

# Debt Contract Terms and Creditor Control

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## Abstract

The law and finance literature characterizes debt covenants as a mechanism that helps to manage agency conflicts between creditors and shareholders. While both banks and bond holders make use of these covenants, they do so in quite different ways. Banks typically monitor their debtors closely and rely on financial maintenance covenants to protect their interests. When these covenants get triggered, banks can use the leverage of accelerating the loan to achieve their governance goals. This ability to monitor and renegotiate suggests that tailoring precise ex ante contract restrictions is not of paramount importance because a bank and a debtor can negotiate around those restrictions based on ex post contract conditions. Bond holders, in contrast, generally do not monitor and renegotiate with their debtors because these bond holders tend to be large groups of passive investors who face substantial collective action problems. As a consequence, ex ante restrictive terms in the contract are likely to be the primary means through which bondholders can address potential conflicts with shareholders. These differences in contracting technologies suggest that the restrictions in bond contracts are more likely to be responsive to changes in background legal rules. This paper tests this theory by treating two Delaware decisions that sharply limited the default duties that the directors of Delaware corporations owe to their creditors as a shock to Delaware debt contract terms. Difference-in-difference and triple difference tests suggest that restrictive terms in bond contracts reacted strongly to this change, while there was not a detectable shift in loan agreements.

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# 1 Introduction

Covenants in debt contracts have long been described as a mechanism to manage agency conflicts between debt holders and equity holders (Jensen and Meckling, 1976). These covenants accomplish this goal by limiting the ability of debtors to engage in excessive risk taking, dividend payouts, claim dilution, and other actions that can harm the interests of creditors. But different types of creditors go about limiting the agency costs of debt in quite different ways. As a wave of recent research shows, banks manage much of this agency conflict through the use of financial maintenance covenants (Baird and Rasmussen, 2006; Chava and Roberts, 2008; Nini et al., 2012). These covenants allow banks to accelerate the entire amount of the loan if a financial metric—such as the firm’s net worth—falls below the level specified in the loan agreement. Loan contracts typically set these covenants tightly, meaning they are set at levels that are close to those present at the time of loan origination. This practice ensures that maintenance covenants will get triggered by even moderate financial distress (Christensen and Nikolaev, 2012). When circumstances trigger these covenants, banks rarely actually accelerate the debt. Instead, they typically renegotiate with debtors and, through that process, are able to limit actions that favor equity (Nini et al., 2009).

This sort of monitoring and renegotiation is much more difficult for most bond creditors. Their diffuse and largely passive nature makes it difficult to engage in the monitoring and renegotiation that are necessary to use financial maintenance covenants as an effective mechanism to constrain the agency costs of debt (Kwan and Carleton, 2010). Moreover, the Trust Indenture Act requires unanimous consent from bondholders for many potential modifications to bond indentures (Amihud et al., 1999).<sup>1</sup> As a consequence of these substantial impediments to renegotiation, covenants that place direct limitations on actions that favor equity play an especially important role in the context of bonds. Absent these restrictions,

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<sup>1</sup>The unanimous consent requirement is not as daunting a requirement as it may seem. Parties can get around this barrier, to some degree, by using an exchange offer to structure a workout. This approach, however, allows for holdouts, which introduces another impediment to renegotiation Gertner and Scharfstein (1991).

bond holders have little power to deter shareholder payouts, risk taking, claim dilution, and other actions that can harm their interests.

The difference in these contracting technologies is likely to have consequences for the evolution of contract terms that restrict debtors from taking actions that harm creditor interests. For banks, fine tuning these ex ante restrictions is relatively inconsequential because of their ability to renegotiate contracts. Investments in the drafting and negotiation of ex ante restrictions are thus unlikely to provide much of a payoff. This calculus is different for bond indentures. If these agreements do not include express restrictions, bondholders will have little recourse if the bond issuer wants to take an action that favors equity at the expense of debt. This difference suggests that bond holders are likely to get a larger return from ex ante investments in these types of restrictions. It follows that bond contracts should react more strongly to changes in the background legal rules that affect their rights against debtors.

To test this hypothesis, this article treats two Delaware cases from 2006 as an exogenous shock to the ability of creditors to recover damages for decisions made by directors when corporations are, or are nearly, insolvent. These two cases—decided within weeks each other—both limited the ability of creditors to recover damages from directors for taking creditor-adverse actions. The first of these cases, *Trenwick America Litigation Trust v. Ernst Young, L.L.P.*<sup>2</sup>, declined to recognize deepening insolvency as a cause of action. This claim would allow a creditor to assert that actions taken by the directors while a corporation was insolvent rendered the financial condition of the corporation even worse. Two federal courts, the Third Circuit Court of Appeals—which includes Delaware—and the Bankruptcy Court for the District of Delaware had recently recognized deepening insolvency as a theory of liability. Some commentators believed the the Delaware Court of Chancery would follow suit (*Zelmanovitz and Baribeau, 2006*). The *Trenwick* decision was therefore something of a surprise to legal practitioners.

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<sup>2</sup>902 A.2d 168 (Del. Ch. August 10, 2006)

The second decision, *North American Educational Programming Foundation, Inc. v. Gheewalla*<sup>3</sup> similarly limited the default rights of the creditors of Delaware corporations. That decision foreclosed the possibility that creditors could assert a direct claim against directors for breach of fiduciary duty and also eliminated the possibility that creditors could bring any fiduciary duty claim while in the “zone of insolvency.” After *Gheewalla*, the only viable fiduciary duty claim for creditors of a Delaware corporation was a derivative claim once the corporation had actually become insolvent. This decision reversed course from *Credit Lyonnais Bank Nederland, N.V. v. Pathe Communications Corp.*,<sup>4</sup> which suggested that creditors could assert direct claims while in the zone of insolvency.

The limitations that *Trenwick* and *Gheewalla* placed on the ability of creditors to sue debtors who are in or approaching insolvency are likely to have affected how creditors governed their relationships with those debtors. Prior to these cases, creditors may have been able to deter actions that would benefit equity at their expense by threatening to sue for violation of a fiduciary duty or for deepening insolvency. After these cases, creditors would need to increase the overall restrictiveness of the covenants in their debt agreements to makeup for this lost deterrence. This deterrence benefit must, however, be traded off against the cost of tailoring these terms to prospective debtors and then negotiating those terms. For banks, that benefit is likely to be minimal because they can use their ability to monitor and renegotiate with debtors to keep them from taking actions that conflict their interests. Given this small gain, there is little point in bearing the costs of developing a well-tailored package of ex ante restrictions. For bondholders, however, the diminished scope of ex post litigation rights may create real risks because they cannot use maintenance covenant-based governance to influence creditors. In that case, the cost of negotiating a restriction may be worth the gain in deterrence. This difference suggests that bond contracts for Delaware creditors are likely to be more restrictive than loan agreements everywhere as well as bond contracts for non-Delaware firms.

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<sup>3</sup>2006 WL 2588971 (Del. Ch., Sep. 1, 2006), affirmed, 930 A.2d 92 (2007).

<sup>4</sup>1991 WL 277613 (Nov. 6, 1991).

The evidence is broadly consistent with this expectation. There is no statistically detectable increase in the restrictiveness of loan contracts for Delaware and non-Delaware firms in the periods before and after these cases (referred to subsequently as pre and post-Gheewalla, for convenience). There is, however, evidence of increased restrictiveness in the bond contracts entered into by Delaware firms relative to non-Delaware firms during the post-Gheewalla period. As one would expect, the results are particularly strong for those debtors who are in poor financial health. This evidence suggests that the substantial differences in the way banks and bondholders govern their relationships with debtors is borne out in the content of their contracts.

