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Article

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Article

Bond Indenture Consent Solicitations as a Debt Management Tool

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Abstract: Many companies in recent years are seeking new ways to manage their debt liabilities. Companies with outstanding debt securities can engage in a variety of transactions with bond holders. Choices will depend to some extent on whether or not the company has access to cash and is able to purchase in the open market or through cash tender offer, or if without cash, by making an exchange offer of new securities for existing securities. Often in either case, there is a bond indenture consent solicitation needed to waive or amend existing bond terms, the announcement of which signals management's intent to the market. Given the increasing prevalence of this practice as a debt management tool, this study seeks to determine whether it is truly perceived to be value enhancing by stockholders. Using an event study of 50 companies announcing bond indenture consent solicitations, we find that shareholders do benefit, and companies appear well served by this practice.

Keywords: bond indenture consent solicitations; bondholder coercion; debt risk management

JEL Classification: G32

1. Introduction

Bond indenture consent solicitations are not a new phenomenon to corporate debt restructuring. There has, however, been an unprecedented level of debt exchange offer activity in the United States and in Europe (de Jong, Roosenboom and Schramade [1]) in recent years following the global financial crisis and dislocation in financial markets (Dunne and Kelly [2]). Even companies with relatively stable financial positions may face the prospect of restructuring their liabilities in turbulent financial times. A number of factors may influence a firm's decision to offer a debt exchange, such as a lack of short-term liquidity, an inability to maintain required financial ratios in loan agreements, the absence of a meaningful credit market to refinance maturing indebtedness and the possibility of a ratings downgrade or bankruptcy, among others (Saggese, Noel and Mohr [3]).

While it is generally recognized that altering debt covenants may reduce the agency costs of debt and possibly increase the value of the firm, questions remain as to the ultimate effect on both bondholders and shareholders. Given the recent tendency of bondholders to acquiesce to consent solicitations, what seemingly appears as a losing proposition may actually not be the case. For example, there is no guarantee that covenants that were optimal when the debt was issued will remain optimal over time. Moreover, as the firm's economic environment changes, the renegotiation of bond covenants may become desirable (Kahan and Tuckman [4]). Further, companies choosing to restructure their debt in this manner find creative ways to incentivize bondholders through cash (tender) or exchange offers, each of which may be perceived to improve the bondholder's value expectations.

Consent solicitations generally propose to remove or relax covenants that are thought to prevent stockholder expropriation of bondholder wealth. For example, covenants may restrict a company's ability to pay dividends, to incur additional debt, to engage in transactions with a controlling shareholder or to achieve a more optimal operating leverage (Glover and Hambusch [5]; Kahan and Tuckman [4]). Yet, evidence suggests that most solicitations entail either tender or exchange offers and are ultimately successful in gaining bondholder approval. Recent debt exchange offers can largely be grouped into one of two general categories: distressed companies that need to reduce debt to avoid an imminent default and/or insolvency; and over-leveraged companies that have a significant amount of debt coming due and want to reduce refinancing risk (Dunne and Kelly [2]).

The solicitation of consents to make changes to the terms of debt securities is often necessary for the success of a debt restructuring and presents a potentially powerful liability management tool. No issuer of debt securities is protected forever from competitive market forces and external economic shocks. A robust business plan can require revision as a result of tougher economic conditions, structural changes, limited financing options, poor profitability, rising costs and/or volatile macroeconomic environments in the issuer's markets (Gkoutzinis [6]).

The reasons why a company may choose to issue a consent solicitation with respect to debt issues are quite varied and represent a plethora of debt management opportunities. Some recent examples include: to deal with replacement capital covenant obligations (e.g., Progressive, Inc., Mayfield Village, OH, USA, Travelers Inc., Hartford, CT, USA, and Charles Schwab, Inc., San Francisco, CA, USA); to facilitate increased financial leverage attendant to an acquisition (e.g., Spectrum Brands, Inc., Mooresville, NC, USA); to engineer the change of "event of default" covenants; to change a bond from unsecured status to secured status; to issue additional debt (e.g., Merge Healthcare, Inc., Chicago, IL,

USA); to repurchase equity (e.g., Alere, Inc., Waltham, MA, USA); or to eliminate a non-refunding covenant (e.g., Capital Source, Inc., Los Angeles, CA, USA).

The recent surge in activity includes companies engaged in debt exchange or cash tender offers, repurchasing of debt at discount terms and a variety of other transactions with holders. The choices depend to some extent on the company's financial vulnerability and whether or not the company has access to cash. When cash is available, a company can consider an optional redemption, open market purchases or a cash tender offer. When cash is not available, the most likely alternative is an exchange offer of new securities for the existing securities. In either case, the consent solicitation is necessary to modify the terms of the existing securities (Rossell [7]).

