

CHAPTER – 3

OBJECTIVES AND HYPOTHESES

After identifying the research gaps from our critical examination of the literature we formulate our objectives and frame our hypotheses for our study in this chapter. The chapter is divided into two sections. Section one presents the objectives of our study. Section two provides the hypotheses formulated to examine the objectives and also presents the theoretical rationality for the hypotheses.

3.1. Objectives

The following are the objectives of our study:

- I. To examine whether firms consider a target capital structure;
- II. To examine whether group affiliation impacts the speed of adjustment of firms;
- III. To examine whether the speed of adjustment of group affiliated firms varies with the level of diversification;
- IV. To examine whether macroeconomic conditions affect the speed of adjustment of firms;
- V. To examine the impact of firm specific characteristics on the speed of adjustment;

3.2. Hypotheses Proposed

The following hypotheses have been postulated to examine the above mentioned objectives

3.2.1. Examining the existence of target capital structure (Objective I)

Literature has many conflicting theories on capital structure, starting with the irrelevance theory (Modigliani and Miller, 1958) of capital structure where given certain perfect market assumptions the capital structure had no influence on the value of the firm. Later many studies have examined, by considering certain capital market imperfections, whether capital structure decisions have an impact on the firm value. This has given rise to the tradeoff theory; it states that the inclusion of debt in capital structure has both benefits and costs to the firm. The benefit of debt, mainly is the tax advantage of interest (Modigliani and Miller, 1963) and the cost associated with debt are the increased financial distress and bankruptcy costs (Kraus and Litzenberger, 1973). Therefore, the optimal capital structure is the trade-off point where the marginal benefit of adding additional debt equals to their marginal cost (Kraus and Litzenberger, 1973). As a deviation from that optimal capital structure is costly, any deviation leads to a dynamic rebalancing by the firms. However, as rebalancing also involves some costs (e.g. Transaction costs, cost of capital, etc.), firms only partially rebalance their capital structure annually optimizing the costs and benefits of making such adjustments (Jalilvand and Harris, 1984; Banerjee et al, 2000; Ozkan, 2001; Fama and French, 2002; Leary and Roberts, 2005; Flannery and Rangan, 2006; Drobetz and Wanzenried, 2006; Kayhan and Titman, 2007; Byoun, 2008; Huang and Ritter, 2009; Qian et al, 2009, Cook and Tang, 2010; Faulkender et al, 2012; Dang et al, 2012; Getzmann et al, 2014; Dang et al, 2014). The study hypothesizes:

H1: Indian firms partially adjust their capital structure towards their target leverage

3.2.2. Examining the impact group affiliation on speed of adjustment (Objective II):

Affiliation to business groups provides some unique benefits to its members which are not available for non-affiliated firms, especially in emerging countries like India (Khanna and Rivkin, 1999). In contrast to developed economies where capital, labor and product markets are mostly developed, in emerging economies, there are market failures in various forms such as (a) inadequate disclosure and weak corporate governance practices, (b) weak securities regulation and erratic enforcement and (c) inefficient and insufficient financial intermediaries and the financial press practices (Dewenter and Warther, 1998; Khanna and Palepu, 2000). These market failures are greatly overcome by firms which affiliate themselves with a business group. Studying the Indian corporate sector, Khanna and Palepu, (2000) found that group affiliated firms have better access to international capital markets, international analysts and international joint venture agreements than the independent firms. Moreover, groups create an internal capital market for its members which can be used to meet their financial needs when the external capital market is underdeveloped or costly (Chang and Choi, 1998; Gonenc et al, 2007; Fier et al, 2013). Apart from these, affiliation with business groups also has some reputational effects which prove valuable in settlement of contractual disputes in economies where legal systems are underdeveloped (Dewenter and Warther, 1998). With such significant institutional differences between the group affiliated firms and standalone firms found in India, we hypothesize that,

H2: The Speed of Adjustment of group affiliated firms is higher than that of Standalone firms

3.2.3. Examining the impact of group diversification on speed of adjustment (Objective III)

One of the biggest drawbacks or market failures of emerging markets is the absence of intermediary firms which provide essential product, labor and capital resources (Khanna and Rivkin, 2001). These institutional voids influence the costs for firms to procure resources and render them incapable of competing in the market. To overcome these drawbacks groups diversify their presence into many sectors and integrate vertically and horizontally. Therefore large diversified business groups have the scope and scale to overcome the costs involved in setting up internal institutions performing intermediating functions (Khanna and Palepu, 2000). The study hypothesizes:

H3: The Speed of Adjustment of a highly diversified group affiliated firms is higher than that of a less diversified group affiliated firms

