Debt covenant design and creditor control rights: Evidence from the tightest covenant

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Abstract

Within the same debt contract, some financial covenants are considerably more restrictive than others. I exploit this heterogeneity in covenant design and show that the design of the most restrictive covenant is systematically associated with covenant outcomes - compliance, violations, or renegotiations. Consistent with an alleviation of moral hazard problems, tighter capital expenditure restrictions (performance covenants) are more likely to facilitate ex post creditor control through covenant renegotiations (violations). By contrast, borrowers are more likely to comply with contracts with tighter capital covenants, suggesting that these covenants more effectively align shareholder-creditor interests ex ante to avoid adverse selection problems.

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1. Introduction

It is a well-recognized fact that debt contracts are inherently incomplete and cannot include an exhaustive list of covenants that specify all the possible contingencies (Klein et al., 1978; Grossman and Hart, 1986; Aghion and Bolton, 1992). Hence, ample prior literature examines the determinants of contracting parties’ choices of the number or specific types of covenants in debt contracts.¹ In this paper, I extend the prior understanding of debt covenants by making a novel and consequential observation: within the limited number of covenants in a contract, individual covenants exhibit substantially different levels of restrictiveness. For example, the median covenant cushion (i.e., the percentage difference between the actual covenant variable and its contractual limit) for the most restrictive covenant is less than 25% of that for the least restrictive covenant in the same contract. Furthermore, the most restrictive covenants are distributed across the three types of covenants – i.e., capital covenants, performance covenants and capital expenditure restrictions - and are not clustered within a certain covenant type.²

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² Financial covenants are grouped into three types based on the sources of information used in calculating the covenant variables and the specific aspects on which the covenants put restrictions: (i) capital covenants which restrict the level of debt in a firm’s capital structure, (ii) performance covenants which specify detailed thresholds on a borrower’s financial performance, and (iii) capital expenditure restrictions which set the maximum amount of capital expenditures that a borrower can spend in a year.
The above observations raise important questions on covenant design. What determines the restrictive level of the tightest covenant in a contract? What are the implications of the different types of covenants as the most restrictive one in a contract? In this paper, I shed light on these questions by investigating the association between the design of the tightest covenant in a contract and the specific mechanisms of creditor control that are reflected in the three feasible covenant outcomes - covenant compliance, covenant violations, or covenant renegotiations.

This empirical angle is motivated by both incomplete contracting theorists and loan officers/attorneys who suggest that covenants are designed to assist creditors’ preferred mechanisms to exercise control rights and protect loan values in a contracting environment with information asymmetry (e.g., Lloyd, 1991; Hart and Moore, 2008; Skinner, 2011; Halonen-Akatwijuka and Hart, 2013). In particular, creditors can take a more active role in corporate governance through either the ex ante or the ex post mechanisms that are facilitated by covenants (e.g., Aghion and Bolton, 1992; Christensen, Nikolaev, and Wittenberg-Moerman, 2015). With respect to the ex ante mechanisms, certain types of covenants can alleviate adverse selection concerns by effectively aligning shareholder-creditor interests or efficiently transmitting borrower information to the lenders. When such covenants are tightly designed, they either make sure shareholders’ ex post actions are consistent with creditors’ preference or incorporate positive prospects of the borrowers, so that future creditor intervention is not necessary (e.g., Jensen and Meckling, 1976; Dessein, 2005; Levine and Hughes, 2005; Demiroglu and James, 2010). With respect to the ex post mechanisms, tight covenants can mitigate moral hazard problems through creditor intervention after the lending relationship is underway. Certain types of covenants are good indicators of borrowers’ financial condition or operation policies; therefore, when such covenants are designed tightly, they can either reflect borrowers’ distress in a timely manner to trigger covenant violations or engage creditors in corporate policies by incentivizing contract renegotiations (e.g., Aghion and Bolton, 1992; Corton and Kahn, 2000; Garleanu and Zwiebel, 2009; Holland and Verriest, 2016; Prilmeier, 2017). Since the most restrictive covenant in a contract sets significantly more stringent requirement on the borrower than the other covenants in the same contract from an ex ante perspective, its restrictive level and type should be the most relevant for the ultimate channel through which creditor control rights are exercised. Thus, the most restrictive covenant in a contract presents a unique opportunity to examine the link between covenant design and mechanisms of creditor control suggested by the prior literature.

I begin my analysis by documenting the evolution of covenant restrictiveness throughout the life of the contract. Two important observations stand out. First, the average covenant cushion for the most restrictive covenant in a contract decreases from 5% at origination to — 9% by the time of maturity under the original covenant requirement, suggesting that on average, borrowers are not able to maintain the most restrictive covenant within the contractual requirement for the entire life of the loan. Second, within my sample, all the three covenant outcomes are commonplace. Around 40% of the contracts experience no covenant violations or renegotiations, 32% of the contracts experience at least one covenant violation, and half of the sample experience at least one covenant renegotiation before the stated maturity date. It is worth noting that covenant violation and renegotiation represent two different channels of ex post creditor control, and the majority of the renegotiations do not occur as a remedy to the existing covenant violations.3 As far as I am aware, this is the first study that documents the extent of the three channels of control rights within the same sample.

Using Probit models, and consistent with the patterns in the evolution of covenant restrictiveness, I find that the ex ante stricter covenants are markedly more likely to be followed by either a covenant violation or renegotiation, even after controlling for the total number of financial covenants included in a contract. Moving the most restrictive covenant in a credit contract from below the median to above the median restrictiveness increases the likelihood of a covenant violation by over 10% and the likelihood of a covenant renegotiation by over 20%, which are economically significant changes considering the unconditional probabilities of these two covenant outcomes. Further tests reveal that, compared to the other covenants within the same contract, the most restrictive covenant is more likely to be the covenant that triggers ex post creditor control. Therefore, despite the importance of ex ante incentive alignment and information transmission, on average, the observed tight covenants primarily protect creditor value by reallocating decision rights to creditors ex post.

Although both covenant violations and renegotiations are likely to occur when covenants are highly restrictive, what is the exact mechanism through which creditors exert their influence? Inarguably, covenants, in general, address both adverse selection and moral hazard problems, but the prior literature suggests that some covenants are more effective in alleviating one problem than the other.4 Therefore, the issue (either adverse selection or moral hazard problems) that creditors are most concerned with will dictate both the type of the most restrictive covenant in a contract and the associated covenant outcome to ease such issue. First, when an adverse selection problem is severe, creditors select tight covenants that help screen out weaker borrowers or align shareholders’ interest with that of creditors, so that the contracting friction is controlled ex ante and ex post creditor intervention is less likely. Two types of covenants are particularly useful for this purpose. Capital covenant restricts the maximum amount of leverage used in a firm, or the minimum amount of capital shareholders have to keep within a firm to assure the consistency of interests between shareholders and creditors; whereas performance covenant sets the lower boundary of the borrower’s profitability to exclude borrowers who do not expect to achieve the required performance thresholds. Secondly, when the main concern is a moral hazard problem, creditors choose tight covenants that can facilitate their involvement in the borrower’s ex post decision making. Capital expenditure restriction restricts the maximum amount of capital investment the

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3 In my sample, 80% of the covenant renegotiations do not occur within the same fiscal year with any covenant violations. Violated covenants are not necessarily followed by covenant renegotiations. Instead, covenant violations can be waived without renegotiations.
4 See, for example, Jensen and Meckling (1976), Aghion and Bolton (1992), Berlin and Mester (1992), Corton and Kahn (2000), Garleanu and Zwiebel (2009), and Christensen and Nikolaev (2011).
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