</td>
</tr>
<tr>
<td>LTDTC</td>
<td>-0.211473</td>
<td>-3.750427*</td>
<td>-0.113672</td>
<td>-0.614524</td>
<td>0.356782</td>
<td>-2.861347*</td>
</tr>
<tr>
<td>TDTC</td>
<td>0.183601</td>
<td>2.882652*</td>
<td>0.062594</td>
<td>2.292217*</td>
<td>0.304231</td>
<td>5.423752*</td>
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<tr>
<td>SIZE</td>
<td>0.180872</td>
<td>3.292314*</td>
<td>0.086134</td>
<td>4.192154*</td>
<td>0.623457</td>
<td>9.723821*</td>
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<tr>
<td>AG</td>
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<td>-1.588859</td>
<td>-0.152469</td>
<td>-0.210233</td>
<td>0.756234</td>
<td>-3.757257*</td>
</tr>
</tbody>
</table>

R-squared: 0.511611 0.731672 0.672345  
F-statistic: 8.246738 12.531268 14.623751  
Observations: 125 125 125  

*Represents the level of significance at 5 percent.