In short, debt restructurings through bond indenture consent solicitations are an appealing management tool for a variety of reasons, including changing the amount of leverage or maturity of the debt and possibly lowering interest expense. This tool can allow the issuer to gain a controlling position in a debt security and, if part of a significant restructuring, may be able to achieve a more sustainable capital structure and possibly prevent a Chapter 11 filing (Dunne, Bray and Shenfield [8]). A number of factors are deemed critical to the success of debt restructurings through consent solicitations. The opportunity to buy back debt at large discounts and to adjust capital structure to achieve greater balance requires a concerted effort by the board, management and council. Persuasive economic reasons must be provided to bondholders. Being proactive and managing information presents challenges (Dunne, Bray and Shenfield [8]). Saggese, Noel and Mohr [3] offer practical advice for debt restructuring management and emphasize the importance of timing (especially when financial troubles present), as the more quickly a corporation can successfully restructure, the better its future prospects tend to be. Other concerns include developing incentives for bondholders, negotiating with bondholders and legally managing the contractual responsibility (as opposed to fiduciary/trust responsibility) owed the firm's bondholders. A consent solicitation that is attendant to current market conditions and bondholder preferences increases the likelihood that its offer will achieve the desired result (Dunne and Kelly [2]).

If the assumption is valid that bondholders are better off, or at least satisfied, the question remains as to whether stockholder value is actually enhanced by the debt restructuring. Although scholars have not paid frequent attention to the effects of bond indenture consent solicitations, the significant rise in the number and level of debt exchanges in recent years warrants further examination. In this study, we are particularly interested in whether there is an influence on shareholder wealth as a result of the announcement of a consent solicitation. We also investigate whether shareholder wealth appropriation is influenced by the method of solicitation, such as cash/tender offers (sometimes associated with coercion (Barondes [9])), or exchange offers, generally thought to be non-coercive, as no cash is involved.

Using an event study of 52 companies announcing bond indenture consent solicitations around a 20-day event window, we find that statistically-significant abnormal returns do accrue to shareholders in the event window encompassing the announcement day and the market trading day following the announcement. We also test independently those solicitations associated with a cash tender offer and an exchange offer and consider whether coercion may be a factor. The evidence found here supports the hypothesis that the bond indenture consent solicitation adds to shareholder wealth, while bondholders accept, at most, a token payment for their agreement to the consent solicitation. None of the consent solicitations in the dataset proposed a management plan to make bondholders whole.

2. Literature Review

Extant literature on the subject of consent solicitations is rather scant. As noted above, practitioner advice on the strategic management of debt restructurings is available and provides evidence that companies can and do solicit consent from bondholders for security covenant modifications. Further, financial consultants view bond indenture consent solicitations as a valuable debt management tool if properly managed. Scholarly attention has long been interested in the relationship between capital structure and firm value, with the general consensus that, in a frictionless world, financial leverage is unrelated to firm value (Berk and DeMarzo [10]). However, in a corporate world with tax implications of interest payments, firm value and capital structure may be positively related (Modigliani and Miller [11]).

Other research has addressed the impacts of various costs on optimal capital structure (Jensen and Meckling [12]; Bradley, Jarrell and Kim [13]; DeAngelo and Masulis [14]). Hatfield, Cheng and Davidson [15] examine market reaction to a firm's decision to alter debt level by moving either closer to or away from the industry average and find that the market does not appear to consider the relationship between a firm's leverage ratio and the industry's leverage ratio important. This again supports the proposition that financial leverage is irrelevant to the value of the firm. Although the scientific consensus is that capital structure does affect a firm's value, we do not have precise measurement of its effect, and therefore, research on the capital structure puzzle continues (Berk and DeMarzo [10]; Brealey, Myers, and Allen [16]; Ross, Westerfield and Jaffe [17]).

However, in the case of corporate bonds, many risks present for the issuer, bondholders and shareholders, most of which are attached to economic forces, such as interest rates, credit risk, liquidity risk, economic risk and company and industry event risk (Gliagias and Badilla [18]). These are all risks that may have accelerated in intensity and impact over recent years, as economic conditions and financial markets have been unusually turbulent. Avoidance, or mitigation, of these risks through debt restructuring has the potential to improve the financial situation of all involved (Gkoutzinis [6]; Saggese, Noel and Mohr [3]).

Debt restructuring in this manner is made complex by a number of influencing factors. There are both benefits and costs to debt financing and the potential for conflicts between stockholders and bondholders over the investment and growth decisions of the firm. The agency costs of debt include loss of firm value when suboptimal investment decisions result from managers attempting to maximize equity value rather than total firm value (Billett, King and Mauer [19]; Kruse, Nohel and Todd [20]). Further, restrictive covenants in bond debt contracts that are designed to mitigate stockholder-bondholder conflict may actually serve to constrain profitable growth investment. The obvious corollary is that firms with high growth opportunities should have less leverage.

