Bond and loan covenants, theory and practice

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Key points

- Bond and loan contracts contain 'business covenants' that regulate the borrower's operations. This article explains their operation and incidence, conjoining drafting practice with economic theory.
- The article begins with the provisions themselves—first affirmative covenants and financial covenants, and then restrictive covenants. The discussion explains the drafting pattern by reference to both the legal framework and the financial economics of the agency costs of debt. There emerges a unitary picture of the entire collection of covenants used in practice.
- The article continues by situating the covenants in transactional context, drawing on empirical studies from financial economics. Incidence varies considerably, from near absence to pervasive coverage, depending not only on the borrower's creditworthiness but on the credit market segment in which the borrowing occurs. Tight and pervasive coverage tends to presuppose relational lending, whether in the bank or private placement market. In the public bond markets, where arm's length contracting prevails, coverage lends to be loose and sporadic.
- The article then takes up a variant on the theme of constraint by promise, looking at provisions that trigger loan prepayment upon events customarily covered in the full set of covenants, explaining why mandatory pay down sometimes emerges as a superior choice to prohibition by promise.

1. Introduction

Bond and loan contracts contain 'business covenants' that regulate the borrower's operations. This article explains their operation and incidence, conjoining drafting practice with economic theory. The article begins with the provisions themselves—affirmative covenants and financial covenants in Section 2, and restrictive covenants in Section 3. The discussion explains the drafting pattern by reference to both the legal framework and the financial economics of the agency costs of debt. There emerges a unitary picture of the entire collection of covenants used in practice. Section 4 situates the covenants in transactional context, drawing on empirical studies from financial economics. Incidence varies considerably, from near absence to pervasive coverage, depending not only on the borrower's creditworthiness but on the credit market segment in which the borrowing occurs. Tight and pervasive coverage tends to presuppose relational lending, whether in the bank or private placement market. In the public bond markets, where arm's length contracting prevails, coverage lends to be loose and sporadic. Section 5 takes up a variant on the theme of constraint by promise, looking at provisions that trigger loan prepayment upon events customarily covered in the full set of covenants,

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explaining why mandatory pay down sometimes emerges as a superior choice to prohibition by promise.

The article focuses on practice in the USA,[1] covering (i) public markets in which 'issuers' publicly offer to sell 'debt securities' issued pursuant to 'trust indentures' to 'holders', (ii) the market for bank-led debt financing in which 'lenders' make 'loans' to 'borrowers' pursuant to 'loan agreements' and (iii) the private placement market in which 'issuers' privately sell 'debt securities' to 'holders' pursuant to 'note purchase agreements'. For simplicity, the terms 'lender', 'loan', 'borrower' and 'debt contract' will be used across-the-board unless the context otherwise requires.

2. Covenants and control

Business covenants are designed to accord lenders significant influence over the operation of the borrower's business without affecting a transfer of control. The drafter charts a course between the economics, which explains and justifies lender constraints on the borrower's conduct in some circumstances, and the law, which protects the borrower's control of its business.

The legal concern follows from the US law of business organizations, which provides that a lender loses its limited liability status when it exercises control over its borrower.[2] When a controlling lender's decisions yield losses, liability to other creditors or even to shareholders[3] can follow. It takes borrower insolvency, and, by implication, a bankruptcy proceeding, to precipitate the liability rule's relaxation. Meanwhile, at the time of loan origination, there results of point of conjunction in the interests of the lender and the borrower—a contract implicating control transfer, substituting the lender's business decisions for those of the borrower's board of directors, makes no sense to either party. Business covenants are drafted so as not to traverse the line.

Financial economic theory confirms both the law's preference for borrower control and allowance of control transfer upon insolvency when it points out that the equity interest is best incented to maximize the firm's value. But the economics also complicates the picture, positing that a shift in control from the equity to the lender sometimes makes sense prior to insolvency. The classic model of Aghion and Bolton captures the point, describing an incentive misalignment between an outside investor whose returns come only in the form of cash flow and an entrepreneur who seeks private benefits in addition to cash. The misalignment causes the entrepreneur to behave inefficiently in some situations, situations in which the optimal investment contract shifts control to the outside investor.[4]

1 For a review of European practice, see L Hornuf, M Reps and S Schäferling, 'Covenants in European Investment-Grade Corporate Bonds' (2015) 10 Capital Markets Law Journal 345.

2 For legal commentaries on business covenants, see American Bar Foundation, *Commentaries on the Model Debenture Indenture Provisions* (ABF 1971); R Nassberg, *The Lender's Handbook* (ALI 1986); R Lloyd, 'Financial Covenants in Commercial Loan Documentation: Uses and Limitations' (1991) 58 Tennessee Law Review 335.

3 The classic case is *Martin v Peyton*, 246 N.Y. 213, 158 N.E. 77 (1927). See generally M Douglas-Hamilton, 'Creditor Liabilities Resulting from Improper Interference with the Management of a Financially Troubled Debtor' (1975) 31 Business Lawyer 343.

4 P Aghion and P Bolton, 'An Incomplete Contracts Approach to Financial Contracting' (1992) 59 Review of Economic Studies 473.

As between a lender and a borrower, this incentive misalignment intensifies as the borrower becomes distressed, distress in turn being a function of the borrower's prospective or present inability to meet its obligations due to excess indebtedness. It follows that distress heightens the lender's interest in developments at the borrower. Lenders to healthy borrowers tend to incur monitoring costs only. Distress imports an incentive for the lender to make additional investments in information and participation in the borrower's business decision-making. Business covenants, even as they are structured to leave the borrower in control, facilitate this intervention in distress situations in advance of insolvency.

Affirmative and negative

Covenants drafted as affirmative promises are thought to hold out a cognizable possibility of traversing the doctrinal line to impinge on borrower control. For example, a borrower could cede control by promising only to pursue a business plan advanced by the lender. A long-standing drafting custom follows. Affirmative instructions in debt contracts go only to ministerial matters. The borrower customarily affirmatively promises to make periodic informational reports, to comply with law, to maintain its franchises, to insure and maintain its properties and to pay all properly assessed taxes. While any of these promises could imply additional costs,[5] none of them materially constrain management's discretion to operate the borrower's business. A careful lender will not even extract an affirmative promise to bind the borrower to invest the proceeds of the loan in the projects outlined during the negotiation. The borrower, instead of making a promise concerning investment in the project, will formally represent its present intent to make the investment.

Promises that materially constrain borrower management's discretion to do business are invariably phrased in the negative—the borrower promises not to do something. Of course, negative phrasing does not by itself prevent serious impingement on management discretion—a borrower could promise not to let anyone other than the lender manage the business, thereby ceding control. It is accordingly not just negative phrasing that matters for liability purposes. The covenant must be structured as a veto respecting an articulated course of action, leaving the borrower otherwise free to generate, select and manage its projects. Promises not to borrow, pay dividends, sell assets, over-invest or permit a financial ratio to fall below a stated level all fall into this category. A species of control can follow—negative covenants, when drafted tightly and applied to a wide range of subject matter, significantly limit discretion of the borrower's managers. A substance over form argument follows for an objecting equity holder seeking to make out a case of lender liability. Courts, however, respect the formal distinction between affirmative and negative and lenders' counsel proceed with confidence in the negative framework.

5 The more costly promises on the list will be negotiable accordingly. See ABF Commentaries (n 2) 312–13.

Financial covenants

Negative covenants indirectly open the door to affirmative lender participation in borrower decision-making by forcing a borrower facing a covenant default to negotiate with the lender for a waiver or amendment. To facilitate this, covenants are drafted to require the borrower to maintain itself in sound financial condition by reference to verifiable metrics. Failure to meet the tests due to deterioration of the business functions as an early warning of distress.

The provisions setting out these maintenance tests are termed *financial covenants*. The tests, which specify levels of net worth and debt coverage, all ultimately work toward the same goal—the definition of a permitted degree of leverage. Some of the tests are balance sheet based. A net worth test sets a minimum level of net worth (assets minus liabilities), either as a dollar amount or a ratio. The stated minimum is the smallest equity cushion that the lender must tolerate. Other tests look to earnings or cash flow. A leverage ratio puts total debt over earnings before interest, taxes, depreciation and amortization (EBITDA) and states a maximum allowed amount with a view to assuring that the borrower's cash flows remain sufficient to service its debt. A coverage ratio puts cash flow over current interest charges (or, alternatively, current interest and principal payments) and states a minimum. An EDITBA test states a minimum amount of EDITBA to be generated per period, again testing for ability to service debt.[6]

The drafting challenge lies in defining the metrics that make up the ratios. These begin with GAAP numbers, often making modifications so as to flush soft asset-side entries out of net worth and to expand net income into a cash flow measure.[7] Meanwhile, the impact (and the degree of potential invasion of the borrower's autonomy) lies in the bottom line. The closer the negotiated minimum or maximum to the borrower's financial condition at the time of contracting, the more likely it is that any later decision gone wrong or negative external influence causes the borrower to fail to meet the test.