This paper continues as follows. Part II reviews the legal landscape. This part also details the pre and post-Gheewalla understandings of creditors' default legal rights and documents the reactions of commentators to Trenwick and Gheewalla. Part III develops the theory of how different types of creditors are likely to react to the diminishment of their default legal rights and use this theory to generate hypotheses. Part IV begins with a description of the dataset, which is drawn from Dealscan, the Fixed Income Security Database (FISD), and Compustat. This section continues with a basic statistical overview of pre and post-Gheewalla contract terms. This part then employs difference-in-difference and triple difference designs to test whether Gheewalla had an effect on the content of debt contracts. The evidence broadly supports the hypothesis that bond contracts respond more directly to changes in the background legal environment. Part V discusses the results of some robustness checks and explores some other modeling concerns. Part VI concludes and Appendix A provides variable definitions.

## 2 Legal Background

The directors of a corporation owe fiduciary duties to shareholders. In good times, these duties are synonymous with maximizing the value of the firm. Once a firm is insolvent, how-

ever, those duties to maximize firm value run to creditors because there is no residual value left for shareholders (Baird and Henderson, 2008). These principles are quite uncontroversial in corporate law. Courts have struggled, however, to determine whether directors should be held to a stricter legal standard when a firm is insolvent and have had difficulty articulating to whom directors owe fiduciary duties as a firm approaches insolvency. In Delaware, the state of incorporation for over half of the public companies in the United States, there were open questions about both these issues until 2006. This section reviews the case law before and after Delaware courts resolved both questions and then documents the corporate legal community's reaction to these changes.

## 2.1 Deepening Insolvency

The claim of deepening insolvency alleges that directors further encumbered the assets of the corporation rather than filing for bankruptcy at a point when it would have maximized the value of the estate for creditors. Before the Delaware Chancery Court torpedoed this theory in *Trenwick*, this claim had gained some traction in other courts. The Third Circuit Court of Appeals—which includes Delaware, New Jersey, and Pennsylvania—endorsed deepening insolvency as an independent cause of action in *Official Comm. of Unsec. Creditors v. Lafferty*.<sup>5</sup> Because a claim for deepening insolvency, like most corporate law issues, is a matter of state law, the *Lafferty* court had to determine how the Pennsylvania Supreme Court would resolve the issue. That court determined that the claim would be allowed, although the court dismissed the case because the plaintiffs did not have standing to press it.

While *Lafferty* did not speak directly to Delaware law, two years after that case, the Bankruptcy Court for the District of Delaware was asked to determine whether the Supreme Court of Delaware was likely to recognize a claim for deepening insolvency. In that case—*In re Exide Technologies, Inc.*<sup>6</sup>—the bankruptcy court, relying in part on *Lafferty*, concluded

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<sup>5</sup>267 F.3d 340 (3d Cir. 2001).

<sup>6</sup>299 B.R. 732 (Bankr. D. Del. 2003).

that “that Delaware Supreme Court would recognize a claim for deepening insolvency when there has been damage to corporate property.”<sup>7</sup> Corporate law commentators recognized the importance of the decision relatively quickly. As one contemporaneous practice article explained, the claim imposes liability when mismanagement or misrepresentations lead to the extension of “credit that the company is unlikely to repay in full.”<sup>8</sup> As a consequence, “creditor recoveries are diluted as additional claims accumulate, and assets available to satisfy claims are depleted.”<sup>9</sup>

In 2006, the need to speculate about Delaware ceased because a Delaware court actually decided the issue. The *Trenwick* case involved a litigation trust that had formed in the wake of a bankruptcy. That trust sued the former directors of *Trenwick* and alleged, among other claims, that the directors of a subsidiary of the bankrupt company committed the tort of deepening insolvency. They allegedly did so by taking on additional debt at a point when they knew it would not be paid back. Although he recognized that the claim had gained traction in other courts, then Vice-Chancellor Strine was not sympathetic to the concept.

Strine’s primary objection to deepening insolvency was its conflict with the business judgment rule. Broadly speaking, that rule insulates directors from liability for diligent decisions made in good faith. Strine took exception to the possibility that deepening insolvency would impose liability for negligent decisions by directors even when they believed, in good faith, that taking on more debt would benefit the firm. He found no reason that insolvency should alter this fundamental rule. Or, as he tartly put it, “‘deepening insolvency’ is no more of a cause of action when a firm is insolvent than a cause of action for ‘shallowing profitability’ would be when a firm is solvent.”<sup>10</sup> Instead, parties should rely on existing causes of action for “breach of fiduciary duty ... fraud, fraudulent conveyance, and breach of contract” when

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<sup>7</sup>Id. at 752.

<sup>8</sup>American Bankruptcy Institute 6th Annual City Bankruptcy Conference May 17, 2004, *Muddy Waters: Wading Through Deepening Insolvency, Aiding and Abetting Liability, Expanded Duties in the Zone*, Philip D. Anker, Thomas W. White, Knight Elsberry, Wilmer Cutler Pickering LLP.

<sup>9</sup>Id.

<sup>10</sup>Id. at 174.

they “seek to challenge the actions of boards of insolvent corporations.”<sup>11</sup> The Delaware Supreme Court subsequently affirmed the opinion the following year in a brief order.<sup>12</sup>

## 2.2 Fiduciary Duties as Insolvency Approaches

Delaware courts had spoken more directly to director fiduciary duties near insolvency than they had about deepening insolvency. Prior to 1991, the view was that directors owed no, or at least very few, obligations to creditors prior to a firm reaching insolvency. In 1991, Chancellor Allen, a widely respected Delaware jurist, suggested otherwise in the *Credit Lyonnais* case. In a relatively famous footnote, he explained that it was possible for creditors to have a direct claim against directors for actions taken by those directors when the firm is in the “the zone of insolvency.”<sup>13</sup> This statement was dicta in the sense that it was not necessary to the outcome of the case. Nevertheless, commentators viewed this statement as a shift in the law of fiduciary duties. Moreover, there is evidence that this legal shift affected the value, behavior, and subsequent contracts of Delaware firms that were in financial distress (Becker and Strömberg, 2012).

This understanding of fiduciary duties endured for a little over a decade before some Delaware opinions began to call the *Credit Lyonnais* footnote into doubt. In 2004, then-Vice Chancellor Strine issued an opinion suggesting—again in dicta—that creditor rights may be more limited in scope than *Credit Lyonnais* implied.<sup>14</sup> Strine argued that because creditors can directly negotiate contracts with debtors and can assert fraudulent conveyance claims in bankruptcy, there may not be much need to use fiduciary duties to protect creditor interests. Despite this doubt, the opinion’s holding is narrow. The court held only that the creditor could not assert its desired direct claim while the firm was in the zone of insolvency. Strine makes clear that this is not a blanket rule—he notes that there are still some circumstances that might permit a direct claim in the zone of insolvency.

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<sup>11</sup>Id.

<sup>12</sup>931 A.2d 438 (2007).

<sup>13</sup>*Credit Lyonnais* at 1155 n.55.

<sup>14</sup>*Production Resources Group, L.L.C. v. NCT Group, Inc.*, 863 A.2d 772 (Del. Ch., 2004).



Neither Credit Lyonnais nor Production Resources provide the precise contours of the fiduciary obligations owed to creditors. This changed on September 1, 2006 when the Chancery Court issued its opinion in Gheewalla. The plaintiff creditors sought to hold the directors of the corporation liable for actions they took as the firm approached bankruptcy. After reviewing this line of precedent, the court resolved the case by holding that creditors may not ever assert a direct claim against directors for violation of fiduciary duties when the firm is in the zone of insolvency.

On appeal, the Delaware Supreme Court affirmed the opinion and further limited the claims that creditors may assert. The Court made clear that no fiduciary claims of any sort could be asserted by creditors when a firm was in the “zone of insolvency.” Rather the firm had to be actually insolvent before creditors could bring this type of claim. The Court also held that at no point could creditors bring a direct claim against the directors of corporation, even if the corporation were insolvent. With this holding, the Court removed any doubt about the viability of Credit Lyonnais’s footnote, eliminated the suggestion in Production Resources that a creditor might be able to bring a direct claim before or after a debtor reaches the point of insolvency, and resolved the ambiguity in the trial court’s opinion regarding the ability to bring direct claims against creditors when the firm had reached actual of insolvency.