Of particular importance in bond indenture consent solicitations is the negotiation process and proper attention to bondholder rights. The Trust Indenture Act of 1939 ¹ and most indentures prohibit the alteration of interest or principal provisions without the consent of each bondholder affected by the changes. Other terms may be changed with less than unanimous approval. Most indenture agreements provide for covenant modifications with the consent of either a majority or 2/3 of the outstanding face value of the bond issue (Barondes [9]; Kahan and Tuckman [4]). Kahan and Tuckman [4] question whether bondholders suffer a loss from covenant changes by examining abnormal bondholder returns around

¹ see [21].

announcements of structurally-coercive consent solicitations. They find the abnormal returns to be significantly positive, indicating that firms are not exploiting the coercive nature of their solicitations. The implication is that bondholders will only approve those offers that are in their collective interest and that debtholders communicate during a consent solicitation period to prevent expropriation of wealth to stockholders. Another conclusion of this study is that the consent solicitation process resembles more an attempt to balance interests of stockholders and bondholders, rather than an attempt to dictate terms to bondholders.

However, in contrast, others have suggested that bondholders are frequently subjected to unfair procedures, as in freeze-out exchange offers, and suffer costs associated with coordination and exchange of information (Bazzana and Broccardo [22]). A financial debt restructuring may not be successful if bondholders hold out. Daniels and Ramirez [23] argue that managers frequently employ exit consents that are coercive in nature; bondholders who choose to hold out may be left with a reduced value bond and are thus exploited for the issuer's benefit. In fact, Oldfield [24] makes the case that issuing corporations often engineer "game-based" tactics to convince bondholders to consent to bond covenant changes in attempts to create value for stockholders. These are often quite successful and have the potential to influence the bond's value. Chatterjee, Dhillon and Ramírez [25] suggest that firms will consider coercive techniques in their offer to avoid bondholder holdouts and to provide ample incentive for bondholders to tender. Although coercion may be perceived as detrimental to bondholders, Chatterjee, et al. [25] and others (Daniels and Ramírez [23]) have posited that it may actually benefit claim holders by helping the company restructure outside bankruptcy.

Ho and Singer [26] consider alternative bond indenture provisions to gauge the effect of risk allocation, holding the firm's leverage in market value terms constant. Timing is of particular importance, as bond price will be influenced by changing interest rates and company circumstances. They find that risk is transferred from stockholders to bondholders as the time to maturity and promised payment increase. Substitution of longer-term debt for an equal amount of shorter-term debt also increases the risk to bondholders while decreasing risk to stockholders. Further, there are many legal considerations that must be taken into account when an issuer deals with its bondholders and the indenture trustee. The Trust Indenture Act (TIA) of 1939 [21] specifies that certain provisions must be part of the indenture to protect bondholders in the case of default or other intervening conditions. Tender or exchange offers will be impacted by several securities laws, in particular the Securities Exchange Act of 1934 (Gkoutzinis [6]). Masulis [27] points out that those securities with "incomplete protective covenants" are associated with lower valuations to compensate security holders. Agency issues may surround the transaction if conflicts arise between shareholders and bondholders requiring equity conversion covenants if managers try to expropriate wealth from bondholders to stockholders (Jensen and Meckling [12]). A consent solicitation thus offers the opportunity to amend the indenture with the intent of reducing agency costs.

A few studies have investigated the performance effects of consent solicitations. Statistically significant negative abnormal stock returns have been associated with announcements of a straight debt offering (Mikkelson and Partch [28]) and also with the announcement of a convertible debt offering (Mikkelson and Partch [28]; Dann and Mikkelson [29]). Further, Mikkelson [30] found statistically significant negative stock returns when a company calls debt and the transaction essentially forces conversion into common equity. Although value creation was not shown for stockholders in these

studies, Kahan and Tuckman [4] did find statistically significant abnormal returns for both bondholders and stockholders, even with evidence of bondholder coercion.

Consent Solicitation, the Law and Coercion

Legal issues to consider in consent solicitations include fiduciary duties, contract issues and, more specifically, the implied covenant of good faith and fair dealings (Gkoutzinis [6]). Fiduciary duties are perhaps the easiest to resolve in this particular context. Unique in this relationship is the fact that while directors of corporations owe stockholders a fiduciary duty, and one built on trust, the courts generally hold that there is no fiduciary duty from an issuer to a holder of a non-convertible bond (Barondes [9]). This relationship is simply contractual in nature.

One of the first cases to deal with a consent offer as a breach of the implied covenant of good faith and fair dealings was *Katz v. Oak Industries, Inc.* ² In this case, Oak Industries was facing serious financial hardship to the point that if it did not become profitable in a very short time, the company would fail. Ultimately, Oak Industries decided to sell off certain assets to another company, Allied-Signal, Inc. In addition to acquiring portions of the company, Allied also agreed to take on a portion of debt if at least 85% of the debtholders would agree to an exchange. Debtholder Moise Katz brought an action against Oak Industries, charging that the offer was coercive because any reasonable debtholder had to take the offer, but the arrangement benefited shareholders at the securities holders' expense. The court held that the exchange offer was not coercive and, thus, not a breach of the implied covenant of good faith, because the offer contained a value that was over market. The case further emphasized that a board of directors owed fiduciary duties to the firm's shareholders, and taking value from the bondholders did not violate any fiduciary duties. The court heard similar arguments in *Kass v. Eastern Air Lines, Inc.* ³ Again, the court rejected the arguments for coercion, citing the consent offer was made to all bondholders and therefore not a breach of good faith and fair dealings.

