Who's Being Greedy? A Theoretical and Empirical Examination of Holdouts and Coercion in Debt Tender and Exchange Offers

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A commonly used word—seemingly specific and concrete when used in everyday speech—may mask troubling ambiguities . . . Few words more perfectly illustrate the deceptive dependability of language than the term “coercion” . . .¹

I. INTRODUCTION

During the 1980's, the combination of an unprecedented number of leveraged buyouts and other leveraged acquisitions, an explosive expansion of the market for high-yield corporate bonds, and an optimistic outlook for future growth resulted in many corporations taking on financial structures dominated by debt. In the early 1990's, largely due to downward trends in the domestic and international economy, many of these firms have tried to relieve long-term financial pressure and avoid short-term liquidity squeezes by offering cash or new securities to their debtholders in exchange for existing debt. Between 1990 and 1992, firms announced tender and exchange offers of more than \$43.6 billion for their high-yield debt, including \$13.5 billion in 1992 alone.²

The substantial amount of capital involved in tender and exchange offers reveals their importance to firms that need to make financial adjustments, especially in a recessionary financial climate. Such private restructurings are a relatively quick means of providing a firm with the financial flexibility needed to adjust to changes in market conditions, and are widely held to be an efficient and relatively inexpensive method by which firms can privately negotiate out of liquidity difficulties without resorting to the high costs and risks of bankruptcy.³

1. Katz v. Oak Indus., 508 A.2d 873, 875 (Del. Ch. 1986).

2. SALOMON BROTHERS, TENDER AND EXCHANGE OFFERS 21 (1993) [hereinafter TENDER AND EXCHANGE OFFERS]. The other years break down as follows: 1990: \$16.0 billion announced, \$7.1 billion completed; 1991: \$14.1 billion announced, \$7.7 billion completed. In 1992, of the \$13.5 billion announced, \$7.0 billion were actually completed.

3. See, e.g., Victor Brudney, *Corporate Bondholders and Debtor Opportunism: In Bad Times and*

However, two problems have troubled practitioners and commentators in recent years.⁴ The first problem, the main focus of this Note, involves the potentially coercive impact of certain conditions that are attached to many offers. Some commentators claim that firms structure their offers so as to force debtholders to accept.⁵ The second problem is the large proportion of tender and exchange offers that fail or are not completed. For instance, of the \$43.6 billion of the debt involved in offers from 1990 to 1992, successfully completed offers account for only \$21.8 billion, half the total amount.⁶ This high rate of failure is alarming because failed private offers generally result in weaker firms and, in the worst cases, costly bankruptcies. One crucial aspect that contributes to this problem is the holdout—the bondholder who refuses to accept an offer in hopes of profiting if the offer succeeds without his participation. This Note focuses on the problem of coercion in tender and exchange offers. Through the discussion of coercion, however, I hope to provide some insights that will help to explain the high failure rate of private restructurings, and in particular problems created by holdouts.

Coercion is said to occur under the following circumstances: A firm offers a certain amount of cash, equity securities, or new debt securities (or a combination of these) in exchange for an existing class of debt ("old debt") held by widely dispersed bondholders. As a condition to its offer, however, the firm requires accepting bondholders to agree to a "consent solicitation," or an agreement to remove from the old debt certain contractual provisions that would otherwise prevent the firm from issuing additional debt or significantly changing its capital structure in other ways.⁷ These agreements are also termed "exit consents" because the bondholder agrees to the changes just prior to leaving the contractual relationship through the exchange.⁸

Good, 105 HARV. L. REV. 1821, 1822-23 (1992); John C. Coffee, Jr. & William A. Klein, *Bondholder Coercion: The Problem of Constrained Choice in Debt Tender Offers and Recapitalizations*, 58 U. CHI. L. REV. 1207, 1211 (1991).