## **2.3 Cumulative Impact of Trenwick and Gheewalla**

Together, Trenwick and Gheewalla sent a distinct message to creditors: Delaware courts will do very little for you beyond enforcing your agreements. Practitioners noticed the import of both these cases almost immediately.<sup>15</sup> Lawyers and courts also made quick use of the cases in ongoing proceedings. Several motions in bankruptcy cases cited the holding and

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<sup>15</sup>See Shearman & Sterling’s Bankruptcy and Reorganization Quarterly Newsletter from Fall 2006 available at <http://www.shearman.com> (“[The Gheewalla decision] will limit the direct causes of action creditors can bring against directors of troubled companies for breach of fiduciary duty.”; Jo Ann Brighton, The Trenwick Decision the Death Knell for Deepening Insolvency?, American Bankruptcy Institute Journal (October 1, 2006).

claimed that it justified the dismissal of fiduciary claims against directors by creditors.<sup>16</sup>

At the very least, these two opinions resolved ambiguities about the extent to which creditors could rely on default rules to police the behavior of debtors. On a more aggressive view, the cases represented a substantial limitation of creditor default rights. Whatever the precise characterization, the sophisticated current and future creditors of Delaware corporations likely had an increased awareness after *Trenwick* and *Gheewalla* that, in the absence of contractual protections, they had few legal options to protect their interests.

### 3 Theory and Hypothesis Development

The question of interest in this paper is how different types of creditors responded to the changes in the legal environment created by *Trenwick* and *Gheewalla*. Those changes are likely to have affected the governance of the relationships that creditors have with debtors. The commonly assumed goal of these relationships is the maximization of contractual surplus and the minimization of the costs associated with the negotiation and administration of these agreements.

The costs of debt governance have both *ex ante* and *ex post* dimensions.<sup>17</sup> *Ex ante* negotiating costs require identifying and reaching agreement on provisions that protect creditors from the agency cost-related dangers like asset substitution and claim dilution. These provisions include express restrictions on certain actions by the debtor firm, such as dividend payments and share repurchases, as well as requiring the use of proceeds from asset sales and equity issues to pay down existing debt. The *ex post* options include setting maintenance

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<sup>16</sup>Chapter 7 Trustee for the Bankruptcy Estate of Mosaic Data Solutions, Inc., Plaintiff, v. Marc Byron, Ben Kaak, Dominic Ieraci, David Graff and Catherine Barbaro, Defendants., 2006 WL 3886034 (N.D. Ill.) (“To the extent that the Trustee purports to assert direct - as opposed to derivative - claims on behalf of those creditors, under Delaware law no such action exists in the so-called zone of insolvency and, therefore, any such claims must be dismissed out of hand.”) See also Dennis J. Buckley, as Trustee of the Dvi Liquidating Trust, Plaintiff, v. Clifford Chance LLP and Clifford Chance US LLP, Defendants., 2006 WL 5280894 (E.D. Pa.).

<sup>17</sup>There is a substantial legal literature on balancing the *ex ante* and *ex post* aspects of contractual governance. Examples include Scott and Triantis (2006), Choi and Triantis (2010), Badawi (2011), and Gilson et al. (2010)

covenants and, should they be triggered, negotiating the consequences.

The costs of the ex ante and ex post options vary for different types of creditors. Broadly speaking, banks have the ability to monitor the financial condition of debtors and, should circumstances trigger a covenant violation, they have substantial leverage to control the behavior of those debtors. The option to use these ex post options should lead banks to weigh carefully the costs of ex ante contracting against the costs of ex post renegotiation as governance mechanisms (Gârleanu and Zwiebel, 2009). Bond holders, in contrast, have much less recourse to ex post governance. This light monitoring is largely due to the substantial collective action problems faced by bondholders and the lack of legal and monetary incentives for bond trustees to pursue violations of maintenance covenants (Kahan and Rock, 2009). As a consequence, bond trustees will rarely, if ever, use the leverage that a covenant violation provides to insist on operational changes.<sup>18</sup> Their recourse to court is likely to be limited to clear violations of restrictive covenants or, in the absence of covenants, claims that directors have violated fiduciary duties, to the extent courts permit them. The limited monitoring and control rights of bond holders is likely to mean that restrictive contract provisions provide their only meaningful means of governance.

These different governance mechanisms suggest that banks and bond holders will not react in similar ways to legal change. Take the shift that occurred post-Gheewalla. Creditors lost some ability to rely on default fiduciary duties to deter or punish debtor actions that harmed their interests. The safety valve nature of fiduciary duties means that a significant limitation on the ability to assert those claims will require creditors to fill in those gaps in another way. That can mean using maintenance covenant as a mechanism of governance or through ex ante restrictive contract terms. The latter approach is likely to require expanded due diligence on potential debtors, additional negotiations, and additional drafting costs.

For banks, the increased costs associated with ex ante governance are likely to be com-

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<sup>18</sup>The Trust Indenture Act poses an addition hurdle to renegotiation in the context of bonds. That legislation requires unanimous bondholder consent in order to amend or waive a payment term in a bond issued to the public (Bratton, 2006).

pared with the alternative of using monitoring and renegotiation. Most banks are already paying the costs of using this ex post governance so the prospect of higher up front costs is probably unappealing. For bondholders, the calculus is likely to be different. The cost of ex post monitoring and renegotiating is extremely high for them. Using this approach to fill in the gaps left open by weakened fiduciary duties would pose substantial hurdles. This is likely to leave increased investment in ex ante governance as the most palatable option for bond holders to deter firm actions that harm their interests.

The increased investment in ex ante governance should lead to a stronger insistence on covenants that restrict debtors from taking actions that favor equity at the expense of debt. These covenants are likely to include limitations on shareholder payouts, negative pledge covenants (which restrict debtors from issuing future debt more senior to current debt), and limitations on investment and asset sales. This reasoning predicts that in the post-Gheewalla period, all else equal, there should be an increase in the number of these types of covenants in bond indentures for Delaware debtors. In other states, however, there should be no such change because there was no shift in the fiduciary duties owed to creditors.

A related prediction concerns the effect of legal changes on bank loan terms. As discussed above, banks have the option to rely on maintenance covenants to control the agency costs of debt. There are, however, some limitations to that approach. Using maintenance covenants requires that those covenants actually get triggered, which typically requires a firm's finances to become worse than they were at the time of loan origination. To put this another way, the monitoring and renegotiation governance approach usually requires a bad state of the world. In good states of the world—meaning the status quo or better—banks will typically not have the leverage that a triggered maintenance covenant provides. There may still be agency cost concerns during these good times and, for that reason, banks may bargain for restrictive covenants to manage those situations.

The legal change created by *Trenwick* and *Gheewalla*, however, affected governance when bad states of the world occur. Recall that the case eliminated any liability to creditors when

a firm entered the “zone of insolvency” and also eliminated direct liability of any kind. If loan maintenance covenants are set relatively tightly, a firm’s movement into the zone of insolvency or into insolvency itself should trigger those covenants. The diminished ability to bring a lawsuit brought about Gheewalla should thus be relatively inconsequential to loan governance because banks can use the leverage provided by a the triggered covenant. This dynamic suggests that banks are unlikely to respond to Gheewalla by investing more in ex ante contract restrictions.

## 4 Results

### 4.1 Data

The data in this paper come from three primary sources: FISD, Dealscan, and Compustat. FISD provides detailed information about bond issues, including data on the covenants in the bond indentures. Dealscan provides similar details about bank loans to firms. Each bond and loan in these respective databases gets matched with financial and descriptive information about the debtor from Compustat for the quarter of debt origination. The state of incorporation in Compustat is backfilled, i.e. the historical data for a firm only reports the current state of incorporation. To remedy this problem, accurate incorporation information is obtained from Compustat’s historical header file for post-2007 observations and from the Corplist file for observations prior to that period.