Three choices greet a borrower that fails. Either it suffers the consequences of default, affects a cure by raising equity capital or persuades the lender to waive the default and modify the covenant. The lender is highly likely to come to the bargaining table. Even as the covenant's violation gives the lender the right to declare an event of default, accelerate the loan and seek a money judgement for the entire principal amount, the right's enforcement profits the lender little if it forces the borrower into a defensive bankruptcy. Bankruptcy being costly and uncertain for both sides, there arise bilateral incentives to negotiate a truce, a negotiation that brings the lender out of passive monitoring into front-line participation in the borrower's business decisions.

Thus does the value of a financial covenant lie in facilitating renegotiation with the lender in a position of strength. The borrower can be expected to open discussion even before the covenant is violated. The lender will look to trade a waiver of the default for

6 Some contracts also include tests keyed to current assets and liabilities. Minimum working capital (current assets minus current liabilities) can be stated, either as a dollar amount or as a ratio. Here failure to meet the test gives the lender an early warning of a liquidity crisis.

7 Thus does 'Consolidated Net Worth' become an adjusted 'Consolidated Tangible Net Worth'.

enhanced contract rights—stricter covenants, a higher interest rate or an unscheduled principal prepayment. Advantage over other creditors can result. Compare the position of a second lender to the same distressed borrower under a contract containing no financial covenants. The unprotected lender has no basis with which to force the borrower to enter into a conversation, much less to improve its standing, even as the protected lender takes the occasion to impose demands. If the protected lender manages to extract preferential payments, the unprotected lender's position is affirmatively damaged.

Aggressive lenders have been known to cross the liability line during the give and take of renegotiation by imposing their preferences on the business plan or directing the selection of key personnel. If negative results follow, such a lender may find itself defending a lawsuit by shareholders with nothing to lose.[8] But liability-deflective legislation minimizes this problem in many states.[9] Given a large borrower and an arm's-length negotiating context, the risk is minimal in any event.[10]

Empirical work by financial economists shows that financial covenants work substantially as advertised. Renegotiation tends to commence before a violation. Violation or threatened violation may or may not result in covenant relaxation, depending on the borrower's financial condition. But the aggregate impact on borrowers' capital structures and businesses is cognizable—levels of debt fall[11] and new investment decreases[12] in the wake of renegotiation.

3. Restrictive covenants

We have seen that financial covenants regulate without prohibiting anything. *Restrictive covenants*, to which we now turn, are directly prohibitive and more complex. They identify business decisions that impair the lender's interests and extract promises not to take them. The burden on the drafter increases correspondingly, for the exercise of identification and definition covers most aspects of the borrower's business. Restrictive covenants are less threatening to the borrower than are financial covenants, despite the complexity. Compliance lies in avoiding the action identified. In contrast with financial covenants, restrictive covenants hold out little prospect of inadvertent default due to deteriorating conditions.

This section's discussion begins with a description of the destructive borrower incentives that restrictive covenants are designed to counteract. It goes on to describe the covenants seen in practice.

8 See, eg *K.M.C. Co. v Irving Trust Co.*, 757 F.2d 752 (6th Cir 1985); *State Nat'l Bank of El Paso v Farah Mfg. Co.*, 678 Sw. 2d 661 (Tex Ct App 1984).

9 See, eg Fla Stat s 687.0304.

10 See J Lipson, 'Governance in the Breach: Controlling Creditor Opportunism' (2011) 84 Southern California Law Review 1035, 1063–67.

11 M Roberts and A Sufi, 'Renegotiation of Financial Contracts: Evidence from Private Credit Agreements' (2009) 93 Journal of Financial Economics 1657.

12 D Denis and J Wang, 'Debt Covenant Renegotiations and Creditor Control Rights' (2014) 113 Journal of Financial Economics 348.

The agency costs of debt

Economic analysis of restrictive covenants follows from analyses by Michael Jensen and William Meckling,[13] Clifford Smith and Jerold Warner[14] and Stewart Myers.[15] These describe four agency costs of debt—claim dilution, underinvestment, asset withdrawal and asset substitution.[16] Restrictive covenants diminish these costs.

Claim dilution

Claim dilution describes the negative impact of subsequent borrowing on the value of an earlier loan. Assume that Firm A is worth 100 and has borrowed 50 from Lender 1 pursuant to an unsecured loan. The loan was priced on the assumption of no further borrowing by Firm A but contains no explicit restrictions. Firm A then borrows 35 from Lender 2 and invests the proceeds in a project that turns out to be worthless. Firm A emerges 85 percent levered. The interest rate on the second borrowing will reflect that possibility, compensating Lender 2, while the interest rate on the first borrowing does not compensate Lender 1. Lender 1's investment declines in value, with the benefits of the decrease accruing to Firm A and Lender 2. Lender 1 is even worse off if Lender 2 makes a loan secured by assets worth 35. So long as the obligation to Lender 2 remains outstanding, the encumbered assets will not be available to satisfy Lender 1. Accordingly, Lender 1 must look for repayment to an asset base of 65 rather than the base of 100 envisaged at the time of the loan.

More generally, a lender, as fixed return claimant, can be injured by an increase in the amount of equal or prior claims in the borrower's capital structure. At the same time, the borrower will have a high-powered incentive to continue to borrow. Under the pecking order theory of finance, retained earnings are the borrower's cheapest and most desirable source of finance, then debt and, finally, new equity.[17] Large new projects accordingly tend to mean an increase in debt claims. An increase in the level of debt can benefit the borrower's equity holders even in the absence of a new project. The new loan's proceeds can be siphoned out as a dividend or a stock repurchase, with the added claims increasing the borrower's leverage, turning it into a higher risk, higher return investment. Because the fixed return lender receives no extra compensation for that higher risk, the transaction transfers wealth from the lender to the borrower's equity holders.

If we change the hypothetical's facts and price the first loan to reflect the possibility of claim dilution, there arises a basis for trade. Assume that Firm A is content to continue to finance all projects on a 50–50 debt/equity basis. A restriction on future borrowing, tied to a 50–50 debt/equity ratio, lowers the cost of the first loan without unduly inhibiting Firm A's freedom of action. The trade illustrates the costly contracting hypothesis of

13 M Jensen and W Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure' (1976) 3 Journal of Financial Economics 305.

14 C Smith and J Warner, 'On Financial Contracting: An Analysis of Bond Covenants' (1979) 7 Journal of Financial Economics 117.

15 S Myers, 'Determinants of Corporate Borrowing' (1977) 5 Journal of Financial Economics 147.

16 In the literature, the concept of 'asset substitution' encompasses the concept of 'asset withdrawal' used here.

17 S Myers, 'Capital Structure' (2001) 15 Journal of Economic Perspectives 81, 91–93.

Smith and Warner. This assumes that the borrower bears the entire projected agency cost of a given issue of debt when the parties set the interest rate. It follows that the borrower's interest in minimizing its borrowing cost leads it to offer covenants that restrict its ability to take actions benefiting its shareholders while injuring its lenders' interests. The parameters of the restrictions offered follow from the borrower's cost–benefit calculation—Firm A trades off the cost of future constraints on its freedom of action against the present benefit of a lower cost of borrowing.[18]

Asset withdrawal and underinvestment

Assume now that Firm A, with assets worth 100 and debt claims of 85, owns asset *x*, valued at 10. Firm A sells *x* to Firm B for 10 in cash, and then declares and distributes to its shareholders a dividend of 10. Because Firm A retains a net worth of 5 (and remains solvent on a going concern basis), the dividend is not a fraudulent conveyance. This *asset withdrawal*[19] nonetheless materially injures the interests of Lenders 1 and 2 by reducing A's net worth from 15 to 5. A covenant that blocks the sale of asset *x* would enhance the positions of Lenders 1 and 2. But it would not protect them from all forms of asset withdrawal. Firm A might in the alternative liquidate an asset over time, directing the proceeds to its shareholders as received. Accordingly, Lenders 1 and 2 also need a covenant that prevents Firm A from transferring assets to its shareholders, by dividend, stock repurchase or otherwise.

