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Bank loan contracting and corporate diversification: Does organizational structure matter to lenders?

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ABSTRACT

This paper investigates the effect of corporate diversification on the pricing of bank-loan contracts. We find that diversified firms have significantly lower loan rates than comparable focused firms, and we find no evidence that diversified firms are subject to more restrictive non-price contract terms pertaining to maturity, collateral requirements, and covenant restrictions. We show that the effect of diversification on the cost of a bank loan is channeled primarily through coinsurance in investment opportunities and cash flows and that the effect is nonlinear: as the extent of corporate diversification grows, the cost-reduction benefit of diversification decreases. Our results indicate that the organizational structure of the firm can alleviate its external financing constraints and that it has an important bearing on the firm's financing capacity.

1. Introduction

The extent to which a firm's organizational structure affects its ability to raise external financing is an important issue for corporate management. In a frictionless capital market, organizational structure is irrelevant because the firm and investors can costlessly replicate any organizational form.

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In environments with capital market frictions, different organizational forms are not necessarily substitutes for reasons such as transaction costs, tax effects, agency problems, and asymmetric information. Thus, the organizational structure of the firm may have an important bearing on its financing capacity. In this paper, we use the diversification strategy of the firm as an identification tool for organizational structure and analyze the effect of organizational form (corporate diversification) on the financing capacity of the firm using information on bank loan contracting.

We focus on bank loan contracting because bank loans are primary sources of corporate financing. Bradley and Roberts (2004) and Dennis and Mihov (2003) show that since 1994 the private bank debt of corporations constitutes a larger fraction of the capital structure compared to that of public debt. There has also been an increased level of corporate diversification in recent decades through mergers and acquisitions (see Montgomery, 1994; Pryor, 2001; Harford, 2005). The concurrent increases in the levels of bank financing and in corporate diversification in recent years make it important to understand how the diversification of a firm's business operations affects the pricing and structure of its loans.

The question of how a firm's operational boundaries are linked to its financial conditions has been a topic of great interest in the literature for some time. In theory, corporate diversification affects the financial conditions of the firm via the following channels: First, it reduces the corporation's overall cash-flow volatility by combining the cash flows of multiple business segments, i.e., via a coinsurance channel (Lewellen, 1971). Second, it is easier to forecast a diversified firm's cash flows as the forecasting errors of individual segments' cash flows will cancel out at the firm level, i.e., via a forecasting-error diversification channel (Hadlock et al., 2001). Third, diversified firms may be harder to evaluate than stand-alone firms because they are less transparent and it requires more extensive knowledge to evaluate their multiple business segments, i.e., via a transparency channel (Habib et al., 1997). Finally, agency-based theories suggest that diversification may either increase or decrease agency costs. Some authors argue that agency costs are higher for diversified firms because managers have more discretion on resource allocation across the business segments of the firm, while others argue that corporate diversification lowers cash flow volatility and engenders investment efficiency via the internal capital market.

From the bank's perspective, corporate diversification can be valuable for several reasons. First, the cost of monitoring could prevent banks from achieving desired diversification on their own. For instance, Acharya et al. (2006) show that a diseconomies-of-scope effect arises through weakened monitoring incentives and a poorer-quality loan portfolio when a bank expands into additional industries and sectors. Indeed, D'Souza and Lai (2010) examine the diversification of Canada's Big Five banks by looking at whether the composition of each bank's assets leaves the bank on the efficient frontier and find that banks' portfolios are below the tangency portfolio. Lending to a diversified firm could lower monitoring costs compared to focused firms because banks only need to collect information and monitor one management team instead of multiple management teams. Such savings in monitoring costs translate into lower loan costs. Second, corporate diversification may create value for the bank via a "smart money" effect (Stein, 2003). The CEO of a diversified firm has more discretion over the allocation of resources (assets) across firm segments, which allows for the selection of better projects and attenuates investment in inefficient segments. If the segments were stand-alone firms, a bank could not easily induce efficiency-enhancing resource reallocations across firms. Third, bank capital requirements based on risk-weighted assets help raise a bank's assessment of the value of a diversified firm compared to a stand-alone firm. A riskier loan portfolio generates a higher capital requirement and lowers the bank's profit. To the extent that the coinsurance effect lowers the risk of diversified firms, lending to such firms reduces the risk of bank assets and lowers capital requirements.

We first examine how diversification affects the loan spread where the loan spread is defined as the loan rate (including any annual fee paid to the bank group) minus the London Inter-bank Offered Rate; this measure represents the direct cost of a bank loan. We begin with a univariate analysis and find that diversified firms have lower loan costs compared to otherwise similar focused firms. Then, using a standard OLS regression analysis and controlling for various firm and loan characteristics and industry and year effects, we show that diversification is associated with a 7.5 basis-points reduction in the loan spread. There are, however, two potential problems with the standard OLS regression approach to