The primary sample focuses on the 2004-09 period, which is roughly three years before and three years after the the Trenwick and Gheewalla trial court opinions. The FISD sample uses newly issued bonds and excludes Canadian, Yankee, foreign currency, and Rule 144A private placement bonds as well as bond exchanges.<sup>19</sup> The Dealscan sample includes all loans that include covenant data during the sample period. Following standard protocol in

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<sup>19</sup>The reason for excluding private placement bonds is that they typically do not have a large group of passive owners. As a consequence, the bond holders should have the ability to engage in ex post monitoring and renegotiation if they choose.

the corporate finance literature, observations from financial firms (SIC codes 6000-6900) are dropped. To measure whether the debt instrument was issued before or after the decisions that are of interest, I specify whether the bond or loan was issued before or after September 1, 2006, the date that the Chancery Court issued the Gheewalla decision.

## 4.2 Sample Overview

Table 1 presents a basic statistical overview of the bonds, loans, and firms that entered into these transactions during the sample period. The top half of the table addresses bonds and issuers and the lower half summarizes loan agreements and borrowers. The debtors that are of particular interest are those who are in relatively poor financial health. The second and third sections of the bond and loan panels report the summary statistics for these borrowers with Z scores below 1.1 in the periods before and after Gheewalla.<sup>20</sup> For both the bond and loan samples, this cutoff point includes roughly the lower third of borrowers.

The primary variables of interest are the restrictions that implicate creditor agency concerns. As discussed above, the chief dangers from the perspective of creditors are shareholder payouts, subordinating existing debt, and selling assets. The bond portion of the table lists the averages for some of these provisions including dividend restrictions (including both the issuer and/or subsidiary restrictions), and restrictions on issuing senior debt. Following other similar work, I construct an index based on some of the most frequently used covenants.<sup>21</sup> Each of these six bond restrictions is coded one if it is present and zero if it is not. The index is the sum of these variables.<sup>22</sup>

The simple trend for the individual bond restrictions and the bond covenant index is clear for at-risk borrowers. The difference in the means between non-Delaware issuers and

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<sup>20</sup>Z is a measure of firm's financial distress. For non-manufacturing firms a score lower than 1.1 indicates a significant risk of distress (Altman, 1968).

<sup>21</sup>Examples of other work that uses a similar include Billet et al. Billett et al. (2007), Fields et al. Fields et al. (2012), and Qi et al. Qi et al. (2011)

<sup>22</sup>The restrictions included in the index are dividend restrictions (including issuer and/or subsidiaries), restrictions on shareholder payouts, cross-default provisions, restrictions on asset sales (issuer and/or subsidiaries), negative pledge covenants, and restrictions on subsidiary debt.

Delaware issuers is more pronounced after the Gheewalla decision. This trend is most apparent in the negative pledge restrictions. These provisions were more common for non-Delaware issuers prior to Gheewalla (about 74 percent against roughly 62 percent), but after Gheewalla, these provisions appeared more frequently for Delaware issuers (about 68 percent versus approximately 62 percent). Prior to Gheewalla the difference between the percentage of contracts with dividend restrictions was about six percent, but after the cases, Delaware issuers outpace non-Delaware issuers by about eleven percent. The gap in the mean covenant index between Delaware and non-Delaware issuers was about .26 before Gheewalla, but the spread increases to about .65 in the later period.<sup>23</sup>

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<sup>23</sup>The general trend in post-Gheewalla period up until the financial crisis was a reduction in overall covenant restrictiveness that has been credited the rise in covenant-lite debt. The concern of this article is, however, the relative difference in between Delaware and non-Delaware firms during the pre and post-Gheewalla periods. For a model of the rise of covenant-lite phenomenon see Ayotte and Bolton Ayotte and Bolton (2011).

Table 1: Summary Statistics

Bond Issues and Issuers											
	ln(Amt.)	Yrs. to Mat.	Div. Res.	Neg. Pledge	Cov. Index	Assets	Sales	Lev.	N		
Non-Delaware											
	19.827	13.188	0.064	0.721	1.862	35163.604	5,307.905	1.174	484		
Delaware											
	19.907	11.400	0.088	0.693	2.006	28421.819	7,122.681	1.064	775		
Total											
	19.876	12.087	0.079	0.704	1.951	31013.577	6,425.023	1.107	1259		
At-Risk Firms Pre-Gheewalla											
Non-Delaware											
	19.613	14.917	0.125	0.736	2.153	39509.354	3,507.416	1.157	72		
Delaware											
	19.553	10.321	0.189	0.623	2.415	10466.416	1,833.786	1.320	53		
Total											
	19.588	12.968	0.152	0.688	2.264	27195.149	2,797.797	1.226	125		
At-Risk Firms Post-Gheewalla											
Non-Delaware											
	19.796	14.228	0.050	0.624	1.584	48452.739	5,252.763	1.440	101		
Delaware											
	19.926	10.451	0.157	0.680	2.235	38978.028	5,550.154	1.513	153		
Total											
	19.874	11.953	0.114	0.657	1.976	42745.531	5,431.900	1.484	254		
Loan Agreements and Borrowers											
	ln(Amt.)	Yrs. to Mat.	Div. Res.	Debt Sweep	Cov. Index	Assets	Sales	SH Eq.	Lev.	N	
Non-Delaware											
	18.923	4.170	0.797	0.312	1.763	5,879.716	1,025.358	1.135	2218		
Delaware											
	18.987	4.420	0.842	0.429	2.129	5,568.246	1,176.089	1.325	4338		
Total											
	18.966	4.336	0.827	0.389	2.005	5,673.621	1,125.094	1.261	6556		
At-Risk Firms Pre-Gheewalla											
Non-Delaware											
	18.835	4.071	0.807	0.311	1.778	8,159.279	964.444	2.324	409		
Delaware											
	18.695	4.504	0.875	0.520	2.537	5,181.044	780.829	1.907	769		
Total											
	18.744	4.353	0.851	0.447	2.273	6,215.083	844.580	2.052	1178		
At-Risk Firms Post-Gheewalla											
Non-Delaware											
	18.955	3.929	0.771	0.416	2.000	8,280.406	1,050.010	2.115	279		
Delaware											
	18.992	4.450	0.886	0.561	2.491	6,472.439	1,062.926	2.501	599		
Total											
	18.980	4.284	0.850	0.515	2.335	7,046.952	1,058.822	2.378	878		



To provide a more detailed sense of the relatively dramatic difference in bond covenant strictness for distressed Delaware and non-Delaware firms after Gheewalla, Figures 1 and 2 track the covenant index over the sample period. The figures depict the 18-month moving average of the covenant index for Delaware and non-Delaware firms in each of the 6 month periods in the sample.<sup>24</sup> Figure 1 shows those differences for non-distressed firms in the Delaware and non-Delaware groups. It demonstrates that the covenant index changed at roughly the same rate for Delaware and non-Delaware firms both before and after Gheewalla. Figure 2 shows the same measure, but only for at-risk firms. As the figures depicts, the Delaware and non-Delaware firms had similar average values in 2004 and 2005. Beginning in 2006, when Trenwick and Gheewalla were decided, the distressed Delaware firms maintain a roughly flat covenant index, while the covenant index for non-Delaware firms drops quite precipitously. In both 2006 and 2007, the covenant index for Delaware increases, while there are particularly sharp drops for the non-Delaware firms in those years.

The second half of the summary statistics table presents information for loans and borrowers. The table reinforces several well-known differences between the loan and bond markets. Bond issuers tend to be larger and less leveraged than borrowers. The typical explanation for this observation is that there tends be less information asymmetry between larger firms and potential passive creditors (Colla et al., 2013). A small firm about which little is known would have to pay high interest on any public bonds and hence they gravitate toward the loan market because the monitoring ability of banks reduces the amount of information asymmetry.

