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The relative influence of competitive intensity and business strategy on the relationship between financial leverage and performance☆

Johnny Jermias[a,b,*,1]

[a] Faculty of Business Administration, Simon Fraser University, 8888 University Drive, Burnaby, BC, Canada
[b] Nanyang Business School, Nanyang Technological University, Block S3, Nanyang Avenue, Singapore 639798, Singapore

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Abstract

This study empirically investigates the effects of competitive intensity and business strategy on the relationship between financial leverage and the performance of firms. Based on a sample of US manufacturing firms, this study confirms the hypothesis that the cost of debt is higher for product differentiation firms than cost leadership firms. Furthermore, the results indicate that competitive intensity has a negative effect on the leverage-performance relationship, suggesting that competition acts as a substitute for debt in limiting manager's opportunistic behavior. These findings reinforce the need to consider moderating factors such as strategic choice and the environment in which a firm operates when investigating the effects of leverage on performance.

JEL classification: D21; G32; M41

Keywords: Business strategy; Competitive intensity; Financial leverage; Performance

1. Introduction

Ever since Modigliani and Miller (1958) proposed that capital structure is irrelevant in determining firm value, the theory of capital structure has been studied extensively. According to this ‘‘irrelevance proposition’’, a firm cannot change the total value of its securities just by splitting its cash flows into different streams because the firm's value is determined by its real assets, not by the securities it issues. Jensen and Meckling (1976) oppose this proposition in arguing that the amount of leverage in a firm's capital structure affects managers' choice of operating activities and that these activities in turn affect the performance of the firm. Ever since Jensen and Meckling (1976) acknowledged the possibility of this influence, researchers have

☆ The data are available from public sources. A list of sampled firms is available from the author upon request.

* Tel.: +65 6790 4979; fax: +65 6791 3697.
E-mail addresses: jjermias@ntu.edu.sg, jjermias@sfu.ca (J. Jermias).
[1] Associate Professor at Simon Fraser University and Visiting Scholar at Nanyang Technological University.

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conducted numerous studies that aim to explain the relationship between financial leverage and the performance of firms.

Nevertheless, previous studies that tried to solve the leverage–performance puzzle continue to report mixed and often contradictory findings (Ghosh, 1992; Harris and Raviv, 1991). Some researchers (e.g., O'Brien, 2003; Robinson and Mcdougall, 2001; Barton and Gordon, 1987) argue that the conflicting evidence reported by prior studies may be due in part to the approaches used. Most prior studies have examined only the direct effects of financial leverage on performance. However, O'Brien (2003) argues that the effect of financial leverage on performance may be contingent upon competitive intensity and the strategy pursued by the firm and researchers note the need for studies that examine the influence of these variables. This is the challenge that is explored by the study presented in this paper.

The purpose of this study is to investigate the effects of competitive intensity and business strategy on the relationship between financial leverage and firm performance. Building on agency theory, I predict and find that the effect of leverage on performance is more negative for firms attempting to be differentiators than those attempting to be cost leaders. Furthermore, I hypothesize and find that competitive intensity negatively affects the leverage–performance relationship.

This study contributes to the literature about the relationship between financial leverage and the performance of firms and has policy implications for practitioners. Its findings indicate that substituting one form of capital for another does affect performance, but the effects are moderated by competitive intensity and the firm's strategy. They reinforce the need to consider theoretically justified moderating variables (such as strategic choice and the environment in which a firm operates) when making financing decisions because the costs and benefits of debt depend on these variables. These findings are inconsistent with the equity theory of accounting and the irrelevance proposition made by Modigliani and Miller (1958) and instead support the notion that financing decisions, strategic choice and competitive intensity do affect the performance of firms (Harris, 1994; Jensen and Meckling, 1976). The findings also have the potential to help practitioners to realize that the tax advantages of debt financing and the ability of debt covenants to control managers' opportunistic behavior might work against performance for firms that adopt a strategy of product differentiation.

The remainder of this paper proceeds as follows. The next section reviews the related literature and presents the study's hypotheses. Section 3 describes the research method and Section 4 details the data analyses and the results of statistical tests. The final section discusses the study's major findings and limitations, as well as its implications for future research in this area.

2. Related literature and hypothesis

Although there is an abundance of research which aims to explain the relationship between financial leverage and performance, the literature remains unclear as to whether debt is good or bad. Arguments and empirical findings have gone both ways. Some researchers argue that leverage has a *negative* impact on performance. For example, Jensen and Meckling (1976) point out that there are agency costs (e.g., monitoring and bonding costs) associated with debt financing due to lenders' need to protect their interest in a firm. Myers (1977) shows that debt financing will cause equity holders to under-invest because a fraction of the proceeds from their investments will go to debt holders, leading to sub-optimal firm performance. Simerly and Li (2000) contend that increasing debts will increase debt holders' influence through debt covenants, which might limit managers' choices and therefore impede their ability to manage a firm effectively. As debt holders tend to emphasize short-term objectives in order to satisfy their primary goal of receiving the interest and principal payments specified in the contract, their increased influence might jeopardize a firm's long-term survival (Jensen, 1986). Furthermore, Balakrishnan and Fox (1993) argue that increasing debt financing will increase managers' risk aversion and reduce their willingness to invest in more risky but profitable projects, and some empirical studies report a negative relationship between leverage and performance (e.g., Gleason et al., 2000; Balakrishnan and Fox, 1993).

Other researchers oppose such claims in arguing that financial leverage has a *positive* effect on performance. For example, Jensen (1986) proposes that debt covenants might control managers' opportunistic behavior by reducing the cash flow available for discretionary spending. He argues that by issuing debt, managers bond their promise to pay off debts with future cash flows. The reason for this is that an inability to honor debt