Claim dilution and asset withdrawal primarily concern wealth transfers from lenders to equity holders. *Underinvestment* has deeper implications for economic welfare. Assume that Firm A continues to decline in value, so that it now is worth 75 as against debt claims of 85. It has the opportunity to invest in project *k*. Project *k* is worth 10. Firm A has no other available investment opportunities. Firm A will not make the investment, assuming an identity of interests among its managers and shareholders. From the point of view of A's equity, project *k* is worthless because its benefits redound entirely to Lenders 1 and 2. Given limited liability, the equity might as well walk away. Alternatively, viewing the debtor–creditor relationship as an option in the equity to repurchase the firm from the debt at maturity, the shareholders of Firm A have an out of the money option to buy A back from Lenders 1 and 2 for 85. They have an incentive to invest in positive net present value (NPV) projects only to the extent the option is projected to expire in the money net of the investment. Firm A might pass up the investment even if project *k* is worth 15, depending on whether it deems the effort necessary to realize the project's value to be cost-beneficial for a return of 5.[20] The welfare cost stems from the decision to for go the investment. The lenders lose because the underinvestment heightens the risk of default, and, to the extent that no other firm is situated to pick up the opportunity, society as a whole also loses. A covenant blocking dividend payments and stock

18 For an alternative account based on information revelation, see A Choi and G Triantis, 'Market Conditions and Contract Design: Variations in Debt Contracting' (2013) 88 New York University Law Review 51.

19 D Fischel, 'The Economics of Lender Liability' (1989) 99 Yale Law Journal 131, 134–35.

20 Myers (n 15) 164–65.

repurchases addresses the problem indirectly, by leaving Firm A no alternative other than reinvestment for its free liquid assets. Drafting a contract term that directly forces Firm A to invest in project *k* will turn out to be more difficult, however.

Asset substitution and risky investment

To see the *asset substitution* problem, assume once again that Firm A is worth 75 as against debt claims of 85. Firm A owns asset *y*, and a potential buyer offers to buy *y* for 20 in cash. If A liquidates *y* it can either pay the 20 to its lenders or invest in *z*. Asset *z* has an expected value of 20, based on the following projection: (i) a 10 per cent chance that *z* turns out to be worth 200, and (ii) a 90 per cent chance that *z* turns out to be worthless. If the expected value of 20 is discounted to reflect the high risk of a zero return, the NPV of *z* turns out to be less than 20. It nonetheless is rational for Firm A to make the investment. If the long shot comes in, Firm A is worth 255; if the investment is worthless, Lenders 1 and 2 bear the cost of the loss. Alternatively, and once again viewing the borrower–lender relationship as an option, the shareholders of Firm A have an out of the money option to buy A back from Lenders 1 and 2 for 85. Viewed as a long holding, investment *z* is irrational due to its negative net present value. But if the equity is viewed from an optionholder's point of view, *z* makes the option more valuable by increasing the volatility of the underlying asset's returns. The shareholders thus have an incentive to make an investment that decreases economic welfare, with the cost falling on the firm's lenders.

The asset substitution problem combines two actions by Firm A—the sale of asset *y* and the investment in risky asset *z*. The asset withdrawal problem already has demonstrated the value of a contract term blocking large asset sales. The underinvestment problem suggested a need for a contractual means to force Firm A to make a valuable investment for the benefit of its lenders. Now we see the need for a term that prevents Firm A from making a sub-optimally risky investment.

The covenants

Restrictions on additional debt

Debt covenants protect against claim dilution by limiting new borrowing, preventing an increase in the number of claims on the equity cushion and the risk of insolvency. They also indirectly discourage risky investments—risky debt and risky investments tend to be concomitants. The covenants come in two varieties, incurrence based and maintenance based.

The test in an incurrence-based covenant applies at the time of the subsequent borrowing—the company can close on its loan only if it passes the test. The test comes in the form of a ratio of net tangible assets to total debt and a ratio of earnings available to pay debt to debt service costs.[21] The targeted transactions are borrowings of money.

21 Asset-based tests are variously stated. For example, the tangible net worth may substitute for net tangible assets, and funded debt may substitute for indebtedness. Borrowings for the purpose of paying down debt of the same or higher priority often are permitted explicitly. See R Nash, J Netter and A Poulsen, 'Determinants of Contractual Relations between Shareholders and Bondholders: Investment Opportunities and Restrictive Covenants' (2003) 9 Journal of Corporate Finance 201, 215.

Other transactions booked on the balance sheet's liability side, trade credit most importantly, are not customarily covered. But it bears noting that debt covenants tend to restrict transactions, such as financial leases and the guarantees of the obligations of others, which strictly speaking do not involve borrowing but are viewed by lenders as the functional equivalent of borrowing. Debt covenants also can make structural distinctions between short-term borrowing and long-term debt and between subordinated and unsubordinated debt. For example, the borrowing window can be made larger for new borrowing subordinated to the loan covered by the covenant.

Maintenance-based debt covenants start with the same expansive concept of borrowing. They prohibit it but then open up zones of permitted borrowing, defining them by type and imposing an absolute cap, stated as a dollar amount. The borrower thus must 'maintain' its debt below the cap. The permitted types of borrowing are likely to include borrowing to finance capital investments and subordinated borrowing.[22] Some loan agreements also tack on a 'basket' pursuant to which the borrower is allowed to incur additional borrowing of any type up to a stated dollar cap.

The difference between the two types of constraint lies in the difference between a ratio and a fixed figure. Assuming a healthy borrower with prospects for growth, a ratio-based covenant protects the borrower's freedom of action by expanding the permitted zone as the company grows. The window of freedom can even hold out an incidental benefit for existing lenders. Additional debt can provide the borrower with additional capital for good projects the returns on which make existing lenders more secure. Restating, flexibility respecting additional debt ameliorates the underinvestment problem. With a maintenance test, flexibility is a function of renegotiation. When a growing borrower bumps up against the ceiling, it must apply to the lender and make a business case for an amendment.

The regime of flexibility may not, however, extend so far as to permit borrowing by subsidiary companies because subsidiary borrowing involves 'structural subordination'.[23] To see why this is, hypothesize two operating companies, Subsidiary A and Subsidiary B, each 100 per cent owned by a holding company, HC. HC is the borrower on a loan with Lender HC under a debt contract that restricts borrowing by HC but not by Subsidiaries 1 and 2. HC causes Subsidiary 1 to borrow heavily from Lender S. Because Subsidiary 1 is an entity separate from HC, HC is not a party to the debt contract with Lender S.

22 It is thus not uncommon for a borrower under a term loan to seek new financing on a subordinated basis in the junk bond market. Bank term loans also may constrain prepayments or extension of pre-existing debt. Depending on the borrower's creditworthiness, a prohibition on prepayment of subordinated debt is qualified with a 'builder basket.' This can operate through a definition of excess cash flow, letting the borrower apply such excess as it generates. Alternatively, the test can be based on cumulative earnings since the time of closing with credit or net equity issuance.

Speaking generally, high credit quality firms tend to have simple capital structures—a layer of unsecured borrowing and common equity. Low credit quality firms tend to have multiple tiers of debt—secured borrowing at the top, then senior unsecured, and subordinated debt at the bottom. See J D Rauh and A Sufi, 'Capital Structure and Debt Structure' (2010) 23 Review of Financial Studies 424.

23 Subsidiaries can be expected to be subject to the covenants more generally: a parent borrower will covenant not to do something and also not to permit its subsidiaries to that something. A good credit might be in a position to negotiate for the exclusion of certain subsidiaries from the covenants, which accordingly would apply only to 'restricted subsidiaries'. Guarantors also can be expected to be covered by the covenants. The prohibition of subsidiary borrowing and stock sales is noteworthy not because the subsidiaries are covered, but because the prohibition is absolute.

Subsidiary 1 becomes insolvent and goes into bankruptcy reorganization. Although Subsidiary 2 remains profitable, HC goes into default on its debt and is itself forced into reorganization. When the smoke clears, Lender HC will be subordinated to Lender S so far as concerns the proceeds of Subsidiary 1's bankruptcy proceeding. Lender HC has a claim only on the assets of HC, and HC can establish a claim in Subsidiary 1's bankruptcy only in its capacity as Subsidiary 1's equity claimant. As an equity claimant, it is subordinated to Lender S. Even if Lender HC emerges from HC's bankruptcy holding HC's entire value, to the extent that Lender S's claim exceeds the value of Subsidiary1's assets and wipes out HC's equity, Lender HC receives no proceeds from Subsidiary 1. A properly drafted debt covenant solves the problem: HC must promise not to permit its subsidiaries to borrow except from HC. HC's freedom of action is not thereby drastically constrained: if HC wishes to procure debt financing for Subsidiary 1, it first borrows in its own name and then reloans the proceeds to Subsidiary 1. This way the borrowing is tested under HC's own debt covenant, and, in the event Subsidiary 1 becomes insolvent, the sole senior claimant is HC, preserving HC's senior position respecting Subsidiary 1's assets.

Extending the point, Lender HC also benefits from a covenant that prevents sales of additional equity to third parties by Subsidiaries 1 and 2. Assume that Subsidiary 1 is wholly owned by HC at the time of the borrowing but goes on to sell its stock directly to the public so that it emerges as a 75 per cent-owned subsidiary of HC. The direct equity financing by Subsidiary 1 makes HC, and hence its lenders, *pari passu* claimants to Subsidiary 1's assets along with the new shareholders. From the Lender HC's point of view, new equity financing for the HC group should be accomplished through an equity offering by HC. As to these new equity holders, Lender HC is completely senior. If HC wants to invest the proceeds of such an equity financing in Subsidiary 1, it can siphon the capital downward either by taking additional subsidiary stock or making an intercompany loan.