The covenant information in the Dealscan database does not map precisely to the equivalent information in FISD. While both report dividend restrictions there is no information on Dealscan on the presence of negative pledge covenants.<sup>25</sup> Dealscan does, however, code whether there are debt sweeps in loan documents. These provisions fulfill much the same

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<sup>24</sup>The weights are the number of debt agreements.

<sup>25</sup>Both FISD and Dealscan code a dividend restriction as present when the agreement contains a term that limits a dividend to a specified percentage of a financial metric. For example, an agreement might specify that the debtor can issue no more than ten percent of quarterly earnings as a dividend.

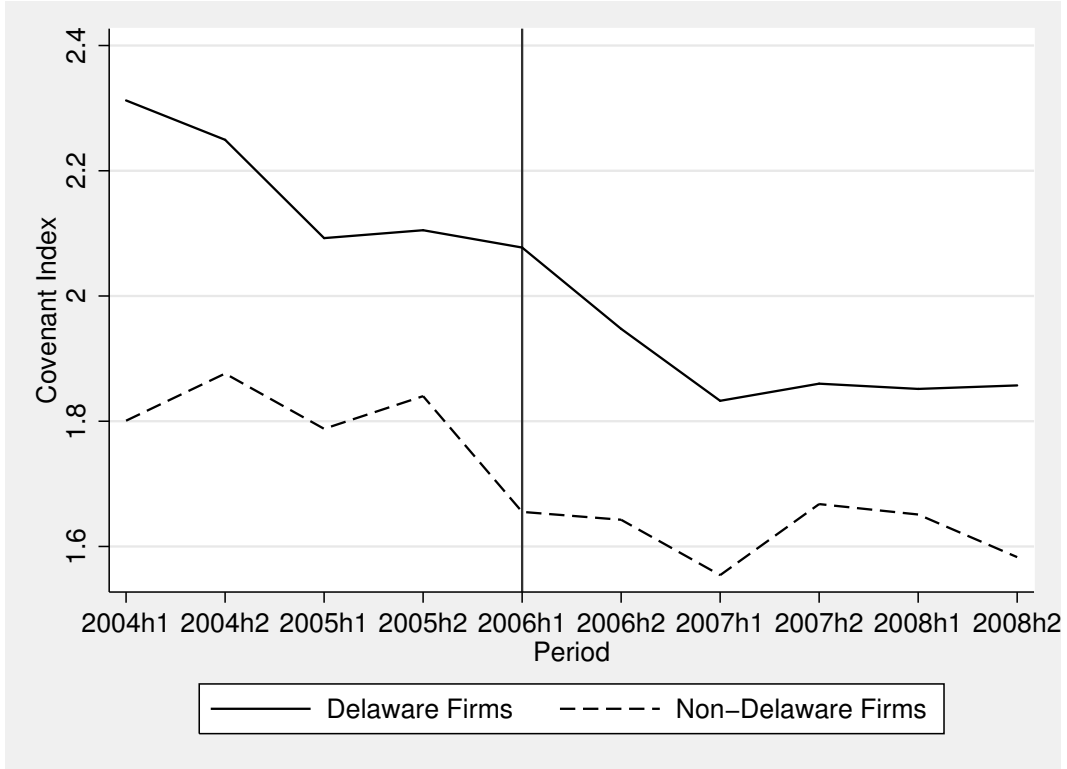


Figure 1: Moving Average Covenant Index for Bonds Issued by Non-Distressed Firms

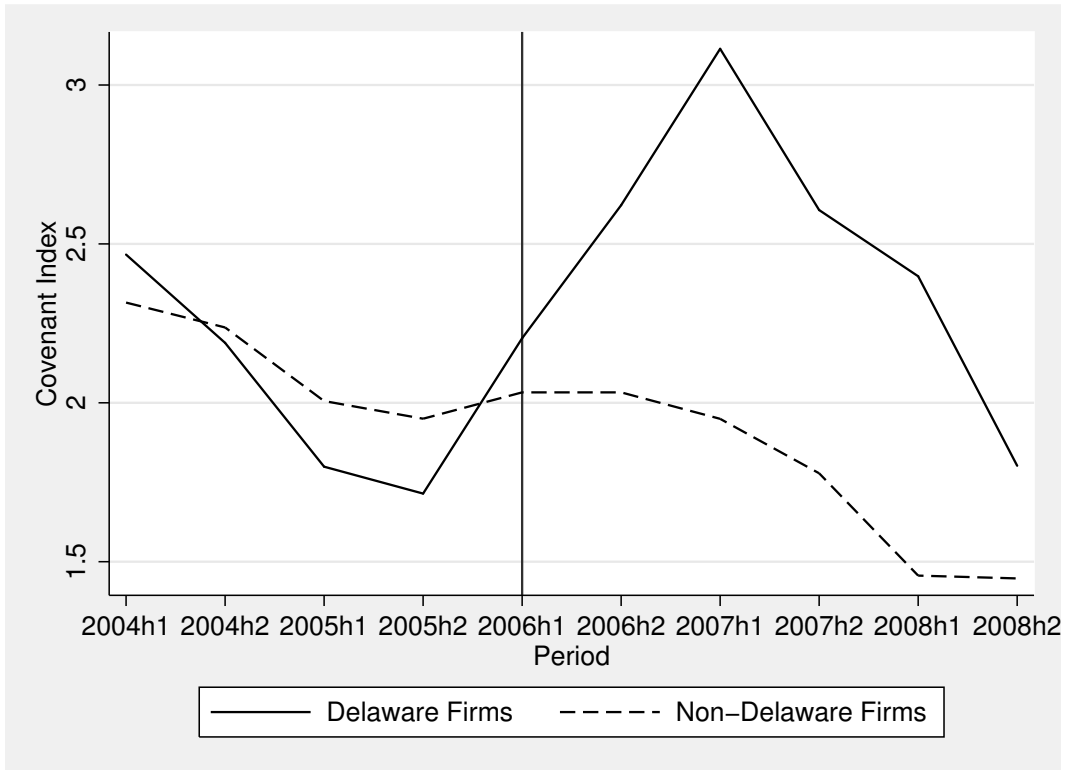


Figure 2: Moving Average of Covenant Index for Bonds Issued by Distressed Firms

function as a negative pledge clause as they require borrowers to use the proceeds of any future debt issuances to pay off the existing loan. The covenant index for loans is the sum of indicator variables for four covenants: dividend restrictions, debt sweeps, equity sweeps, and asset sale sweeps.<sup>26</sup>

When it comes to some provisions, such as dividend restrictions, the loan contracts are substantially more restrictive than the bonds. There are likely two reasons for this state of affairs. First, borrowers tend to have lower credit quality and higher information asymmetry than bond issuers (Krishnaswami and Subramaniam, 1999). As a consequence, loan contracts may contain more restrictive initial terms. Second, the restrictions in loan agreements may not be as restrictive as they seem. The relational nature of lender-borrower contracts means that borrowers may be able to negotiate around a written dividend restriction. Doing so would be much more difficult in the bond context because negotiating with the bondholders to relax a contract term is prohibitively costly.<sup>27</sup>

The shift in these variables in the pre and post-Gheewalla periods are substantially less pronounced than they are for bonds. Prior to Gheewalla there is about a seven percentage point difference in the number of at-risk Delaware and non-Delaware loans that have dividend restrictions and after Gheewalla that difference increases modestly to about eleven percentage points. Prior to Gheewalla, the percentage of debt sweeps for at-risk firms is about 31 percent for non-Delaware firms and 52 percent for Delaware firms. After the case, the non-Delaware number jumps to about 42 percent while the Delaware number only increases to 56 percent. Likewise, relative gap in the covenant index between Delaware firms and non-Delaware firms narrows after Gheewalla. These summary statistics provide an initial indication that the

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<sup>26</sup>While the data on dividend restrictions appears reasonably complete, the debt, equity, and asset sales sweeps provisions appear to only rarely get coded as “zero” if the provisions are not present. Most other studies that use the Dealscan database appear to code missing data as zero and I follow that practice here. As a robustness check, I perform the regressions that follow without this correction and the results are highly similar in both cases.