4. The following articles deal with bargaining problems in tender and exchange offers: Brudney, *supra* note 3; Coffee & Klein, *supra* note 3; Julian R. Franks & Walter N. Torous, *An Empirical Investigation of U.S. Firms in Reorganization*, 44 J. FIN. 747 (1989); Robert Gertner & David Scharfstein, *A Theory of Workouts and the Effects of Reorganization Law*, 46 J. FIN. 1189 (1991); Ford Lacy & David M. Dolan, *Legal Aspects of Public Debt Restructurings: Exchange Offers, Consent Solicitations and Tender Offers*, 4 DEPAUL BUS. L.J. 49 (1991); Mark J. Roe, *The Voting Prohibition in Bond Workouts*, 97 YALE L.J. 232 (1987); Nicholas P. Saggese et al., *A Practitioner's Guide to Exchange Offers and Consent Solicitations*, 24 LOY. L.A. L. REV. 527 (1991); Alan Schwartz, *Bankruptcy Workouts and Debt Contracts*, 36 J.L. & ECON. (forthcoming 1993) (manuscript on file with author); Andrew L. Bab, Note, *Debt Tender Offer Techniques and the Problem of Coercion*, 91 COLUM. L. REV. 846 (1991).

5. See *infra* notes 11, 40 and accompanying text.

6. Only \$7 billion of the \$13.5 billion announced in 1992 was involved in offers that were actually completed. See TENDER AND EXCHANGE OFFERS, *supra* note 2, at 21.

7. Changing the firm's capital structure can potentially reduce the value of the remaining outstanding debt. If the offer is withdrawn, the provisions of the old debt are unchanged and any debt that has been tendered is returned to the bondholder.

8. For example, Town & Country Corp. recently offered to exchange \$850 principal amount of new bonds and \$150 principal amount of another new issue of bonds for each \$1000 principal amount of its old debt. The company attached to the exchange a solicitation to "delete certain restrictive covenants and other

If a sufficient number, usually a majority, of the bondholders tender their old debt, the exit consents alter the governing debt contract. Any bondholders who have failed to tender are left with debt that has been stripped of its protective covenants, and thus, according to some observers, should be worth less. In fact, resisting bondholders may have difficulty finding a market for their bonds after the tender offer has succeeded.

Critics of exit consents see bondholders as having been placed in a type of prisoner's dilemma,⁹ each forced to accept an offer that disadvantages the group as a whole. In this view, firms are using offers with exit consents (hereinafter "consent offers")¹⁰ to extract wealth from bondholders. Bondholders go along with deals that are not in their best interests to avoid losing substantially more. This, in a nutshell, is the problem of coercion.

Many commentators have written about claims of coercion in debt exchange offers.¹¹ The majority of writers agree that firms do have the ability to extract wealth from bondholders through a consent offer, and that therefore a firm can fashion coercive offers.¹² Professor Victor Brudney states that in the context of consent offers, "bondholders must be induced . . . to sell their bonds to the issuer Dispersed bondholders are often 'compelled' by the debtor to consent to such disadvantageous sales, exchanges, or amendments by premiums, bribes, or threats" ¹³ However, Professor Brudney's criticism does not address the oxymoronic approach of condemning a situation in which a bondholder, in a market setting, is "compelled" to sell by high premiums. In other words, he does not recognize that receiving an offer that cannot be refused is not *always* a bad thing. In a similar vein, Professors Coffee and Klein assert that because corporations have the potential power to make bondholders worse off, they "can achieve favorable recapitalizations through exchange offers that put the bondholders into a kind of prisoner's dilemma,

provisions from the old bonds' indenture." SALOMON BROTHERS, HIGH YIELD RESTRUCTURING REPORT 5 (1992). These offers still occur in significant numbers. In the first two weeks of April 1993, Eagle Industries and Mirage Resorts, Inc. each made offers involving a combined total of over \$260 million in debt. *Great American Unit in Tender Offer*, Reuters News Service, Apr. 8, 1993, available in DIALOG; *Registers Notes, 2003, To Be Offered in Exchange for 12.75% Unsecured Notes, 1999, of GNLV Finance Corp., Plans Related Consent Solicitation*, Standard & Poors Daily News, Apr. 16, 1993, available in DIALOG.

9. See *infra* notes 41 and accompanying text.

10. Hereinafter, "consent offer" refers to a tender or exchange offer that has, as a condition of acceptance and success of the offer, a requirement that a sufficient number of bondholders consent to amending protective covenants of the old debt.

11. Most commentators have written that coercion is a substantial problem. See, e.g., Brudney, *supra* note 3; Coffee & Klein, *supra* note 3; Lacy & Dolan, *supra* note 4; Patricia A. Vlahakis, *Deleveraging: A Search for Rules in a Financial Free-for-All*, 5 M&A AND CORP. GOVERNANCE L. REP. 290 (1990). Some authors argue that consent offers, for various reasons, may be unable to coerce bondholders in the same way that prisoners are coerced in the traditional game. See, e.g., Schwartz, *supra* note 4; Bab, *supra* note 4; Marcel Kahan & Bruce Tuckman, *Do Bondholders Lose from Junk Bond Covenant Changes?*, (Feb. 1992) (unpublished manuscript, on file with author).