Restrictions on prior claims

Covenants restricting mortgages and liens are the second principal protection against claim dilution. Unsecured creditors can look only to the borrower's unencumbered property; to the extent the property is subject to mortgages, security interests or other liens, it is not available to pay their claims in liquidation. Secured creditors, moreover, are accorded priority in bankruptcy reorganization to the extent of the value of the property covered by their liens. Contracts governing unsecured debt accordingly tend to restrict the creation of new liens.

There are two modes of drafting the restriction. The first imposes a direct and sweeping prohibition, subject to negotiated exceptions. Exceptions are most likely to be granted for purchase money mortgages and security interests. There also may be a basket allowing any liens securing borrowing up to a stated amount or a percentage of net worth or net tangible assets. The second mode is the 'negative pledge'. This comparatively simple provision states that no lien will be created unless the lien also equally and ratably

secures the debt benefited by the provision. Ratable coverage prevents the lien protecting the new loan from displacing the priority of the earlier unsecured loan covered by the covenant.[24] Some negative pledges are absolute, while others are qualified by a basket stated as a dollar amount or a percentage of net worth or net tangible assets.[25]

Separate sale and leaseback prohibitions are found in many debt contracts. Sale and leaseback transactions take assets presently owned by the borrower and available to pay the lender and transfer title to them to a third party, with the seller–borrower emerging holding a lease on the sold premises with the buyer as lessor. Lenders view such a transaction as an extreme form of secured borrowing on the asset. The borrower sells a building and pockets the sale price, even as the simultaneous lease back lets it leave its existing facility in place. The purchaser of the property holds a superior title to the property, which will not be available for inclusion in a borrower bankruptcy estate. To see the depth of a lender's aversion to such a transaction, compare a mortgage loan secured by the same premises. With a mortgage, the borrower builds up equity in the property as it pays the loan over time, further benefiting to the extent the property appreciates in value. With the sale and leaseback, the borrower starts out with a 100 per cent equity interest in the property, which is transferred away. It thereafter makes lease payments over time, ending up with nothing at the lease's expiration. Furthermore, the funds generated by the sale readily can be redirected to investment in riskier assets, or, alternatively, withdrawn from the firm's asset base and distributed to its shareholders. Sale and leasebacks, in short, are just the sort of transactions entered into by cash-strapped firms—a single transaction which can implicate claim dilution, asset withdrawal, asset substitution and risky investment. Unsurprisingly, the prohibition is often absolute. Alternatively, these transactions can be permitted subject to a cap.

Restrictions on dividends and other payments to shareholders

'Restricted payment' covenants block transfers of corporate assets to shareholders, whether by way of a dividend, a redemption or a repurchase of outstanding stock. There are looser and stricter versions. The looser version references the borrower's profitability through a 'builder basket'. Under this, the covenant sets a base date, usually at or near the time of the loan, and permits dividends, repurchases and redemptions only to the extent of cumulative earnings after that date, and then only up to a given percentage or amount. A fixed sum (the 'dip') may be added to this cumulative sum of earnings, increasing the total allowed sum for distributions. In addition, credit might be given for the proceeds of the sales of new equity. The stricter version specifies a maximum permitted amount for

24 See C Bjerre, 'Secured Transactions Inside Out: Negative Pledge Covenants, Property, and Perfection' (1999) 84 Cornell Law Review 305. A negative pledge does not necessarily disable a subsequent secured loan. Suppose Firm A has assets worth 100. Debt claims of Lender 1, covered by a negative pledge clause, total 15. Firm A wishes to borrow an additional 15 from Lender 2 on a secured basis. All of its 100 of assets are unencumbered. Firm A can borrow from Lender 2 on a secured basis so long as Lender 1 also is secured by the lien. The transaction will satisfy Lender 2 so long as the lien covers property worth 30, thereby fully securing Lenders 1 and 2.

25 A secured bank term loan might contain a provision that bars entry into a contract that contains a negative pledge clause, on the theory that the subsequent negative pledge could constrain the borrower from adding assets to the security package in the event of renegotiation.

stated future periods, limits the frequency of payouts and conditions payments on stated tests such as credit ratings and financial ratios.[26] It bears noting that a restricted payment covenant can be tied to other covenants in the full set—the dividend can be conditioned not only on room in a builder basket but on the existence of room to borrow under the debt covenant and compliance with all covenants *ex post* the payment.[27]

A restricted payment covenant serves multiple purposes. First, it prevents asset withdrawals that injure the lender's interest by locking in the firm assets at least equal in amount to those present at the time of the loan. Secondly, the covenant enhances the lender's position during the term of the loan. For example, if the permitted distribution amount grows as a function of 50 per cent of annual earnings, then half of the incremental growth of the asset base remains contained in the borrower entity, making the loan more secure and enhancing its value. The covenant also discourages underinvestment. As we have seen, as a borrower declines in value, at some point new investment redounds only to its lenders' benefit. If the declining business nonetheless generates free cash flow, whether from operations or as the result of disinvestment, a dividend or share repurchase amounts to the funds' best use from the shareholders' point of view. The covenant blocks the escape route, forcing the borrower to invest the funds for the lenders' benefit.

Of course, a project undertaken on a second-best basis could hold out a negative net present value. From an equity holder's point of view, a project is sub-optimal if it returns less than the cost of equity capital: basic financial economics teaches that cash flows should be paid out to the shareholders absent investments returning more than the cost of equity capital. Things look very different from a lender's point of view. As between a payout to shareholders and reinvestment, any investment yielding a positive cash return, no matter how low, is superior, for even a zero return investment enhances the asset base available to pay the debt. Here, then, it is the lender's side of the debt-equity conflict of interest that threatens inefficient results. Despite this, a standard restricted payment covenant holds out only a minimal threat to economic welfare: so long as the loan remains outstanding, a borrower without positive investment projects can always direct its free cash flows to repayment of the loan's principal amount. In any event, as with the debt covenant, the typical restricted payment covenant stops well short of absolute prohibition.

It bears noting that only a small subset of mature US firms pay regular dividends.[28] Lenders need the covenant nonetheless. Circumstances easily can change over a loan's 10- or 15-year term so as to favour a shareholder distribution. Moreover, a distribution need not entail the implicit commitment of a regular dividend. For example, if the borrower generates free cash flow in the face of a diminishing set of new investments, a programme

26 M Bradley and M Roberts, 'The Structure and Pricing of Corporate Debt Covenants' (2004) Working Paper 12 <http://ssrn.com/abstract=466240> accessed 16 August 2016.

27 To the extent a borrower's ability to service the loan depends on cash flows from subsidiaries, a dividend covenant given up by a subsidiary could amount to a payment barrier, and so could be covered by a negative covenant.

28 W Bratton, 'The New Dividend Puzzle' (2005) 93 Georgetown Law Journal 845, 849–52.

of open market stock repurchases can pump out the money so as to suit the interests of both outside shareholders and managers benefited by equity incentive plans.

Restrictions on mergers and sales of assets

A borrower's merger with another operating company can injure a lender even though the surviving corporation is a larger firm. If the merger partner is highly levered, then the deal results in claim dilution. If the merger partner has a riskier business, then the merger detrimentally shifts investment policy. A sale of all or substantially all of the borrower's assets can raise the same problems in aggravated form—such a transaction literally separates the assets supporting the loan from the corporate obligor on the debt contract; absent covenant protection, the lender can be left looking to a shell entity for satisfaction. In contrast, a merger into a shell acquisition subsidiary organized by a conservatively managed acquirer may be a matter of indifference or benefit to the lender.

Covenants dealing with mergers and acquisitions range from permissive to strict. The permissive variant allows mergers and sales of all or substantially all assets subject to two conditions—the purchasing firm, (i) must be organized within the USA, eliminating the possibility of an offshore bankruptcy proceeding, and (ii) must formally assume the debt. A stricter version imposes additional constraints—a transaction will be permitted only so long as the survivor or purchaser has room to borrow under the debt covenant and can demonstrate compliance with every other covenant *ex post* the closing of the merger. Stricter still is a covenant that adds on a buy-side constraint, limiting total acquisitions—whether by merger, stock purchase or asset purchase—by imposing a dollar cap.

Lenders also concern themselves with sales of less than the whole company, for piecemeal asset sales hold out problems of asset withdrawal and risky investment policy. Accordingly, a covenant will impose a fair value standard on permitted sales and state a book value or fair value cap—for example, 10 per cent of net worth—on the aggregate annual asset sales. The cap on the amount of assets sold prevents a borrower from using minor asset sales as the basis for a covert redirection of the business plan. A borrower could sell off pieces of itself over a period of time and reinvest the proceeds in a riskier line of business.

