The Impact of Firm Specific Factors on Capital Structure: Empirical Evidence from Turkey

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ABSTRACT

The main aim of this study is to analyze the impact of firm specific factors on corporate capital structure decisions of firms. The analysis is based on the year end observations of 100 firms which are among the top 1000 industrial enterprises listed on Borsa Istanbul for the period 2005-2011. By using panel data methodology, five explanatory variables: tangibility, profitability, firm size, non-debt tax shields and growth opportunities are evaluated as the firm specific determinants of capital structure decisions. The leverage ratio which is the dependent variable of the analysis is used as the proxy of firms’ capital structure. In order to test whether crucial results are robust to alternative leverage definitions, this study measures leverage as the firm’s total debt to total asset and long term debt to total asset ratios by focusing both on book and market based measures. The major findings of the study with respect to financing decisions of firms provide significant and positive impact of tangibility on long term debt ratio, however it turns out to be inverse for total debt ratio. In addition, it is found that profitable firms tend to have lower leverage; and larger companies tend to have higher debt ratios compared to small ones. What is more, evidence support that firms with greater growth opportunities and non-debt tax shield reveal inverse relation with debt level. Except the impact of growth opportunities which is only significant for market based leverage ratios, the findings for all other variables are robust for different definitions of leverage.

Keywords: Capital Structure, Debt Ratio, Firm Specific Factors, Leverage Ratio, Panel Data Analysis

1. INTRODUCTION

The study of Modigliani and Miller (1958) has been a turning point in financial literature on corporate capital structure decisions. It shows that under stringent conditions of frictionless, competitive and perfect capital markets, the value of a firm is independent of its capital structure. However, the conditions assumed in Modigliani and Miller world rarely exist in reality and moreover empirical evidence suggests that

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Financing does matter. Over the last five decades, researchers have relaxed some of the restrictive assumptions behind the Capital Structure Theory of Modigliani and Miller which led to the development of different capital structure theories. The views in the proposed theories differ from each other. The optimal debt/equity mix for each theory depends on market frictions such as taxes, information or agency costs that theory relies on, and factors driving capital structure decisions are generally related to these market frictions.

The main aim of this study is to analyze the impact of firm specific characteristics on corporate capital structure decisions of Turkish manufacturing firms which are classified as being among the top 1,000 industrial enterprises of Turkey by Istanbul Chamber of Industry (ICI) listed on Borsa Istanbul (BIST). The analysis is based on the year end observations of 100 Turkish firms for the period 2005-2011. By using panel data methodology, five explanatory variables: tangibility, profitability, firm size, non-debt tax shields and growth opportunities are evaluated as the firm specific determinants of corporate capital structure decisions. In order to reflect the characteristics of firms in a given industry, several industry dummies are introduced to control for any industry specific effect that may not be captured by the explanatory variables.

While literature presents alternative definitions of leverage, most of the studies use debt ratios in different forms either based on market or book values of assets. Choice between market and book leverage is still not a clear issue and there is not a universal measure of leverage. While there are many studies focusing on a single measure, as it is mostly the case in Turkey, the ones employing more than one measure of leverage are also common in literature. In order to test whether crucial results are robust to alternative leverage definitions for Turkish firms, throughout the study we measure leverage as the firm’s total debt to total asset and long term debt to total asset ratios by focusing both on book and market based measures. Therefore, distinct from most of the previous empirical studies in the Turkish context, we investigate impact of firm specific determinants of capital structures on four alternative definitions of leverage: the ratio of long term debt to book value of assets, the ratio of long term debt to market value of assets, the ratio of total debt to book value of assets and the ratio of total debt to market value of assets.

The remainder of the study is organized as follows: The next section is an overview of the capital structure theories and a review of recent literature related to the topic. Within the context of this section, firm specific determinants of capital structure, namely tangibility, profitability, firm size, non-debt tax shields and growth opportunities will be also discussed. We present our research methodology, empirical analysis and findings in the fourth section. Finally, concluding remarks are provided together with the suggestions for further research.

2. LITERATURE REVIEW

The rationale behind the decisions of firms for how they choose their debt equity mix is still an unclear issue of interest. While some firms prefer debt financing, others prefer equity and the factors driving this decision remain ambiguous despite extensive
Deferred Tax Positions under the Prism of Financial Crisis and the Effects of a Corporate Tax Reform
*International Journal of Corporate Finance and Accounting (pp. 21-58).*  