12. See, e.g., Coffee & Klein, *supra* note 3, at 1225.

13. Brudney, *supra* note 3, at 1822.

thereby coercing the bondholders.”¹⁴ Here also, the authors pay little attention to the source of the alleged coercion and the structure of the allegedly coercive offers, and provide no substantial evidence to show that the power of a firm to reduce the value of the remaining bonds held by non-tendering bondholders is real rather than imagined.

Other commentators have argued that these claims of bondholder coercion are neither realistic nor theoretically sound. Professor Schwartz maintains that bondholders can avert coercion, either by coordinating their decisions in the absence of communication or binding commitments, or by communicating their decisions so as to assure other bondholders of their commitment to cooperation.¹⁵ For example, Schwartz argues that a bondholder may figure out that a particular choice is the “sensible thing to do,” and correctly assume that all other bondholders will come to the same conclusion, enabling the group to avoid the trap of a prisoner’s dilemma.¹⁶ Another author provides anecdotal evidence from practitioners that bondholders can coordinate their actions to avoid being forced to accept an unfavorable offer.¹⁷

In setting up the problems of coercion, however, previous commentators have failed to recognize and model all theoretical scenarios. Most significantly, the existing literature does not evaluate or fully envision the possibility of beneficial coercion, by which exit consents are employed to promote the success of “good offers” (offers that are in the best interest of the bondholders and the firm) when holdouts might otherwise cause them to fail.¹⁸ Another weakness of the current literature lies in a number of key assumptions used to support the claims of coercion. The most important assumption is that firms using consent offers can actually reduce the value of non-tendered debt. Another is that firms actually use coercive tactics to force bondholders to accept “bad offers”—offers that bondholders would rather reject, either because the deal is tilted in favor of management or because the offer is detrimental to the financial future of the firm, or both.¹⁹

14. Coffee & Klein, *supra* note 3, at 1212. They also claim that firms can mislead bondholders by exaggerating the possibility or proximity of bankruptcy. *Id.* I dispute this point below. *See infra* note 51.

15. Schwartz, *supra* note 4, at 50-57.

16. *Id.* at 50-51. This outcome is characterized as a “focal equilibrium.” *Id.*

17. Bab, *supra* note 4, at 878-89.

18. Professors Coffee and Klein recognized the possibility of good coercion, but made no efforts to ascertain whether or not it existed in practice. By assuming that firms used consent offers to manipulate bondholders, Coffee and Klein gave undue weight to their policy conclusions favoring bondholders. Thus, they recommend that bondholders should be allowed to vote on changes to the debt contract first, and only after knowing the outcome of such vote should they be asked to decide whether to exchange their debt. Coffee & Klein, *supra* note 3, at 1242-51. According to the authors, this two-step process would shift the control of the “coercive potential” of the offer to the bondholders. *Id.*

19. “Bad offers” are defined as offers that are bad for bondholders because the firm is using the offer to shortchange the bondholders. I also assume that, in most cases, such offers are bad for the firm. *See infra* note 39 and accompanying text. “Good offers,” on the other hand, are tender or exchange offers designed to avert financial distress and improve the financial condition of the firm, rather than to cheat unwary bondholders through hidden information and deceptive offers.

These claims and assumptions are difficult to assess without undertaking a large-scale examination of past offers. Important assumptions underpinning claims of coercion cannot be evaluated without empirical research on the impact of consent offers, which, to date, has not been done. This Note begins to fill this void by examining a sample of 118 tender and exchange offers made from January 1990 through October 1992.

Part II of this Note reviews the current position of courts and regulators on the coercion problem. Part III defines and discusses the possible payoff structures of exchange and tender offers. A detailed game-theoretic exposition of the conditions necessary for coercion and holdout problems follows in Part IV. Part V empirically tests the coercion theory by examining a sample of past tender and exchange offers. First, Part V compares the success rate of allegedly coercive consent offers with that of non-consent offers,²⁰ finding that consent offers do succeed more often than do non-consent offers. Second, this Part examines bond price data, both pre- and post-offer, to determine whether and to what extent consent offers reduce the value of the debt held by non-tendering bondholders and whether firms use consent offers to force bondholders to accept bad offers.