For a borrower, an asset sale constraint poses as significant an impairment of freedom of action as does a debt covenant. Today's managers actively trade subsidiaries and divisions in a market for going concern assets. They also use asset sales to expand access to liquidity. Consider a standard asset securitization—the firm sells its accounts receivable for cash to an off-balance sheet special purpose entity, there to be pledged to secure new debt. Such a transaction falls within the scope of a standard covenant barring piecemeal asset sales. Whether such a transaction also negatively implicates a legitimate interest of a lender will depend on the facts of the case. On the one hand, liquidation of receivables could generate funding for the borrower's core investment programme, benefiting the lender. In the alternative, the proceeds could be devoted to riskier investments or open market stock repurchases.

Restrictions on investments

We have seen that restrictive covenants easily can ameliorate the problems of asset substitution and risky investment by constraining sales of assets. It is more difficult to draft a covenant that takes the additional step of directing reinvestment of the proceeds of permitted sales into projects viewed with favour by the lender. The lender liability constraint prevents the dictation of positive instructions on such a core matter. In theory, a set of advance negative instructions could be concocted. The drafter would craft an instruction keyed to positive net present value projects, defined as projects that exceed a specified hurdle rate and carry low-to-moderate asset betas. But the factors in question present verification problems, and therefore would be expensive to monitor.[29] The interests of both parties thus signal a strategy of indirect constraint of investment policy.

Two mechanisms of negative constraint of investment policy show up in practice, one of recent vintage and the other traditional. The recent innovation limits the borrower's capital expenditures. 'Capital expenditures' are defined as expenditures and capital leases for fixed or capital assets, software or additions to or repairs or replacements of equipment required to be capitalized under GAAP. They are permitted only up to an annual cap stated as a dollar amount and made subject to a proviso that permits the borrower to carry unutilized room under the cap over to the following year.

The traditional constraint on investment makes for an interesting contrast. Instead of constraining the operation of the core business, the traditional covenant seeks to force management to concentrate all of its attention thereon. The covenant targets risky investment outside of the core business, forcing the borrower to invest its free cash flow in safe, short-term investments such as treasury securities and certificates of deposit, and prohibiting riskier outlets like portfolios of common stocks and futures contracts. The idea is to force the borrower to devote its capital to its standing going concern, subject to whatever elbow room the covenant allows it to earn for itself under a builder basket and dip. A companion covenant forecloses resort to new and potentially speculative lines of business by requiring the borrower to stay in its present line of business.

Traditional investment and line of business covenants contain a number of agency costs. Used in combination with a covenant barring asset sales, they effectively prevent asset substitution and risky investment. The combination would, for example, prevent a smokestack borrower dissatisfied with the return on its present line of business from reinventing its going concern by acquiring a high tech, high risk subsidiary. The combination also would prevent a borrower in distress from liquidating going concern assets and putting the proceeds into high risk, high return financial assets or

29 See Myers (n 15) 156–58; Smith and Warner (n 14) 153.

contracts. Add a restricted payment provision and the underinvestment problem also is addressed. The investment covenant restricts the set of available investments for the borrower's free cash flow, while the restricted payment covenant blocks the alternative of a transfer of the cash in question payment to the shareholders. With the exit doors blocked, the borrower's best returns on the spare cash turn out to be prepayment of the loan.

Reverse wealth transfer

Now consider a scenario that reverses the theme of distress and borrower exploitation: Firm A borrows from Lenders 1 and 2 and prospers. Assume that both lenders have contracts containing covenants that (i) restrict any future borrowing by Firm A, (ii) restrict dividends and stock repurchases to a small percentage of annual net earnings and (iii) block substantial asset sales. At the time of Lender 2's loan, Firm A has assets of 135 and debt of 85, leaving an 'equity cushion' of 50. As we have seen, the purpose of the covenants is to lock in the equity cushion as a source of value available to pay the loans. Five years later, Firm A's assets are 300 and its debt is still 85. As the equity cushion becomes larger, the loans become less risky, and, all other things being equal, increase in value. More generally, with a full set of restrictive covenants and a successful borrower, the lender's position becomes more secure over time.

This upside scenario reverses the wealth transfer problem—now the lenders gain at the expense of the borrower and its shareholders. To the extent the lender operates under a relational commitment to deal reasonably with its borrowers, Firm A can renegotiate for a more relaxed set of covenants. Alternatively, Firm A can structure its loan contracts to provide for relaxation in advance. As we have seen, covenants can be drafted so as to condition constraints on stated financial conditions, so that the restraints relax as Firm A becomes more valuable. Alternatively, debt contracts entered into by non-investment grade companies sometimes provide that certain covenants 'fall away' in the event the issuer achieves investment grade status. In any event, Firm A can reserve a power to prepay ('call') the principal amount of the loan.

4. Incidence

Business covenant incidence varies widely. The primary variables are market segment and borrower creditworthiness. Coverage tends to correlate directly with the borrower's credit rating, ranging from near absence at the high end to pervasive at the low end. Sorting also occurs between the long-term debt market's two distinct segments—private and public. Relational lending prevails in the private sector, while the public markets proceed at arm's length. Relational lending, which involves small numbers of lenders with reputational interests in working constructively with their borrowers, is more conducive to covenant usage because it is more open to renegotiation in the event of changed conditions. The two variables tend to move in the same direction—the lower the borrower's rating the more likely it is to fund itself in the private markets.

Borrower characteristics

Numerous studies confirm the salience of borrower creditworthiness.[30] Covenant intensity increases as the credit rating goes down[31] and as levels of leverage,[32] cash flow uncertainty[33] and bankruptcy risk[34] go up. Other borrower characteristics matter too. Usage increases with the issuer's growth opportunity set.[35] Greater borrower transparency makes dividend and investment restrictions less likely.[36] Sensible correlations to borrowers' corporate governance postures also have been shown.[37] For example, entrenched managers are less likely to labour under payout restrictions.[38] Similarly, active institutional equity ownership imports tighter covenants.[39] All of these results are intuitive, for each ties covenant incidence to a situation implicating a higher agency cost of debt. For example, the negative correlation between entrenchment and constraints on restricted payments makes sense on the assumption that responsiveness to shareholders implies a cash drain in their direction.

Recent work on investment covenants that limit capital expenditures adds considerable detail to the picture. These arguably are the most invasive of all restrictive covenants. Investment policy is the mainspring of shareholder value enhancement and direct constraint of the capital budget could implicate substantial opportunity costs. The covenant accordingly raises policy concerns. Perhaps out-of-control lenders with misaligned incentives are choking economic growth and exploiting shareholders. But a study looking into the matter reports that there is no apparent abuse and even suggests that there are benefits. Capital expenditure covenants show up only in the relational sector and even then in only 32 per cent of bank loan agreements. They tend to apply to borrowers at the low-end of the range of creditworthiness. Their incidence also is highly correlated with changes in credit quality—they tend to come into loan agreements in connection with post-default renegotiations.[40] Restating, capital expenditure covenants show up in the cases where new investment is most likely to involve adverse selection. Moreover, it does not look as if the shareholders get hurt. The introduction of capital

30 C Demiroglu and C M James, 'The Information Content of Bank Loan Covenants' (2010) 23 Review of Financial Studies 1300, 1307, ties usage of financial covenants to borrower risk.

31 M T Billett, T D King and D C Mauer, 'Growth Opportunities and the Choice of Leverage, Debt Maturity, and Covenants' (2007) 62 Journal of Finance 697, 708.

32 ibid.

33 D O Cook, X Fu and T Tang, 'The Effect of Liquidity and Solvency Risk on the Inclusion of Bond Covenants' (2012) Working Paper <http://ssrn.com/abstract=2020804> accessed 16 August 2016.

34 S A Mansi, Y Qi and J K Wald, 'Debt Covenants, Bankruptcy Risk, and Issuance Costs' (2013) Working Paper <http://ssrn.com/abstract=1805038> accessed 16 August 2016.

35 ibid.

36 S Chava, P Kumar and A Warga, 'Managerial Agency and Bond Covenants' (2010) 23 Review of Financial Studies 1121, 1145–46.

37 Other showings are more surprising. X Li, İ Tuna and FP Vasvari, 'Corporate Governance and Covenants in Debt Contracts' (2014) Working Paper <http://ssrn.com/abstract=1988272> accessed 16 August 2016, positively associates covenant laxity with the presence of hedge fund activists.

38 S Chava, P Kumar and A Warga (n 36) 1145–46.

39 AB Badawi, 'Covenant Thresholds and the Agency Costs of Debt' (2014) Working Paper <https://bfi.uchicago.edu/research/working-paper/covenant-thresholds-and-agency-costs-debt> accessed 16 August 2016.

