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Beauty is in the eye of the beholder: The effect of corporate tax avoidance on the cost of bank loans ☆

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ABSTRACT

We find that firms with greater tax avoidance incur higher spreads when obtaining bank loans. This finding is robust in a battery of sensitivity analyses and in two quasi-experimental settings including the implementation of Financial Accounting Standards Board Interpretation No. 48 and the revelation of past tax sheltering activity. Firms with greater tax avoidance also incur more stringent nonprice loan terms, incur higher at-issue bond spreads, and prefer bank loans over public bonds when obtaining debt financing. Overall, these findings indicate that banks perceive tax avoidance as engendering significant risks.

1. Introduction

Recent studies examine the economic consequences of tax avoidance on shareholders and find mixed results. For example, Desai and Dharmapala (2009) show a positive relation between tax avoidance and firm value for well-governed firms. In contrast, Hanlon and Slemrod (2009) show a negative stock market reaction to news concerning company involvement in tax shelters. An interpretation of these findings is that shareholders perceive tax avoidance practices as potentially value-enhancing but risk-engendering corporate activities (Rego and Wilson, 2012). Nevertheless, how debt holders perceive corporate tax avoidance has remained largely unexplored. This study considers economic consequences of tax avoidance from the perspective of debt holders by examining the empirical relation between tax avoidance and cost of bank loans.

Debt holders and shareholders have significantly different risk preferences and return expectations. Unlike shareholders, debt holders such as banks and bondholders have asymmetric payoffs. They generally receive fixed future income and face substantial downside risk. Although tax

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savings might accrue to shareholders, they do not necessarily benefit debt holders who are fixed claimants. For debt holders, the specter of risk exposure associated with tax avoidance could be more salient than the concomitant reward such as tax savings. Consequently, the debt market provides an ideal setting to examine the significance of risks engendered by tax avoidance activities.

We specifically focus on bank loans for two reasons. First, bank loans are the bulk of new financing for US firms, even large public firms (see, e.g., Bharath, Sunder, and Sunder, 2008). Therefore, it is of immense managerial and economic importance to understand the relation between corporate tax avoidance and cost of bank loans. Second, compared with arm's-length investors, including public bondholders, banks are more apt to price the risks and rewards of tax avoidance because banks typically maintain long-term relations with borrowing firms and have access to the firm's proprietary information (see, e.g., Diamond, 1984; Fama, 1985; James, 1987). Accordingly, bank loans provide an ideal setting to examine how debt holders perceive the risk–reward trade-off of tax avoidance.

On the one hand, tax avoidance could generate tax savings (Mills, 1998) and reduce leverage (Graham and Tucker, 2006), providing up-side potential to banks or reducing default risk banks face, or both. On the other hand, tax avoidance activities could increase the risk exposure of banks by increasing information risk (Balakrishnan, Blouin, and Guay, 2012), agency risk (Desai and Dharmapala, 2006), and the risk of being audited by tax authorities (Mills, 1998). These competing effects imply that tax avoidance could increase or decrease the cost of bank loans. However, if banks perceive avoidance-induced risks as more salient than the concomitant benefits, one would expect to observe an overall positive relation between tax avoidance and bank loan cost.

Using a comprehensive sample of around 17,000 bank loans issued to US public firms in the period 1985–2009, we empirically examine the overall effect of tax avoidance on bank loan cost. Given our conceptual framework, we are interested in the effect of a broad spectrum of aggressive tax avoidance practices that induce risks, not only the most extreme of these activities that could be deemed inappropriate by the Internal Revenue Service (IRS).[1] Hereafter, we refer to all of these risk-engendering tax planning practices as aggressive tax avoidance. We use various empirical measures to capture aggressive tax avoidance, including two book-tax differences (Manzon and Plesko, 2002; Frank, Lynch, and Rego, 2009) and the cash effective tax rate (Rego and Wilson, 2012). We measure bank loan cost using loan spread that is defined as the basis points a borrower pays in excess of the London Interbank Offered Rate (LIBOR) or LIBOR equivalent for each dollar drawn down.

Across all three measures, we find a positive and significant relation between aggressive tax avoidance and loan spread after controlling for credit risk, firm performance, and other firm-level and loan-level factors that are found to impact bank loan spread in the literature. Our results are robust in a battery of sensitivity tests including when we use firm fixed effect regressions to mitigate omitted variable bias and instrumental variable two-stage regressions to address the endogeneity of tax avoidance.

More important, we find consistent results when we use two quasi-experimental settings to examine the effect of aggressive tax avoidance on bank loan cost. The first involves the implementation of Financial Accounting Standards Board Interpretation No. 48 (FIN 48). Using a difference-in-differences analysis, we find that firms that disclose a positive FIN 48 tax reserve during a three-year window immediately after FIN 48 incur significantly larger increases in loan spreads when compared with match firms that never report a positive FIN 48 tax reserve in that same period. This finding indicates that banks view the increased tax reserve disclosures pursuant to FIN 48 as informative about the firm's aggressive tax avoidance practices in terms of uncertain tax positions, and, consequently, banks increase loan spreads in borrowing firms that report a positive FIN 48 tax reserve.

In another quasi-experimental setting, we examine whether banks increase loan spread after a borrowing firm's involvement in tax-sheltering activities became a publicly disclosed news event. Compared with loans obtained before the tax shelter news event, companies pay higher spreads for loans they obtained after the news event. Further, a difference-in-differences test shows that firms with tax shelter news have significantly larger increases in loan spreads after the news events when compared with match firms without tax shelter news. To the extent that FIN 48 tax reserves and tax shelter news events reflect aggressive tax avoidance, one could interpret the findings in these quasi-experimental settings as providing evidence of a positive, causal effect of aggressive tax avoidance on cost of bank loans.

If aggressive tax avoidance increases loan spread because it heightens the lenders' risk exposure, it should also affect nonprice loan term, at-issue bond spread, and the firm's debt financing preference toward bank loans over public bonds (see, e.g., Bharath, Sunder, and Sunder, 2008). We find that banks impose more stringent collateral and covenant requirements in loans issued to firms exhibiting greater tax avoidance. Using an exhaustive sample of bond-issuing firms during the same sampling period 1985–2009, we find that firms with greater aggressive tax avoidance incur higher yield spreads when issuing public bonds. Based on the combined sample of bond-issuing firms and loan-initiating firms over the same sampling period, we find that firms with greater tax avoidance prefer bank loans over public bonds when seeking debt financing.

Lastly, we explore possible channels through which tax avoidance influences cost of bank loans. We find that the positive association between aggressive tax avoidance and

[1] Aggressive tax avoidance activities include corporate-owned life insurance, transfer pricing, reincorporation in tax havens, offshore intellectual property havens, re-invoicing, and offshore special purpose vehicles. At the most extreme end, they also include illegal tax shelters and tax noncompliance. All of these activities engender risks for two reasons. First, they represent deliberate actions to exploit the varied interpretations of tax laws including using literal interpretations of the laws or abusing loopholes that exist in the statutes. Second, from the lender's perspective, the anticipated outcomes of any given observable aggressive tax practice are likely uncertain because tax laws can be changed and tax courts do not always have the same ruling on the same transaction. See, for instance, *United Parcel Service of America Inc. v. Commissioner* (Graham and Tucker, 2006, *p.* 574).