In a consent solicitation, a bondholder is typically offered a price that is higher than the current value of the bond should the holder wish to trade on the market at that time (Bab [31]). While this offer can persuade a bondholder to tender, sometimes bondholders wish to hold out and see if the company will offer more. This could mean that not enough bondholders agree to support the needs of the corporation and possibly result in the company declaring bankruptcy. As this presents a problem for the issuing company, a number of seemingly coercive approaches have been devised to make the offer more attractive and persuasive, including consent solicitations.

Common law treats claims of coercion in contracts under the heading of duress (Farnsworth [32]). Duress comes in two forms, physical compulsion or threat, which can be either physical or economic. Farnsworth [32] defines a threat as an intention to do or not do something that is *less desirable* from the promisee's (in this case, bondholder's) point of view than if the alternative were the case. In order to succeed in a claim of duress by economic threat, the threat must be viewed as real. The threat applied to a consent solicitation is debatable based on the value of the risk. On its face, the potential expropriation of wealth from the bondholders to the benefit of the shareholders is a *less desirable* outcome from the

² Katz v. Oak Industries, Inc., 508 A. 2d 873 (Del. Ch. 1986).

³ Kass v. Easter Air Lines, Inc., 12 Del J Corp. L. 1074 (Del. Ch. 1986).

promisee's perspective. However, while the loss or change to contractual benefits is *less desirable*, the company does not appear to desire to steal contractual benefits from a bondholder. Usually, the promisors (board of directors) are attempting to spread the costs of insolvency among all of the parties to avoid a more catastrophic event, such as bankruptcy (Bab [31]).

Secondly, the threat must be of the kind that the law condemns or is, in other words, "improper." According to the Restatement (Second) of Contracts, Section 176 ⁴, a threat is improper if it breaches the covenant of good faith and fair dealing. A threat is further deemed improper if the resulting exchange is not on fair terms, the threatened act would harm the recipient and would not significantly benefit the party making the threat. In essence, according to law, for a threat to be deemed improper in support of economic duress, it must rise to a level that amounts to an abuse of process. This cannot be the case if the threat is legal. In a consent solicitation, the potential threat comes from the board of directors who have fiduciary duties to the shareholders. Finally, the threat must induce the victim's manifestation of assent (Farnsworth [32]). Did the threat cause the promisee to sign the solicitation or would the promisee have signed it anyway?

3. Empirical Predictions

Bond indenture consent solicitations represent management's intention to alter its debt structure. It may be reasonably expected that consent solicitations are issued with management, board and council or trustee corroboration and are done with the best interest of the company and its shareholders in mind. As proposed by Smith and Warner [34] with the "costly contracting hypothesis," shareholder wealth should be increased as a result of the consent solicitation. Expectations are that the firm will either improve capital structure by reducing debt costs or be better able to pursue profitable investment opportunities. Several have found that wealth does accrue to shareholders following announcements of bond indenture consent solicitation (Kahan and Tuckman [4]; Mikkelson and Partch [28]; Schaub [35]). Because consent solicitations are assumed to represent stockholder interests and given their popularity in recent years and promotion as a debt/liability management tool, we propose the following hypothesis:

 H_1 : Stockholders will experience positive abnormal returns following firm bond indenture consent solicitation announcements related to debt restructuring.

Clearly, issuers control the structure of the consent solicitation and do have the ability to apply significant pressure on bondholders. While some scholars have argued that consent solicitations may frequently be coercive and stimulate an adversarial relationship between the issuer and the bondholders (Barondes [9]), others question that assertion. If so, why do bondholders not demand covenants that prohibit coercive consent solicitations, or offer more resistance to consent solicitations, or coordinate their actions? Further, while some have found statistically-significant negative abnormal returns accruing to bondholders following consent solicitations (Mikkelson [30]; Mikkelson and Partch [28]), there is more recent evidence that positive abnormal bondholder returns do accrue to bondholders following consent solicitations (Kahan and Tuckman [4]). Perhaps firms are not abusing the coercive nature of consent solicitations and are providing an opportunity not just for improved debt management for the company, but an improved relationship and reassessment of debt costs that benefits all parties

⁴ see [33].

(Jensen and Meckling [12]). As discussed above, coercion, if present, takes on many forms and strategies (Oldfield [24]). The dated perspective that tender offers entail coercion while exchange offers do not (Barondes [9]) has been largely rejected. The recent surge in the practice of bond indenture consent solicitations indicates that the terms of public debt can be renegotiated more easily than has been previously assumed and may actually benefit all parties. The following hypothesis is thus proposed:

H2: No differences in stockholder abnormal returns will be evidenced in consent solicitations that involve tender offers versus those that involve exchange offers.