40 G Nini, D Smith and A Sufi, 'Creditor Control Rights and Firm Investment Policy' (2009) 92 Journal of Financial Economics 400.

expenditure restrictions at particular companies correlates positively and significantly with increases in market value and return on assets.[41] Finally, in a case where the covenant gets in the way of the business plan, the borrower can initiate a renegotiation. The studies show this tends to succeed where the borrower has better-quality investment opportunities.[42]

There is other evidence of positive effects from covenants. A borrower that holds out bankruptcy risk, once constrained by covenants, is less likely to go bankrupt.[43] The stricter the set of loan covenants, the higher the default recovery rate.[44]

Market segment

The public and private markets are separated by clear regulatory lines. A public bond offering is either registered under the Securities Act of 1933[45] or underwritten pursuant to the Rule 144A registration exemption.[46] The private market breaks into two regulatory subsets. The first is bank lending, which is exempt from 1933 Act registration because no 'securities' are involved, only 'loans.' The second, smaller segment is the private placement market, in which a discrete set of insurance companies, pension funds and asset managers buy privately placed 'notes' from smaller 'issuers.'[47] The notes are securities under the 1933 Act, but their offering and sale are exempted.

Generally speaking, the public market is open to larger, safer firms—firms with higher credit ratings, higher ratios of fixed assets to total assets and higher profitability.[48] Durations are long—the median maturity is ten years.[49] Liquidity is relatively high. Holders are numerous and diversify their portfolios. They rely on public information and do not customarily engage directly with the issuer—issuance is affected through intermediaries.

The private markets are larger—they hold out the largest source of corporate external finance, larger than public debt and equity combined.[50] Face-to-face negotiation is the norm and lenders make substantial, on-going investments in direct acquisition of information about their borrowers. The banks tend to lend to medium credit quality

41 ibid 415–17.

42 DJ Denis and J Wang, 'Debt Covenant Renegotiations and Creditor Control Rights' (2014) 113 Journal of Financial Economics 348, 361–63.

43 ibid.

44 Z Zhang, 'Recovery Rates and Macroeconomic Conditions: The Role of Loan Covenants' (2009) AFA 2010 Atlanta Meetings Paper <http://ssrn.com/abstract=1346163> accessed 16 August 2016.

45 15 U.S.C. ss 77aff. Public issues must be governed by trust indentures conforming to the requirements of the Trust Indenture Act of 1939. 15 U.S.C. ss 77aaaff.

46 17 C.F.R. s 230.144A. A classificatory complication should be noted. Technically, r 144A offerings can be described as private placements, since they are marketed only to 'qualified institutional buyers' and entail resale restrictions. For present purposes they nevertheless are classified on the public side of the line because the set of qualified buyers tends to be the same set of institutions that make up the buy side of the public bond market, buyers who treat their issuers as arm's-length counterparties and make no relational commitments.

47 These financings are not underwritten and rely directly on the 1933 Act's 4(a)(2) exemption rather than on r 144A.

48 D Denis and V Mihov, 'The Choice Among Bank Debt, Non-Bank Private Debt and Public Debt: Evidence from New Corporate Borrowings' (2002) Working Paper 3 <http://ssrn.com/abstract=269129>.

49 ibid 13.

50 See G Gorton and A Winton, 'Financial Intermediation' (2003) 1 Handbook of the Economics of Finance 431.

firms too small to access the public markets,[51] while private placement lenders serve bottom-end borrowers, the weakest, worst rated firms with the highest risk of default. Durations vary with the segment—the median is three years for bank borrowings and 8.2 years in the private placement market.[52]

Even as clear regulatory lines divide the market segments, distinctions become blurred on the business side. Some borrowers and lenders operate in more than one segment. Nothing prevents a public bond issuer from borrowing through a private placement if it finds the terms suitable; a large but risky issuer may have access to the public junk bond market as well as to a bank term loan. Meanwhile, bank loans come in multiple tranches, some of which are funded by the same non-bank institutions that invest in the public bond markets. Some non-bank tranches even trade publicly in an over-the-counter market.

Private markets

A full, tightly drafted set of covenants is the practice norm in both the bank and private placement markets. Bradley and Roberts, reporting on a sample of bank loans closed in 2001, found that 81 per cent contained a dividend covenant, 72 per cent contained a covenant restricting secured borrowing and 94 per cent contained a covenant restricting asset sales.[53] Bank loans, with their shorter durations, tend to be the stricter than private placements. For example, the debt covenant in a bank loan might include a maintenance test where the debt covenant in a private placement would employ an incurrence test. Investment covenants in bank loans to lower-end borrowers might limit capital expenditures where a private placement to a similarly situated borrower would use the traditional formulation. A bank loan might specify a maximum dividend amount where a private placement covenant would feature a builder basket. A bank loan's merger covenant might include a buy-side cap where a private placement covenant would not.

Tight drafting imports an expectation of ongoing flexibility on the lenders' part. Bank loans and private placements tend to involve a small number of lenders able to coordinate renegotiation of the contract terms with the borrower in the event of a covenant default. Indeed, renegotiation is expected. More than 90 per cent of bank loans are renegotiated before maturity.

Renegotiation does not necessarily presuppose default or near default.[54] It also follows from positive changes in borrower creditworthiness or economic conditions; given good news, changes can be borrower favourable.[55] Indeed, renegotiations of bank loans are borrower-favourable most of the time. Threatened or actual covenant violations trigger

51 ibid 3–4.

52 ibid 13.

53 Bradley and Roberts (n 26) Table II.

54 M Roberts, 'The Role of Dynamic Renegotiation and Asymmetric Information in Financial Contracting' (2010) NBER Working Paper W20484 <http://ssrn.com/abstract=1732364> accessed 16 August 2016, finds that only 28% of bank loan renegotiations commence due to an actual or threatened default.

55 M Roberts and A Sufi, 'Renegotiation of Financial Contracts: Evidence from Private Credit Agreements' (2009) 93 Journal of Financial Economics 159. For empirical studies of negotiations in the wake of early earning default, see M Beneish and E Press, 'Costs of Technical Violation of Accounting-Based Debt Covenants' (1993) 68 Accounting Review 233; K Chen and K Wei, 'Creditors' Decisions to Waive Violations of Accounting-Based Debt Covenants' (1993) 68 Accounting Review 218.

renegotiation in only 28 per cent of the cases, according to one study.[56] The more likely renegotiation trigger is new information regarding the borrower's credit quality and investment opportunities or an upward shift of macroeconomic conditions more generally. The result will be a change in financial terms—interest rate, amount outstanding, or duration.[57] Only 15 per cent; of contracts are renegotiated so as to tighten the original covenants and only 18 per cent result in a decrease in the amount of the loan.[58]

Financial covenants bear special mention here. They are drafted in contemplation of subsequent renegotiation[59] and therefore tend to go together with relational lending, showing up in bank loans and private placements but only rarely[60] appearing in underwritten bonds.[61]

Significantly, financial covenants are not invariant incidents of bank lending. Their appearance depends on the contracting environment and the tranche. Their omission is the hallmark of the so-called 'covenant lite' or 'cov-lite' bank financing.[62] Cov-lite loans resemble junk bonds, containing restrictive covenants but no maintenance tests. They appeared in quantity during the private equity boom of 2003–2007, disappeared during the financial crisis and returned after 2010 as the so-called 'leveraged loan' market recovered. Leveraged loans are bank loans to below-investment grade issuers, and, in 2014, 60 per cent of leveraged loans were cov-lite.[63] Leveraged loans tend to include junior tranches sold to non-bank lenders like mutual funds and hedge funds, and to securitized pools of bank loans called collateralized loan obligations. The non-bank tranches hold out longer maturities and higher yields and are publicly traded. Public trading reinforces resistance to covenants. Indeed, given cov-lite terms, there is an increasing convergence between the bank-driven leveraged loan market and the high-yield bond market.

Public markets

Even though the contracts governing bonds issued in the public markets build in a collective enforcement structure—securities are issued pursuant to trust indentures and

56 Roberts (n 54) 16.

57 Roberts and Sufi (n 55) [2–4].

58 ibid [16].

59 In bank loans, maintenance tests are synchronized with performance payment terms. These set forth ratios that improve on the condition of the borrower at the time of loan origination. As the borrower improves its financial position and passes a test, the interest rate on the loan declines. Contrariwise, if the borrower's financial position deteriorates, a maintenance test is violated. Performance payment terms also can work in the opposite direction where a better quality borrower negotiates for looser ratios; if its condition deteriorates without triggering a default, the interest rate goes up. See F Tung, 'Leverage in the Boardroom: The Unsung Influence of Private Lenders' (2009–2010) 57 California Law Review 115, 148–49 fn 154.