<sup>27</sup>Kwan and Carleton (2010) find a similar divide when comparing private placement bonds and publicly offered bonds. The private placement bonds are substantially more restrictive than the publicly offered bonds, a phenomenon that the authors partially attribute to the ease of renegotiation in the private placement context.

increases in relative restrictiveness of Delaware debt agreements were more pronounced for bonds than for loans.

### 4.3 Bond and Loan Term Results

The analysis in this section uses a difference-in-difference approach to analyze use of restrictive covenants during the sample period. The unit of analysis is an individual debt agreement, which allows the use of controls for the characteristics of the agreement and the debtor. The dependent variable in the regressions is either an indicator variable for a specific restrictive covenant or is the covenant index. The primary variable of interest is the interaction term for the issuer being a Delaware incorporated firm and the issue date occurring after the Gheewalla period (Lechner et al., 2011). Given the reduction in the ability to rely on default fiduciary duties and the barriers to ex post renegotiation, the expectation is that the coefficient on this interaction term will be positive for bond indentures—especially those issued by distressed debtors—but will be zero for loan agreements.

The general form estimated in the regressions is:

$$COV_i = \alpha + \beta_1 DEL_i + \beta_2 POST_i + \beta_{DiD} DEL_i \times POST_i + X_i \beta + \epsilon_i \quad (1)$$

where  $i$  indexes debt issues, COV is the covenant restriction or index of interest, DEL is an indicator variable for whether the issuer is incorporated in Delaware, POST is an indicator variable for whether the debt issuance occurred after the Gheewalla decision, and  $X_i$  is a vector of issue controls, firm controls, firm fixed effects, and year fixed effects. The coefficient on the  $DEL \times POST$  interaction term is the estimated treatment effect of a debt issuance to a Delaware-incorporated firm after the Gheewalla decision. The standard errors are clustered by state of incorporation. All regressions use firm fixed effects to account for unobserved heterogeneity between firms. Doing so should limit the potential influence of omitted variables. The use of firm fixed effects presumably accounts for the generally tight

Table 2: Bond Contract Restrictions

	Cov. Index	Neg. Pledge	Div. Restrict
Del. X Post-Gheewalla	0.303 (0.206)	0.143 (0.0696)**	0.0491 (0.0256)*
Log Bond Amount	0.0891 (0.117)	0.00553 (0.0327)	0.0227 (0.0184)
Time to Maturity	-0.000945 (0.00192)	-0.000591 (0.00105)	0.0000696 (0.000521)
Log Assets	0.0525 (0.161)	-0.154 (0.0399)***	0.0249 (0.0507)
Leverage	0.0328 (0.0116)***	0.00292 (0.00198)	0.00375 (0.00126)***
Secured	0.146 (0.485)	-0.313 (0.184)*	0.172 (0.0996)*
Observations	1259	1259	1259
$R^2$	0.818	0.729	0.811
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes

This table presents coefficient estimates from ordinary least squares regressions. The column titles provide list the dependent variables for each of the regressions. The Delaware and Post-Gheewalla coefficients are not reported. Standard errors are clustered by the state of incorporation. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% confidence levels, respectively.

fit of the models.

Table 2 presents the results of the covenant index, negative pledge covenant, and dividend restriction regressions for the entire sample of bonds. The variable of interest is the interaction term that indicates that the bond was issued to a Delaware-incorporated firm after the Gheewalla trial court case. The controls include the log of the bond amount, time to maturity, the log of total firm assets in the quarter of bond issuance, and firm leverage in that quarter.

The coefficients for the interaction term are all positive and the negative pledge and dividend restriction coefficients are statistically significant at the five-percent and ten-percent levels, respectively. This provides some preliminary evidence that Trenwick and Gheewalla led to tightened restrictions on bonds issued to Delaware firms. Given, however, that Trenwick and Gheewalla altered creditor rights when firms are in or near insolvency, one would expect its impact to be strongest when firms are less financially stable. To assess

Table 3: Bond Contract Restrictions for At-Risk Firms

	Cov. Index	Neg. Pledge	Div. Restrict
Del. X Post-Gheewalla	0.923 (0.349)**	0.185 (0.0828)**	0.218 (0.0506)***
Log Bond Amount	0.397 (0.224)*	0.0544 (0.0396)	0.0720 (0.0470)
Time to Maturity	-0.000787 (0.00694)	-0.00271 (0.00247)	0.00129 (0.00177)
Log Assets	-0.0103 (0.700)	-0.0677 (0.139)	0.00759 (0.168)
Leverage	0.0330 (0.00652)***	0.00135 (0.00381)	0.00739 (0.00166)***
Secured	0.105 (0.499)	-0.329 (0.208)	0.230 (0.189)
Observations	379	379	379
$R^2$	0.788	0.808	0.765
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes

This table presents coefficient estimates from ordinary least squares regressions. The column titles provide list the dependent variables for each of the regressions. The Delaware and Post-Gheewalla coefficients are not reported. Standard errors are clustered by the state of incorporation. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% confidence levels, respectively.

the magnitude of these cases' effect on the least financially stable firms, Table 3 performs the same regressions as Table 2, but for bonds issued to firms with Altman-Z scores below 1.1.

As expected, the effect of Trenwick and Gheewalla on the prevalence of restrictive covenants is stronger for these at-risk firms. The coefficients for the interaction term are substantially larger in the regressions for at-risk firms than they are for the entire sample. The coefficients are also all statistically significant at either the one or five percent levels. These results provide substantial evidence that bond lawyers noticed the effect of Trenwick and Gheewalla on Delaware issuers. They appear to have responded by increasing the strength of protections on those bonds, especially when there was a substantial chance that a firm would approach insolvency over the course of the issue.

Table 4 turns to an analysis of covenants in loan agreements. The hypothesis developed in the previous section predicts that loan restrictiveness is less likely to respond to Trenwick

Table 4: Bank Loan Contract Restrictions

	Cov. Index	Debt Sweep	Div. Restrict
Del. X Post-Gheewalla	-0.121 (0.102)	-0.0330 (0.0376)	0.000222 (0.0303)
Log Loan Amount	0.0429 (0.0156)***	0.0217 (0.00514)***	0.00353 (0.00380)
Time to Maturity	-0.00909 (0.00983)	-0.00305 (0.00563)	0.00822 (0.00400)**
Log Assets	0.271 (0.0625)***	0.116 (0.0320)***	0.0126 (0.0200)
Leverage	0.00989 (0.00297)***	0.00447 (0.000786)***	-0.00112 (0.000948)
Syndicated	-0.206 (0.188)	-0.103 (0.0553)*	0.00418 (0.0598)
Secured	0.713 (0.0740)***	0.232 (0.0263)***	0.0385 (0.0178)**
Observations	6105	6105	6105
$R^2$	0.788	0.765	0.629
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes

This table presents coefficient estimates from ordinary least squares regressions. The column titles provide list the dependent variables for each of the regressions. The Delaware and Post-Gheewalla coefficients are not reported. Standard errors are clustered by the state of incorporation. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% confidence levels, respectively.

and Gheewalla, if there is any response at all. As explained above, the Dealscan coding of restrictions does not map exactly to those in FISD. The dependent variables used in the loan regressions include the Dealscan covenant index, the presence of a debt sweep covenant, and the presence of a dividend restriction. The controls used in the loan regressions are largely similar to those used in the bond regressions. The only difference is the addition of a variable to control for whether the loan is syndicated.<sup>28</sup>

As predicted, the cases appear to have had little influence on loan contract restrictiveness. The coefficients of interest are not statistically significant in any of the specifications in Table 4. This table, however, includes all of the loans in the sample. As discussed previously, if the cases are to have an effect on debt contracts, it is most likely to affect those firms that are close to distress. Post-Gheewalla, creditors of those firms have substantially less recourse

<sup>28</sup>The results are unchanged if the syndication variable is omitted.