4. Methodology

4.1. Data

The data consists of a convenience sample of 50 companies captured within an investigation period between the years 2004 and 2012 and those with a complete return set spanning the event period, as well as the estimation period. Thirty-four of the consent solicitations involved cash payments, and sixteen of the consent solicitations involved no cash payment. Only companies offering bond indenture-related consent solicitations are included in the dataset. The reasons for consent solicitations are so different and specific to funding, that no attempt is made to parse the dataset by reason for the consent solicitation. Consent solicitation announcements were obtained from searches of publically available news media. Filings with the Securities and Exchange Commission are publically available, but if the major news services did not publish the information, an announcement date effect would not be discernable.

Data are calculated (or Derived) based on data from CRSP 1925 US Stock Annual ©2012 Center for Research in Security Prices (CRSP®) at the University of Chicago Booth School of Business. The Center for Research in Securities Prices CRSP® database provides daily adjusted price, adjusted shares outstanding and market capitalization values. Table 1 shows some statistics that describe the cross-section of firms used in the analysis and firms that have announced consent solicitations.

Market CapitalizationExchange OfferCash Tender OfferAverage Market Capitalization\$14,516,356,450\$7,672,603,980N1634

Table 1. Descriptive statistics.

Data are calculated (or Derived) based on data from CRSP 1925 US Stock Annual ©2012 Center for Research in Security Prices (CRSP®) at the University of Chicago Booth School of Business.

4.2. Event Study Methodology

To examine the performance of firms involved in bond indenture consent solicitations, we use the event study methodology of Brown and Warner [36]. Abnormal performance estimation uses the value weighted market model and daily stock returns from the CRSP® database. The estimation period for the market model begins on day t = -126 and ends on day t = -26. Day zero is the announcement day with abnormal returns as predicted by deviations from the market model estimate being calculated on days t = 0 to t = +1. Standardized test statistics are used to determine whether the mean abnormal return is significantly different from zero. The nonparametric generalized sign Z statistic as developed and

described in Cowan [37] is reported, as well. The precision weighted cumulative abnormal return (PWCAAR) is also reported. Cummins and Lewis [38] explain the precision weighted cumulative abnormal return. We look at the event window on the announcement day and the following day (0, 1), because the information could have entered the market on the announcement day or, after trading on the announcement day (where the information would be reflected in the market the next trading day). We use SAS® software and Eventus® software 5 to analyze the data.

4.3 Empirical Results

The first hypothesis that stockholders will experience positive abnormal returns following firm bond indenture consent solicitation announcements related to debt restructuring is supported. The results in Table 2 show high positive and significant abnormal returns in the day zero event window using all companies in the sample. This is evidence that the announcement of a bond indenture consent solicitation is beneficial to stockholders, possibly in expectation of a move toward a more optimal capital structure and better opportunities for stockholder value creation.

Table 2. Average Abnormal Returns in the event period -10 to +10 relative to Event-Day 0.

Event Day	N	Abnormal Return	Positive Negative	Patell Z	Generalized Sign Z
-10	50	-0.23%	25:25	0.337	0.317
-9	50	-0.67%	17:33	-1.565	-1.948
-8	50	-0.11%	24:26	-0.358	0.034
-7	50	-0.03%	24:26	0.221	0.034
-6	50	0.68%	20:30	0.782	-1.099
-5	50	-0.09%	28:22	-0.805	1.166
-4	50	0.62%	27:23	0.879	0.883
-3	50	-0.16%	25:25	0.429	0.317
-2	50	0.37%	22:28	-0.771	-0.532
-1	50	− 0.17%	21:29	-0.326	-0.815
0	50	0.65%	26:24	2.700 **	0.600
+1	49	0.94%	25:24	1.924	0.457
+2	49	-0.06%	22:27	-0.268	-0.401
+3	49	0.13%	24:25	0.924	0.171
+4	49	-0.37%	21:28	-0.076	-0.687
+5	49	-0.20%	25:24	-0.100	0.457
+6	49	-0.11%	21:28	-1.256	-0.687
+7	49	0.03%	27:22	0.271	1.029
+8	49	0.54%	29:20	2.134 *	1.601
+9	49	-0.18%	25:24	0.356	0.457
+10	49	-0.51%	19:30	-1.598	-1.259

Data are calculated (or Derived) based on data from CRSP 1925 US Stock Annual ©2012 Center for Research in Security Prices (CRSP®) at the University of Chicago Booth School of Business. * Significant at 0.05. ** Significant at 0.01.

⁵ Cowan Research, LC, Ames, IA, USA, publisher of Eventus®, a software for event studies and financial market research.

An anomaly is noted on Day 8, as abnormal returns also significantly accrue. While this result is likely spurious and attributed to random movement, as no event is attached to that date, we might speculate that additional activity following the announcement (through committee, Board of Directors decision, *etc.*) has further strengthened the possibility of actual bond repurchase and debt restructuring.