60 M T Billett, T D King and D C Mauer, 'Growth Opportunities and the Choice of Leverage, Debt Maturity, and Covenants' (2007) 62 Journal of Finance 697, 707, Table III, finds that financial covenants triggered by net worth tests or rating downgrades appear in 4.1% of a large sample of bonds issued between 1985 and 2003.

61 One study of a large sample of bank loans found that an average of three financial covenants per loan agreement, with debt to EBITDA the most the popular, appearing in 54.8% of the contracts. C Demiroglu and C M James, 'The Information Content of Bank Loan Covenants' (2010) 23 Review of Financial Studies 1300, 1307 (studying 7,237 loans from 1995 to 2001).

62 Cov-lite loans tend also to include a 'PIK-Toggle' option in the borrower to omit cash coupon payments, instead rolling the amount over into principal due at the maturity date.

63 See K Bhanot, A S Mello and R Li, 'Pay Now or Later: Financial Flexibility and Security Design' (2014) Working Paper <http://ssrn.com/abstract=2248113> accessed 16 August 2016.

the holders are represented by a trustee—negotiation in the event of default is cumbersome and no norm of cooperation restrains the holders. This implies looser covenants:[64] constraints are both less pervasive and less tightly drafted in the public markets, going from minimal in the case of an investment grade issuer to cognizable but still limited in the case of a non-investment grade ('junk') bond issuer. Financial covenants will be absent, and restrictive covenants will employ incurrence rather than maintenance tests. A negative pledge may be employed in place of an outright prohibition on prior claims. A prepackaged 'fall away' term substitutes for renegotiation in the event of borrower prosperity.

Covenant incidence in the investment grade sector of the public bond markets varies over time. For most of the twentieth century the norm was substantial covenant protection, if not the full set of covenants then a partial set containing a debt covenant. Smith and Warner's survey of 87 bonds issued between 1974 and 1975 showed that 90.8 per cent contained debt covenants, 23 per cent contained dividend covenants, 39.1 per cent restricted mergers and 35.6 per cent restricted asset sales.[65]

The practice changed in the late 1970s when managers of top rated issuers successfully resisted debt covenants as unnecessary constraints. When McDaniel surveyed the debt contracts of Fortune's 100 largest industrials in 1984, he found that only negative pledge and sale-leaseback covenants were ubiquitous. Of the 92 companies reported as having one or more senior issues, one or more subordinated issues, or both, only 28 per cent of the issues contained debt covenants. Of the newer issues, only 16 per cent contained a debt covenant. Dividend restrictions appeared in 35 per cent of the issues, but in only 20 per cent of the newer issues.[66]

Why did the bondholders make this concession? Before the leveraged restructurings of the 1980s, big-cap company borrowing was thought to be a low agency cost proposition. Bondholders and managers were thought to hold significant interests in common. Management wanted steady growth and security—goals best realized with conservative leverage and retained earnings financing. According to the conventional wisdom at the time, any opportunistic conduct detrimental to the bondholder interest would lead lenders in future financings to impose unfavourable terms, the costs of which would outweigh the benefits of any present wealth transfers.[67] Other factors also contributed. Actors in the bond market perceived a shift in supply and demand and remarked on a shift from 'sold' to 'bought' deals. As more money looked for investment grade issues, the issuers seized the resulting bargaining advantage and took the opportunity to loosen constraints. Changes in

64 See Smith and Warner (n 14) 150–52.

65 ibid, 123. See M McDaniel, 'Bondholders and Corporate Governance' (1986) 41 Business Lawyer 413, 425–26. Malitz surveyed all long-term senior non-convertible debentures issued between 1960 and 1980 and described in Moody's Bond Survey or Moody's Industrial Manual. Of these, 49% contained no debt covenant. Malitz found a negative correlation between the presence of debt covenants and the size of the issuer. See I Malitz, 'On Financial Contracting: The Determinants of Bond Covenants' (Summer 1986) Financial Management 18, 21–24.

66 McDaniel (n 65) 236–38.

67 R Taggart, 'The Growth of the "Junk" Bond Market and its Role in Financing Takeovers' in A Auerbach (ed), *Mergers and Acquisitions* (University of Chicago Press, 1988) 5, 19.

holding patterns certainly also contributed. Individuals disappeared from the market to be replaced by institutional holders with diversified portfolios. Interest rate shocks and deregulation in the 1970s and 1980s turned the institutions into more active portfolio managers. Bond trading markets grew and thickened. An earlier conservative pattern, under which the lender expected to hold the bonds to maturity and both parties linked the loan's maturity to the lifetime of a capital investment made by the borrower, no longer invariably shaped the terms of transactions.[68]

The pattern persists, with a slight tendency towards increased covenant protection since the late 1980s.[69] Billett, King and Mauer collected a large sample of public bonds issued during the period 1985 to 2003. Covenants incidences are as follows for investment grade (non-investment grade) bond contracts: merger 61.8 per cent (67.1 per cent); negative pledge 50 per cent (39.8 per cent); debt 17.5 per cent (45 per cent); restricted payment 12.1 per cent (43.5 per cent); sale-leaseback 35 per cent (23.5 per cent); subsidiary stock 3.6 per cent (32.7 per cent); investment 2.3 per cent (6.1 per cent). As would be expected, incidence is highly correlated with creditworthiness.

Questions

The intuitive picture tying covenant incidence to creditworthiness and the feasibility of renegotiation leaves open some puzzles. One might expect a much tighter association between covenant intensity and creditworthiness, however measured. And how is it that many bond issues lack basic and unobtrusive protections like successor obligor clauses?[70] Why is coverage less than full even in bank loan agreements? It would seem that more factors come to bear on the contents of debt contracts than the basic economic tradeoff between discretion to run the business and the agency costs of debt. Economic researchers are beginning to explore this territory. It seems that that bond covenants are sticky. The restrictiveness of the covenants in a company's earlier bond issues is an important determinant of restrictiveness in a subsequent issue, surpassing both agency costs and information asymmetries.[71] Banker–borrower relationships, with their base of informational investment, are sticky also. Finally, banks tighten covenants in new deals in response to recent defaults within their own portfolios, apparently reassessing their own credit judgements. Less creditworthy borrowers do not find it cost-effective to switch credit-providers in response.[72]

5. Payment trigger provisions

Covenant enforcement by default declaration and relational covenant renegotiation sometimes lead to the same end point. Compare a covenant default that leads to

68 J Van Horne, *Financial Management and Policy* (6th edn, Englewood Cliffs, Prentice Hall 1983) 507–09, 513–15.

69 M T Billett, T D King and D C Mauer, 'Growth Opportunities and the Choice of Leverage, Debt Maturity, and Covenants' (2007) 62 Journal of Finance 697, 708.

70 One suspects that the data bases have their failings as they record the contents of debt contracts.

71 G De Franco and others, 'Similarity in Bond Covenants' (2016) Rotman School of Management Working Paper No 2288723 36-37 <http://ssrn.com/abstract=2288723> accessed 16 August 2016.

72 J Murfin, 'The Supply-Side Determinants of Loan Contract Strictness,' (2012) 67 Journal of Finance 1565.

acceleration and a present duty to repay the principal amount outstanding with a covenant default that leads to renegotiation and a voluntary prepayment from the borrower of a part of the amount outstanding in exchange for a waiver and a revision of the contract. In both cases, principal comes due in advance of the maturity date set in the contract. Debt contracts also provide for prepayments in the absence of default, on a required schedule ('sinking fund' payments) or at the borrower's option ('redemption' or 'call').

Principal prepayments contingent on specified borrower actions also appear in debt contracts, often covering the same territory as restrictive covenants. Such provisions have a hybrid aspect—like negative covenants, they target actions that injure the lender's interests; like optional prepayments, they give the borrower the choice to make an early principal payment. The operative promise is not only affirmative but high-impact—the borrower promises to pay down all or part of the outstanding principal amount on the occurrence of a stated condition. The condition may or may not be a business decision within the borrower's control. When it is, the operation of the business is directly implicated. Lender control, however, remains indirect, for the borrower still does the choosing. Indeed, the provision's impact differs little from that of a negative covenant the default of which triggers an acceleration right.

Sweeps

In the classic picture of corporate bank lending, a term loan follows up on a revolving credit agreement. The revolver has a short-term duration; the borrower draws down funds and repays during the term in accordance with its cash flow requirements. At the end of the term, the borrower has an option to roll the outstanding principal amount over into a five- to seven-year term loan, with the principal and interest payments being meshed onto an amortization schedule.[73] The classic picture persists, but as a part of a varied practice. Term lending, particularly as regards shorter durations, now incorporates features that tie principal amounts and principal payments to the borrower's going concern results. If the borrower performs better than anticipated, the loan is paid down more quickly with the excess proceeds. The loan agreement defines 'excess cash flow' in terms of either EDITBA or net income and requires that a stated percentage of the excess be directed to principal repayment at the end of each year. Governing definitions and exceptions will be heavily negotiated.