3.2.4. Examining the impact of macroeconomic conditions on SOA (Objective IV)

According to Trade off theory, target leverage is a tradeoff between the benefits of debt and costs of debt. The benefits of debt being in terms of tax benefits and costs in terms of bankruptcy costs. Tax benefits depend on taxable earnings, which is a function of the economy. Similarly the probability of default and losses which effect bankruptcy costs are also related economic conditions (Kiyotaki and Moore, 1997; Levy 2001). According to Hackbarth et al. (2006), firm's adjustment costs will be lower in good macroeconomic state of the economy than in bad macroeconomic state. The speed of adjustment of capital structure should also be faster in good economic conditions because the adjustment costs are lower in comparison to that of bad economic conditions associated with high adjustment costs. Therefore, the study hypothesizes that,

H4: The Speed of Adjustment of firms in a good macroeconomic condition is higher than that of firms in bad macroeconomic condition

3.2.5. Examining the impact of firm characteristics on speed of adjustment (Objective V)

Firm characteristics like Profitability, Firm Size, Listing status and Growth opportunities have an impact on the adjustment costs and thereby have an impact on the Speed of adjustment of the firm

3.2.5.1. Examining the impact of the profitability of firms on Speed of Adjustment

Firms with higher profitability are expected to have high cash flows. This excess amount of cash can be used to fund expansions or even be used to make capital structure changes so as to reduce the capital cost of the firm. Further, High profitability leads to better reputation and lower bankruptcy costs, which would give the firm access to cheaper and faster capital from the external capital market (Faulkender et al. 2012). This access to cheaper and faster capital and also the excess cash reduces the adjustment costs of the firm's capital structure leading to a faster speed of adjustment. The study hypothesizes that:

H5_{A1}: The Speed of Adjustment of high profitable firms is greater than that of low profitable firms

We further decompose the above hypothesis to account for ownership type i.e. Group affiliation and standalone to further hypothesize:

H5_{A2}: The Speed of Adjustment of a high profitable group affiliated firms are greater than that of low profitable group affiliated firms

H5_{A3}: The Speed of Adjustment of high profitable standalone firms is greater than that of low profitable standalone firms

3.2.5.2. Examining the impact of firm size on speed of adjustment

Larger firms tend to have a stable and reliable cash flows (as compared to smaller firms) which reduce the bankruptcy risk of the firm. Further, larger firms also tend to have valuable assets in terms of fixed assets, goodwill etc. which contribute in the reduction of its bankruptcy risk. This reduction in the bankruptcy risk reduces the adjustment costs (e.g.: high interest rate etc.) involved in the changing the capital structure of the firm and should be able to adjust to target capital structure changes faster. The study hypothesizes that:

H5_{B1}: The Speed of Adjustment of larger firms is greater than that of smaller firms

We further decompose the above hypothesis to account for ownership type, i.e. Group affiliation and Standalone. The study further hypothesizes:

H5_{B2}: The Speed of Adjustment of larger group affiliated firms is greater than that of smaller group affiliated firms

H5_{B3}: The Speed of Adjustment of larger standalone firms is greater than that of smaller standalone firms

3.2.5.3. Examining the impact listing status of the firms on speed of adjustment

Firms have different sources of finance that they can tap into when they are in need of funds. A firm which is not listed in the capital market can either request for funds from its shareholders or it can raise debt through financial institutions. Whereas, a listed firm has access to both of

these two sources and also has access to the capital markets from which the firm can raise equity or debt. Further, a listed company will have higher disclosure norms and higher reputation among the investor than an unlisted firm. This translates to faster and cheaper access to funds when required. The study hypothesizes that:

H5_{C1}: The Speed of Adjustment of listed firms is greater than that of unlisted firms

We further decompose the above hypothesis to account for ownership type, i.e. Group affiliation and standalone and further hypothesize:

H5_{C2}: The Speed of Adjustment of listed group affiliated firms is greater than that of unlisted group affiliated firms

H5_{C3}: The Speed of Adjustment of listed standalone firms is greater than that of unlisted standalone firms

3.2.5.4. Examining the impact Growth opportunities of the firms on speed of adjustment

Firms with higher growth opportunities in the future tend to have higher earnings thereby having a lower bankruptcy risk. This lower bankruptcy risk would motivate the firm to increase their financial leverage and also motivate the banks to fund such increase. Further, a firm with higher growth opportunities provide for an ideal investment avenue for equity investors, providing the firm with more faster and lower cost equity capital. Both these reasons provide freedom to a high growth opportunity firm to adjust its leverage to its optimal. The study hypothesizes that:

H5_{D1}: The Speed of Adjustment of firms with high growth opportunities is greater than that of firms with low growth opportunities

We further decompose the above hypothesis to account for ownership type i.e. Group affiliation and standalone. The study further hypothesizes:

H5_{D2}: The Speed of Adjustment of group affiliated firms with high growth opportunities is greater than that of group affiliated firms with low growth opportunities

H5_{D3}: The Speed of Adjustment of standalone firms with high growth opportunities is greater than that standalone firms with low growth opportunities

After framing our hypotheses, we present the research methodology used to empirically examine the data in the following chapter.