Table 5: Bank Loan Contract Restrictions for At-Risk Firms

	Cov. Index	Debt Sweep	Div. Restrict
Del. X Post-Gheewalla	-0.247 (0.176)	-0.0934 (0.0524)*	0.0627 (0.0643)
Log Loan Amount	0.0591 (0.0196)***	0.0312 (0.00654)***	0.00745 (0.00852)
Time to Maturity	0.00806 (0.0140)	0.00749 (0.00643)	0.00409 (0.00766)
Log Assets	0.00904 (0.139)	0.0658 (0.0531)	-0.0377 (0.0270)
Leverage	0.00245 (0.00159)	0.00235 (0.000644)***	-0.00161 (0.000805)*
Syndicated	-0.0395 (0.253)	-0.0543 (0.0830)	-0.0706 (0.0590)
Secured	0.665 (0.203)***	0.164 (0.0506)***	0.153 (0.0766)*
Observations	1923	1923	1923
$R^2$	0.800	0.798	0.598
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes

This table presents coefficient estimates from ordinary least squares regressions. The column titles provide list the dependent variables for each of the regressions. The Delaware and Post-Gheewalla coefficients are not reported. Standard errors are clustered by the state of incorporation. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% confidence levels, respectively.

to default debtor duties than they did beforehand. Table 5 performs the same regressions as Table 4, but limits the sample to loans to firms that have Altman-Z scores below 1.1.

The covenant index and dividend restriction coefficients are not statistically significant in Table 5.<sup>29</sup> While the debt sweep coefficient is statistically significant at the ten-percent level, it is negative. This evidence provides additional support for the hypothesis that the availability of ex post monitoring and negotiation in the bank lending environment means that loan contract terms are far less responsive to background legal rules. This account is consistent with banks not investing much in the upfront drafting of terms and instead devoting their governance resources to what happens after the agreement has been signed. If financial distress is the concern, the most effective way to deal with that worry appears to be setting tight covenants and negotiating a resolution that protects the interest of the

<sup>29</sup>The results for the not-at-risk firms are not reported. The coefficient on the interaction term is not statistically significant in any of the specifications.



lender.

#### 4.4 Triple Difference Regressions

The previous regressions provide evidence that, within bond contracts, there was a tightening in contract restrictiveness during the post-Gheewalla period for Delaware firms. Within bank loan contracts, there is not evidence of this shift. This showing, however, does not demonstrate that there is a statistically detectable difference between the two groups of contracts. To ascertain whether there is such a difference, this section reports the results of triple difference regressions. The interaction term of interest indicates whether the contract is for a Delaware incorporate firm and was entered into after the Gheewalla decision and was for a bond issuance. The the triple difference regressions are of the form:

$$\begin{aligned}
 COV_i = & \alpha + \beta_1 DEL_i + \beta_2 POST_i + \beta_3 BOND_i + \beta_{D_i D_1} DEL_i \times POST_i \\
 & + \beta_{D_i D_2} DEL_i \times BOND_i + \beta_{D_i D_3} POST_i \times BOND_i \\
 & + \beta_{D_i D_i D} DEL_i \times POST_i \times BOND_i + X_i \beta + \epsilon_i
 \end{aligned} \tag{2}$$

One concern with combining the two datasets is the comparability of the contract variables. To address this problem, I limit the analysis to the most analogous terms in the contracts. These variables include the amount of the borrowed funds, the time to maturity, whether the loan is secured, the presence of a debt restriction, and the presence of a dividend restriction. The covenant index in this part of the analysis is the sum of the debt restriction and dividend restriction variables. Table 6 presents the results of this analysis.

The coefficient of interest, the triple difference indicator, is large, positive, and statistically significant in all specifications. This provides particularly strong evidence that there is something different about the bond agreements entered into by Delaware incorporated firms during the post-Gheewalla period. As expected, the differences are larger for the at-risk firms than they are for the entire sample of firms each of the dependent variables. This evidence suggests that the limitation on creditor duties caused a particularly strong reaction

Table 6: Triple Difference Regressions

	Cov. Index		Debt Control		Div. Restrict	
	All	At-Risk	All	At-Risk	All	At-Risk
Del. $\times$ POST $\times$ Bond	0.329 (0.0782)***	0.520 (0.127)***	0.210 (0.0694)***	0.358 (0.0831)***	0.109 (0.0413)**	0.174 (0.0856)**
Log Loan Amount	0.0115 (0.00627)*	0.0385 (0.00900)***	0.0180 (0.00502)***	0.0274 (0.00415)***	0.00162 (0.00347)	0.0106 (0.00704)
Time to Maturity	-0.00207 (0.000837)**	-0.00254 (0.00285)	-0.00223 (0.000943)**	-0.00337 (0.00246)	0.0000564 (0.000820)	0.000384 (0.000907)
Log Assets	0.0861 (0.0190)***	0.0268 (0.0495)	0.0851 (0.0310)***	0.0768 (0.0328)**	0.00649 (0.0181)	-0.0253 (0.0223)
Leverage	0.00358 (0.00092)***	0.00107 (0.00077)	0.00563 (0.00064)***	0.00468 (0.00086)***	-0.000855 (0.00087)	-0.00182 (0.00081)**
Secured	0.331 (0.0341)***	0.313 (0.0874)***	0.198 (0.0256)***	0.0760 (0.0567)	0.0791 (0.0209)***	0.182 (0.0489)***
Observations	7364	2302	8294	2709	7364	2302
$R^2$	0.701	0.731	0.665	0.689	0.753	0.747
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

This table presents coefficient estimates from ordinary least squares regressions. The column titles provide list the dependent variables for each of the regressions. The Delaware, Post-Gheewalla, Bond, Del.  $\times$  Post-Gheewalla, Del.  $\times$  Bond, and Post-Gheewalla  $\times$  Bond coefficients are not reported. Standard errors are clustered by the state of incorporation. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% confidence levels, respectively.

among Delaware bond creditors who were most likely to have to resort to the default rules that applied to creditors.

## 5 Modeling Concerns

This section discusses two related modeling concerns. The first is that the model may be sensitive to different specifications. The first subsection runs some robustness checks to assess these worries. The second is the specific worry that other states may follow Delaware corporate rules. If so, there is unlikely to be variation between the states after the Trenwick and Gheewalla decisions. The second subsection shows that other states have generally declined to follow these decisions.

## 5.1 Robustness Checks

The chief result of interest—the relative increase in bond covenant strictness for distressed firms in Delaware after Gheewalla—is robust to changes in time frame and the threshold for financial distress. The choice of time frame in difference-in-difference studies poses a tradeoff between statistical power and the ability to attribute observed effects to the exogenous shock. The concern is that, as time goes on, it is less likely that differences between states depends on an earlier policy change. In addition, there is a worry that stretching the window too far back will inappropriately change the baseline for the post-shock comparison of the treated and untreated groups. With these caveats, I run a robustness check that expands the time frame an additional year before and an additional year after the sample period used above. This unreported check, which includes bonds issued from 2003 to 2010, shows similar results to those reported above. The interaction coefficient for the covenant index is slightly lower, but remains significant at the five-percent level. The negative pledge regression produces a slightly higher interaction coefficient and it is significant at the one-percent level. The dividend restriction variable has an interaction coefficient that is about 25% lower, but remains significant at the one-percent level.