Shown in Table 3 are the cumulative abnormal returns associated with the event window (0, 1) for all 50 companies in the dataset. The results show a cumulative abnormal return that is statistically significant at the 0.01 level.

Table 3. Cumulative Average Abnormal Returns (CAAR).

Window	N	Mean Cumulative Abnormal Return	Precision Weighted CAAR	Positive Negative	Patell Z	Generalized Sign Z
(0, 1)	50	1.57%	1.16%	27:23	3.275 **	0.883

Data are calculated (or Derived) based on data from CRSP 1925 US Stock Annual ©2012 Center for Research in Security Prices (CRSP®) at the University of Chicago Booth School of Business. ** Significant at 0.01.

Further analysis divided the dataset into those announcements associated with exchange offers and those associated with cash tender offers to see if differences could be noted. The results in Table 4 show the cumulative abnormal return associated with the event window (0, 1) for the 16 companies in the dataset associated with an exchange offer. The results show a cumulative abnormal return in Table 4 that is not statistically significant.

Table 4. Cumulative Average Abnormal Returns (CAAR)—Exchange offer.

Window	N	Mean Cumulative Abnormal Return	Precision Weighted CAAR	Positive Negative	Patell Z	Generalized Sign Z
(0, 1)	16	0.58%	-0.44%	6:10	-0.872	-0.717

Data are calculated (or Derived) based on data from CRSP 1925 US Stock Annual ©2012 Center for Research in Security Prices (CRSP®) at the University of Chicago Booth School of Business.

The results in Table 5 show the cumulative abnormal return associated with the event window (0, 1) for the 34 companies in the dataset associated with a cash tender offer. The results show a cumulative abnormal return in Table 5 that is statistically significant at the 0.001 level. These results indicate that the cash tender offer provides a statistically-significant economic benefit to shareholders making the bond indenture consent solicitation.

Table 5. Cumulative Average Abnormal Returns (CAAR)—Cash tender offer.

XX/S	indow	M	Mean Cumulative	Precision	Positive	Patell Z	Generalized
Window	1♥	Abnormal Return	Weighted CAAR	Negative	raten Z	Sign Z	
(0, 1)	34	2.03%	1.88%	21:13	4.511 ***	1.561

Data are calculated (or Derived) based on data from CRSP 1925 US Stock Annual ©2012 Center for Research in Security Prices (CRSP®) at the University of Chicago Booth School of Business. *** Significant at 0.001.

To test for a significant difference between the event window (0, 1) abnormal returns for the companies doing cash tender offers and companies doing exchange offers, we perform a mean difference

t-test. These results are presented in Table 6. We use the PROC TTEST ⁶ procedure in SAS[®] software ⁷ to analyze the data. The folded F statistic is used to test for unequal variances for the two samples and is explained in Steel and Torrie [39]. The pooled *t*-statistic is explained in Sasabuchi [40,41]. The Satterthwaite *t*-statistic is explained in Satterthwaite [42]. The results in Table 6 show that there is no statistically-significant difference between the event window (0, 1) cumulative abnormal returns associated with companies announcing bond indenture-related exchange offers and companies announcing bond indenture-related cash tender offers. This result supports our second hypothesis that no differences in stockholder abnormal returns will be evidenced in consent solicitations deemed to be (perhaps) coercive (tender offers) *vs.* those that are not coercive (exchange offers).

The results in Table 6 indicate that companies involved in a change in the bond indenture will not experience a significant difference in the influence on shareholder wealth if a cash tender offer or an exchange offer is chosen to facilitate the transaction.

Statistics	Exchange Offer	Cash Tender Offer
Panel A		
Mean Cumulative Abnormal Return	0.0057	0.0203
Variance	0.0063	0.0033
Panel B: t-statistics		
Pooled	-0.7300	
Satterthwaite	-0.6600	
Folded-F (p-Value)	1.85 (0.13)	
N	16	34

Table 6. Test of differences between cash tender offer returns and exchange offer returns.

Data are calculated (or Derived) based on data from CRSP 1925 US Stock Annual ©2012 Center for Research in Security Prices (CRSP®) at the University of Chicago Booth School of Business.

5. Conclusions

Many companies in recent years are restructuring their debt liabilities, including even those with relatively stable financial positions. By buying back debt through bond indenture consent solicitations, either through cash tender offers or exchange offers, a firm may achieve a more optimal and sustainable capital structure while instilling confidence in the market and, in some cases, may prevent a Chapter 11 filing (Dunne, Bray and Shenfield [8]). Clearly, the bond issuer benefits in a number of ways. Bond buybacks present as a desirable debt management strategy, as leverage is reduced and interest expense lowered. Further, it may alleviate shareholder pressure on the board of a company with excess cash to deleverage capital structure.

Evidence was shown in this study that stockholders benefit, as well, as the market responds favorably to announcements of debt restructuring through bond indenture consent solicitations. Stockholders

⁶ SAS Institute Inc. 2014. "The TTEST Procedure." In SAS/STAT® 13.2 User's Guide. SAS Institute Inc., Cary, NC, USA.