Such a contingent prepayment term is called a 'sweep'. Unanticipated equity financing can trigger the term as well as unanticipated earnings. Hypothesize a smaller borrower which does not regularly issue additional common stock. The borrower unexpectedly does a public equity offering. From the lender's point of view, the offering's proceeds functionally replace the principal amount of the loan in the borrower's capital structure. Under an 'equity sweep', a negotiated percentage of the offering proceeds must be

73 See R Wight, *The LSTA's Complete Credit Agreement Guide* (McGraw Hill, 2009).

diverted into a loan prepayment. The provision signals that both the bank and the borrower see the loan as an interim feature of the borrower's capital structure.

Sweeps can also perform a more conventional agency cost control function, protecting against claim dilution and asset substitution. A borrowing or asset sale that otherwise might be flatly prohibited instead triggers a duty to pay down all or part of the loan.[74] The magnitude of the triggering event is tied to a percentage of the loan to be paid down—for example, an asset sale exceeding a stated amount or percentage of net assets might trigger a duty to pay down 50 per cent of the loan.

Sweeps assumed a prominent role in the structure of bank loan contracting in the 1990s. Bradley and Roberts report their rise with a comparative review of loan agreements in 1993 and 2001. In 1993, 32 per cent of the contracts contained an asset sweep; in 2003 the inclusion percentage was 93 per cent; the incidence of debt sweeps went from 18 per cent to 81 per cent and of equity sweeps from 25 per cent to 75 per cent.[75] Recent reports from practice note a trend toward diminished strictness, manifested in higher trigger thresholds and negotiated exclusions. Some loans to large borrowers omit the excess cash flow sweep entirely.[76]

Poison puts

In a textbook 'going private' transaction, a private equity fund joins with the top managers of a publicly traded company (the 'target') to borrow funds to purchase the target from its shareholders at a premium over the market price of the stock. Critically, the target's own assets provide the borrowing base. The means to the end is a merger of the target into a shell corporation organized by the fund. The merger pays the target shareholders cash, with the loans providing the cash closing simultaneously with the merger, so that the surviving entity serving as the obligor on the loans possesses the target's assets. The target emerges privately held and highly levered.

Given a full set of covenants, the massive borrowing needed to take out the common stockholders likely violates the debt covenant. A merger covenant conditioned the existence of room to borrow under the debt covenant *ex post* the closing of the merger independently blocks the deal. Closing the deal accordingly means prepaying all covenant-protected loans.

But, as we have seen, debt covenants disappeared from trust indentures governing investment-grade bonds during the 1970s. Unfortunately for the bondholders, low and medium leverage capital structures became high leverage capital structures overnight when the first private equity wave rose during the 1980s in tandem with the bust-up hostile tender offer. The bondholders were without protection.[77] Upon announcement of a going private transaction or hostile tender offer, the target's stock jumped up while its

74 Bradley and Roberts (n 26) 11.

75 ibid 9–11, Table 1.

76 Practical Law Finance, 'What's Market: 2014 Year-end Trends in Large Cap and Middle Market Loan Terms' (2015) <https://a.next.westlaw.com>.

77 The courts foreclosed an implied in law contractual remedy in *Metropolitan Life Insurance Co. v RJR Nabisco, Inc.*, 716 F. Supp. 1504 (SDNY 1989).

bond prices dropped, with rating downgrades soon following.[78] What had looked like an independent and diversifiable source of risk became a systematic risk for investment grade portfolios. Rating-agencies began to evaluate restructuring risk, termed 'event risk', with downgrades becoming common for firms deemed vulnerable.

Bondholders demanded a return to protection. They got it by the end of the 1980s, but not as reversion to the full set of covenants. Drafters devised 'poison puts' or 'event risk provisions'. The protection came from a right to put the bonds back to the issuer at par, or in a minority of instances, from a right to an upward interest rate adjustment tied to a change in credit rating. The right, whether a put or a rate adjustment, was triggered by defined events, generally mergers and acquisitions (including management buyouts), a shift of the board majority to directors elected or appointed without the incumbents' consent, and downward rate adjustments to below investment grade. At first, a 'dual trigger' provision appeared most frequently. Under this, the combination of a defined takeover-related event and a fall in the bonds' rating triggered the put. Today's poison puts omit the trigger tied to rating downgrades.

The drafting mode—an affirmative right to resell the bond to the issuer as opposed to a conventional negative covenant—suited the circumstances. A borrower does not necessarily possess the power to prevent a threatened change of control. A covenant thus could be violated unintentionally, with the possible perverse effect of triggering cross defaults on unprotected bonds, bootstrapping their holders and potentially putting the borrower into financial distress. A 'put' was not a 'default' within the meaning of cross-default clauses as then drafted.[79] At the same time, the put's triggers isolate a discrete set of events, all related to changes of control, rather than all mergers and all borrowing. Finally, in a case where a change of control does not impair the borrower's creditworthiness, the put mode holds out the possibility that most of the debt remains outstanding, for the prepayment option vests in the holders.

By 1990, poison put provisions appeared in 40 per cent of new investment grade bonds. Usage thereafter fell off, along with the incidence of high leverage restructuring. Bond buyers faced a choice between protection and yield.[80] Over time, they more and more opted for yield, so that by the mid-1990s, the clauses appeared in around 25 per cent of new bond contracts, with their incidence heavily concentrated in the non-investment grade segment of the market.[81] Poison puts made a notable return after 2000,

78 See W Bratton, 'Corporate Debt Relationships: Legal Theory in a Time of Restructuring' (1989) 1989 Duke Law Journal 92, 94. Aggregate data show an average announcement period loss of 6% to 7% of bond value in the wake of a leveraged buyout. A Warga and I Welch, 'Bondholder Losses in Leveraged Buyouts' (1993) 6 Review of Financial Studies 959.

79 Today, a well-drafted cross-default clause will pick up the triggering of a put. See W Bratton, *Corporate Finance: Cases and Materials* (7th edn, Foundation Press 2012) A-138.

80 See M Kahan and M Klausner, 'Anti-Takeover Provisions in Bonds: Bondholder Protection or Management Retrenchment?' (1993) 40 UCLA Law Review 931. Around 1990, inclusion lowered the average bond yield by 24 basis points. L Crabbe, 'Event Risk: An Analysis of Losses to Bondholders and ''Super Poison Put'' Bond Covenants' (1991) 46 Journal of Finance 689. The price effect grew in magnitude as the bond rating declined—for a Baa bond the spread was 65.7 basis points. S Bae and D Klein, 'Further Evidence on Corporate Bonds with Event-Risk Covenants: Inferences from Standard and Poor's and Moody's Bond Ratings' (1997) 37 Quarterly Review of Economics and Finance 709, 720.

81 Nash, Netter and Poulsen (n 21) 224, fn 12.

coincident with the rise of the second private equity wave. This time the trade-off favours protection: a study of bonds issued from 1993 to 2007 finds that 60 per cent of investment grade bonds and 88.7 per cent of non-investment grade bonds contained poison puts.[82]

Poison puts recently again become newsworthy due to an unexpected intersection with hedge fund activist engagement. Poison put triggers are drafted pursuant to the poison pill template, and so include control challenges by successful proxy contestants seeking a majority of board seats. Managers fighting off hedge fund proxy contestants have threatened to pull the put trigger only to find themselves unsuccessfully defending shareholder lawsuits in the Delaware courts.[83] The cases tie the put's validity to a corporate law evaluation of the 'threat' posed by the activist. It is as yet unclear whether the operative notion of 'threat' includes an activist challenge implicating a significant impairment of the lender's interest, such as a large shareholder payout or a material step up in leverage. The framework of Delaware law, which excludes reference to lender interests in control transfer situations, suggests an answer in the negative.

6. Conclusion

Recent commentary[84] problematizes business covenants, pointing out that lender empowerment traverses the norm of shareholder value maximization and highlighting potential incentive incompatibility. This article's institutional review shows that while these questions certainly need to be asked, the answers are consistently confirmatory. Debt contracting accommodates the interests of differently and incompatibly incentivized actors, trading off reductions in the agency costs of debt against constraints on the equity's power to run the business. While the review herein provides no basis for a strong assertion that an 'optimal' trade-off has been affected in practice, this article's picture of context sensitive contracting strongly suggests that the system works well.

82 Chava, Kumar and Warga (n 36) 1129, Table 2.

83 See *Kallick v Sandridge Energy, Inc.*, 68 A.3d 242 (Del Ch 2013); *San Antonio Fire & Police Pension Fund v Amylin Pharmaceuticals*, 983 A.2d 304 (Del Ch 2009).

84 See D Baird and R Rasmussen, 'Private Debt and the Missing Lever of Corporate Governance (2006) 154 University of Pennsylvania Law Review 1209; Tung (n 59); Lipson (n 10).