These results are also relatively robust to adjustments in the threshold for financial distress. In unreported regressions that increase the Z-Score cutoff to 1.5 instead 1.1, the value of all the coefficients drop, as one would expect. But the coefficient of interest remains statistically significant for the negative pledge and dividend restriction variables at the ten-percent and five-percent levels, respectively. At a threshold of 1.8, the results are similar with a coefficient that is significant at the ten-percent level for the negative pledge covenant and at the five-percent level for the dividend restriction. The results are essentially equivalent at a threshold of 2.1.

## 5.2 The Influence of Delaware Law

One potential issue with treating *Trenwick* and *Gheewalla* as a shock to debt contracts entered into with Delaware-incorporated firms is the influence that Delaware law may exert over the corporate law of other states. This is not a hollow concern.<sup>30</sup> As a New Jersey court has put, “When considering issues of first impression in New Jersey regarding corporate law, we frequently look to Delaware for guidance or assistance.”<sup>31</sup> If this influence extends to the topic of creditor rights, there is unlikely to be much of a difference across states in the pre and post-*Gheewalla* bond covenants.

There are two reasons why this concern is unlikely to have materialized. First, the rules articulated in *Trenwick* and *Gheewalla* were specifically rejected by a number of the states that considered the issue after Delaware courts decided those cases. It is understandable that non-Delaware courts declined to follow these cases because while some courts will do so when addressing an issue for the first time, many had existing law on creditor rights near insolvency. For example, a South Carolina court rejected the *Gheewalla* rule on the following basis:

Defendants have urged the Court to consider law from outside of South Carolina in determining whether Plaintiffs have the right and ability to bring a direct action against the Defendant-directors for a breach of their fiduciary duties to Debtor’s creditors. Specifically, Defendants have directed the Court to a case decided by the Delaware Supreme Court, *North American Catholic Educational Programming Foundation, Inc. v. Gheewalla*, 930 A.2d 92 (Del.2007). ... Defendants ... cannot point the Court to (nor has the Court been able to find) any cases decided by South Carolina courts or under South Carolina law which have applied the rationale set forth in *Gheewalla*. As stated above, South Carolina law governs Plaintiffs’ breach of fiduciary duty to creditors claims and, therefore, the previously cited standard set forth in the [governing South Carolina] case is the appropriate standard under which the Court must review these claims.<sup>32</sup>

Courts in other states have likewise refused to follow Delaware’s revised approach to

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<sup>30</sup>Delaware’s influence is not limited to its case law. Several studies show that the language used in Delaware corporate agreements and charters migrates to other states. (Broughman et al., 2014; Cain and Davidoff Solomon, 2012)

<sup>31</sup>*Casey v. Brennan*, 780 A.2d 553, 567 (2001).

<sup>32</sup>*In re Joseph Walker Company, Inc.*, 522 B. R. 165, 196 n. 42.

fiduciary duties. At least two other states have expressly stated during the post-Gheewalla period that directors owe fiduciary duties to creditors when the firm is in the zone of insolvency.<sup>33</sup> Similarly, non-Delaware courts have endorsed potential liability for deepening insolvency, or claims much like it, after the issuance of the Trenwick decision.<sup>34</sup>

Beyond opinions that have declined to follow Trenwick and Gheewalla, there are statutory impediments to reigning in creditor rights in some states. Approximately 32 states have constituency statutes that either permit or require directors to take into account the interests of non-shareholders groups, such as employees and creditors. For example, the relevant Connecticut statute states that “a director of a corporation ... shall consider, in determining what he reasonably believes to be in the best interests of the corporation ... the interests of the corporation’s employees, customers, creditors and suppliers.”<sup>35</sup> A law like this imposes a substantially stronger obligation on directors to take creditor interests into account relative to the low thresholds set by Trenwick and Gheewalla. To be sure, a court could square the language of the statute with the view that it should just enforce agreements between firms and creditors. After all, doing so would take into account the interests of creditors. And if the statute were merely permissive—meaning that it allowed directors to take into account non-shareholder interests, but did not require doing so—it would be even easier to adopt positions that are consistent with Trenwick and Gheewalla. Nevertheless, the broad use of these statutes suggests some reason to believe that non-Delaware courts were not likely to follow the Chancery Court in immediate lockstep.

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<sup>33</sup>Dooley v. O’Brien, 244 P.3d 586, 591 (Ariz. Ct. App. 2010) (“fiduciary obligations can apply even to creditors when a corporation enters the zone of insolvency, without regard to the terms in the underlying contracts”); Gladstone v. Stuart Cinemas Inc., 178 Vt. 104, 117 (Vt. 2005).

<sup>34</sup>Official Comm. of Unsecured Creditors of Allegheny Health, Educ. Research Found. v. PricewaterhouseCoopers, LLP, 2007 WL 141059, at \*7 (W.D.Pa. Jan.17, 2007); Thahault v. Chait, 541 F.3d 512, 520, 523 (3d Cir.2008).

<sup>35</sup>Conn. Gen. Stat. Ann. §33-756.

## 6 Concluding Remarks

The Trenwick and Gheewalla decisions placed strong limitations on the ability of the creditors of distressed firms to assert fiduciary duty claims. Because these decisions affected only those firms incorporated in Delaware, it creates a quasi-natural experiment that should be able to detect the response of creditors to a limitation of their default rights. This article predicts that the different cost of the governance mechanisms available to loan and bond creditors should lead them to react in different ways. Loan creditors have the ability to perform ex post monitoring after the parties have signed an agreement. They can set tight maintenance covenants and then use the leverage provided when financial distress triggers those covenants. Given that loan creditors are already engaging in this type of ex post governance, they are unlikely to want to bear the costs of investing in the development of an optimal suite of ex ante restrictions. Bond creditors generally do not have the option of ex post governance through maintenance covenants. One would thus expect them to react to Gheewalla by investing more in ex ante contract restrictions that will protect their interests.

The evidence developed through the quasi-natural experiment broadly supports this theory. Bonds issued to Delaware corporations after Gheewalla show more ex ante restrictions than those issued to firms incorporated outside of Delaware. This effect is substantially stronger for less financially stable firms, who are more likely to be affected by the legal rules articulated in Trenwick and Gheewalla. The restrictive terms of bank loan agreements, however, do not appear to have responded to these cases. This evidence suggests the governance abilities of different creditors have a substantial effect on how they structure and manage their agreements with debtors.

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## Appendix A: Variable Definitions

Variable	Definition
<i>Delaware</i>	Indicator variable for whether the firm was incorporated in Delaware at the time of debt issuance.
<i>Post-Gheewalla</i>	Indicator variable for whether debt was issued after the trial court's Gheewalla decision.
<i>Log Bond Amount</i>	The natural logarithm of the amount of bond principal.
<i>Dividend Restriction</i>	Indicator variable for whether the debt restricts the ability of the issuer and/or its subsidiaries to pay dividends.
<i>Negative Pledge</i>	Indicator variable for whether the bond restricts the ability of the borrower to issue additional debt.
<i>Assets</i>	The total assets of the corporation during the quarter of debt origination.
<i>Sales</i>	The total sales of the company in the quarter of debt origination.
<i>Shareholder Equity</i>	The amount of shareholder equity during the quarter of debt origination.
<i>Leverage</i>	$(\text{Long Term Debt} + \text{Current Debt}) / \text{Total Assets}$ during the quarter of debt origination.
<i>Secured</i>	Indicator variable for whether the debt was secured.

*Syndicated*

Indicator variable for whether a loan was syndicated.

*Altman-Z*

The value of the following formula during the quarter of debt origination:  $1.2 * ((\text{Current Assets} - \text{Current Liabilities}) / \text{Total Assets}) + 1.4 * (\text{Retained Earnings} / \text{Total Assets}) + 3.3 * (\text{EBIT} / \text{Total Assets}) + .6 * (\text{Market Capitalization} / \text{Total Liabilities}) + .999 * (\text{Sales} / \text{Total Assets})$