The data analysis for this paper was generated using SAS/STAT software, Version 9.3 of the SAS System for Windows. Copyright © 2002–2010, SAS Institute Inc. SAS, and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc., Cary, NC, USA.

earned statistically-significant abnormal returns both on the event day (Day 0) and over the cumulative event window (Day 0 and Day +1). For both the holder of the debt and the stockholder, buybacks associated with cash tender offers tend to be more attractive than exchanges for equity. Although no statistical differences were noted between those associated with cash tender offer and exchange offer, statistically-significant abnormal returns did accrue to the announcements associated with cash tender offers.

Although some concern has traditionally been expressed for the bondholder's wellbeing, whether due to coercive influence from cash tender offers or stockholder wealth appropriation at the bondholders' expense, it seems reasonable to assume that bondholders are at a minimum no worse off, as long as legal rights with respect to the bond and trust indenture are honored. Bondholders do seem to be attracted to opportunities to consent to bond indenture amendments or waivers of covenants, perhaps out of concern for future trading prices, or to take advantage of a cash tender offer that is current, or to abandon a relationship where risk has increased. Whereas a number of methods of determining bond market abnormal returns have been used, no definitive method of analyzing bond market abnormal returns has been described in the literature. Bondholder value is further deemed difficult to analyze due to the paucity of float, liquidity and information (the indenture) in individual bonds, along with the attendant analysis required by bond portfolio managers in each individual situation, and the likelihood that an event-related trade will happen in the event window is low. To actually capture an event-related liquidity trade might require a long-term event study, something that might be of interest in future research.

In conclusion, all appear to be better off as a result of this method of debt reduction. The practice of bond buybacks and exchanges through bond indenture consent solicitations is gaining traction as a viable strategic opportunity to better manage the firm's leverage exposure and to move toward a more satisfactory capital structure that enhances growth and investment opportunities by limiting the constraints of long-term debt, thus creating value for the firm and its owners.

Author Contributions

Jamie A. Anderson-Parson and Robin T. Byerly conducted theoretical research, developed and wrote introduction, literature review and research argument. Terrill R. Keasler conducted statistical analysis and wrote the methods and results sections.

Conflicts of Interest

The authors declare no conflict of interest.

References

- 1. DeJong, A.; Roosenboom, P.; Schramade, W. Who benefits from bond tender offers in Europe? *J. Multinatl. Financ. Manag.* **2009**, *19*, 355–369.
- 2. Dunne, D.F.; Kelly, B.P. Debt Exchange Offers in the Current Market. Available online: http://www.milbank.com/images/content/9/1/912/Bky-Strat-Debt-Exchange-Offers-DunneKelly-0709.pdf (accessed on 15 May 2015).

- 3. Saggese, N.P.; Noel, G.A.; Mohr, M.E. A practitioner's guide to exchange offers and consent solicitations. *Loyola Los Angeles Law Rev.* **1991**, *24*, 526–545.
- 4. Kahan, M.; Tuckman, B. Do bondholders lose from junk bond covenant changes? *J. Bus.* **1993**, *66*, 499–516.
- 5. Glover, K.J.; Hambusch, G. The trade-off theory revisited: On the effect of operating leverage. *Soc. Sci. Res. Netw.* **2013**, *10*, 2–22.
- 6. Gkoutzinis, A.A. The law and practice of consent solicitations. In *Law and Practice of Liability Management*; Cambridge University Press: Cambridge, MA, USA, 2014; pp. 252–295.
- 7. Rossell, M.M. Options for Restructuring Publicly-Traded Debt. Project Finance Newswire 2009. Available online: http://www.chadbourne.com/OptionsforRestructuringPublicly_projectfinance/ (accessed on 28 February 2015).
- 8. Dunne, D.; Bray, G.; Shenfield, R. Evaluating strategic debt buybacks: How to pursue effective de-leveraging strategies. In *Navigating Today's Environment: The Directors' and Officers' Guide to Restructuring*; Beard Books: Frederick, MD, USA, 2010; pp. 1–6.
- 9. Barondes, R. An Economic Analysis of the Potential for Coercion in Consent Solicitations for Bonds. *Fordham Law Rev.* **1994**, *63*, 749–790.
- 10. Berk, J.; DeMarzo, P. Corporate Finance, 3 ed.; Pearson: New Saddle River, NJ, USA, 2014.
- 11. Modigliani, F.; Miller, M. Corporate income taxes and the cost of capital: A Correction. *Am. Econ. Rev.* **1963**, *53*, 433–443.
- 12. Jensen, M.; Meckling, W. Theory of the firm: Managerial behavior, agency costs and ownership structure. *J. Financ. Econ.* **1976**, *3*, 305–360.
- 13. Bradley, M.; Jarrell, G.A.; Kim, E.H. On the existence of an optimal structure: Theory and evidence. *J. Financ.* **2012**, *39*, 857–878.
- 14. DeAngelo, H.; Masulis, R.W. Optimal capital structure under corporate and personal taxation. *J. Financ. Econ.* **1980**, *8*, 3–27.
- 15. Hatfield, G.B.; Cheng, L.T.W.; Davidson, W.N., III. The determination of optimal capital structure: The effect of firm and industry debt ratios on market value. *J. Financ. Strateg. Decis.* **1994**, *7*, 1–14.
- 16. Brealey, R.; Myers, S.; Allen, F. *Principles of Corporate Finance*; McGraw Hill: New York, NY, USA, 2013.
- 17. Ross, S.A.; Westerfield, R.W.; Jaffe, J. *Corporate Finance*, 10th ed.; McGraw Hill: New York, NY, USA, 2012.
- 18. Gliadias, N.; Badilla, R. Understanding Credit Risk for Corporate Bonds. *Bond University*. Available online: http://www.bondsquawk.com/2013/01/14/understanding-credit-risk-for-corporate-bonds/ (accessed on 28 February 2015).
- 19. Billett, M.; King, T.; Mauer, D. Growth opportunities and the choice of leverage, debt maturity, and covenants. *J. Finance* **2007**, *62*, 697–730.
- 20. Kruse, T.; Nohel, T.; Todd, S. The decision to repurchase debt. *J. Appl. Corp. Finance* **2014**, *26*, 85–93.
- 21. The Trust Indenture Act of 1939. Available online: https://www.sec.gov/about/laws/tia39.pdf (accessed on 15 May 2015).
- 22. Bazzana, F.; Broccardo, E. The role of bondholders' coordination in freeze-out exchange offers. *J. Financ. Manag. Mark. Inst.* **2013**, *I*, 67–84.

- 23. Daniels, K.; Ramírez, G. Debt restructurings, holdouts, and exit consents. *J. Financ. Stab.* **2007**, *3*, 1–17.
- 24. Oldfield, G. Bond games. Financ. Anal. J. 2004, 60, 52–66.
- 25. Chatterjee, S.; Dhillon, U.; Ramírez, G. Coercive tender and exchange offers in distressed high-yield debt restructurings: An empirical analysis. *J. Financ. Econ.* **1995**, *38*, 333–360.
- 26. Ho, T.S.Y.; Singer, R.F. Bond indenture provisions and the risk of corporate debt. *J. Financ. Econ.* **1982**, *10*, 375–406.
- 27. Masulis, R. The effects of capital structure change on security prices: A study of exchange offers. *J. Financ. Econ.* **1980**, *8*, 139–178.
- 28. Mikkelson, W.; Partch, M. Valuation effects of security offerings and the issuance process. *J. Financ. Econ.* **1986**, *15*, 31–60.
- 29. Dann, L.; Mikkelson, W. Convertible debt issuance, capital structure change and financing-related information: Some new evidence. *J. Financ Econ.* **1984**, *13*, 157–186.
- 30. Mikkelson, W. Convertible Calls and Security Returns. J. Financ. Econ. 1981, 9, 237–264.
- 31. Bab, A. Debt tender offer techniques and the problem of coercion. *Columbia Law Rev.* **1991**, *91*, 846–890.
- 32. Farnsworth, E.A. Coercion in contract law. Univ. Ark. Little Rock Law J. 1982, 5, 329–343.
- 33. The Restatement of Contracts. Available online: http://www.lexinter.net/LOTWVers4/restatement_of_contracts.htm (accessed on 20 October 2014).
- 34. Smith, C.; Warner, J. On financial contracting: An analysis of bond covenants. *J. Financ. Econ.* **1979**, *7*, 117–161.
- 35. Schaub, M. Short-term wealth effects from debt buyback announcements. *Appl. Econ. Lett.* **2010**, *17*, 1351–1354.
- 36. Brown, S.; Warner, J. Using daily stock returns: The case of event studies. *J. Financ. Econ.* **1985**, *14*, 3–31.
- 37. Cowan, A. Nonparametric event study tests. Rev. Quant. Finance Account. 1992, 2, 343–358.
- 38. Cummins, D.J.; Lewis, C.M. Catastrophic events, parameter uncertainty and the breakdown of implicit long-term contracting in the insurance market: The case of terrorism insurance. *J. Risk Uncertain.* **2003**, *15*, 55–80.
- 39. Steel, R.G.D.; Torrie, J.H. *Principles and Procedures of Statistics*, 2nd ed.; McGraw Hill: New York, NY, USA, 1980.
- 40. Sasabuchi, S. A multivariate test with composite hypotheses determined by linear inequalities when the covariance matrix is completely unknown. *Mem. Fac. Sci. Univ. Ser. A* **1988**, *42*, 9–19.
- 41. Sasabuchi, S. A multivariate test with composite hypotheses determined by linear inequalities when the covariance matrix has an unknown scale factor. *Mem. Fac. Sci. Univ. Ser. A* **1988**, *42*, 37–46.
- 42. Satterthwaite, F.W. An approximate distribution of estimates of variance components. *Biom. Bull.* **1946**, *2*, 110–111.
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