Contrary to the widely held assumptions discussed above, the data show that, on average, consent offers do not reduce the value of non-tendered debt. On the other hand, exit consents have a positive impact on the success rate of the offers, suggesting that consent offers have the potential to coerce. However, there is no evidence that firms use these exit consents to coerce bondholders into accepting bad offers. On the contrary, the data indicate that in situations where a supposedly coercive consent offer fails, the bondholders would have been better off accepting the offer because it was in the best interests of the bondholders and the firm. This suggests that the real problem may lie with greedy individuals holding out, and that perhaps this type of coercive technique should be used more often to make them comply with good offers. Observers frequently attribute the failure of non-consent offers to a holdout problem, and the data reveal that the conditions necessary for a holdout problem do in fact exist in the sample of non-consent offers examined in this Note.

Part VI presents conclusions and policy implications, in light of the empirical findings. Based on the data presented, this Note concludes that the coercion problem has been overrated, and that the more serious problem of holdouts derailing apparently good offers demands increased attention.

20. A "non-consent" offer is any tender or exchange offer which does not condition acceptance or success of the offer upon receipt of agreements to modify the provisions of the old debt.

II. CURRENT LAW

A. Case Law: Judicial Restraint

Courts have taken a hands-off approach to claims of coercion in consent offers. Current judicial policy allows firms to use allegedly coercive elements in financial restructurings with impunity. Courts have not created additional rules to protect bondholders, nor have they imposed potential litigation costs by creating uncertainties in legal treatment. In establishing this policy, courts have generally not been sympathetic to plaintiffs' claims of unfair coercion in exchange offers.²¹ By reading debt contracts literally and not finding implied fiduciary duties to bondholders, courts have deflected complaints of coercion while avoiding the real question: Was there coercion?

The seminal case of *Katz v. Oak Industries Inc.*²² involved a restructuring that included an exchange offer involving multiple classes of debt and required amendments of bond indentures (exit consents) to succeed. The Delaware Chancery Court recognized the possibility that the amendments "may have adverse consequences to debt holders who elect not to tender,"²³ but noted that coercion in a market context is sometimes justified. For instance, an employer may withhold wages from an absent worker to "coerce" the employee to work because she desires to be paid. The court held that only "wrongfully coercive" actions carry a right of redress,²⁴ and that the coercion alleged by plaintiffs was not "wrongful."

Skeptical of claims of wrongful coercion, the court stated that an exchange offer's success does not rely on hidden coercion of bondholders, but rather "ultimately depends upon the ability and willingness of the issuer to extend an offer that will be a financially attractive alternative to holders."²⁵ That is, when offers succeed, they do so on their own merits. The court implicitly rejected the idea that firms could effectively coerce bondholders to accept an offer by reducing the value of dissenting bondholders' debt. The court expressly rejected the plaintiffs' argument²⁶ that a firm could make an offer that a bondholder could not, but should, rationally refuse.

The Delaware court confronted a similar complaint in another important case, *Kass v. Eastern Air Lines, Inc.*²⁷ The plaintiffs in that case argued that

21. See, e.g., *Katz v. Oak Indus.*, 508 A.2d 873, 878-82 (Del. Ch. 1986); *GAF Corp. v. Union Carbide Corp.*, 624 F. Supp. 1016, 1018-22 (S.D.N.Y. 1985) (applying business judgment rule to validate allegedly coercive actions of board of directors in defending against plaintiff's cash buyout offer); *Kass v. Eastern Air Lines*, Nos. 8700, 8701, 8711, 1986 WL 13008, at *5 (Del. Ch. Nov. 14, 1986) (rejecting plaintiffs' characterization of tender offer as wrongfully coercive).

22. 508 A.2d 873 (Del. Ch. 1986).

23. *Id.* at 877.

24. *Id.* at 880.

25. *Id.* at 881-82.

26. *Id.* at 878.

27. Nos. 8700, 8701, 8711, 1986 WL 13008 (Del. Ch. Nov. 14, 1986).

the defendant's consent solicitation unfairly coerced bondholders and amounted to vote-buying, and thus, the defendant had violated an implied duty of good faith and fair dealing. Rejecting the bondholders' complaint, the Delaware court reiterated its reluctance to find "wrongful" coercion, again revealing its presumption that the market works fairly:

The gist of the complaint is not that Eastern is not being candid but that it is being wrongfully coercive and unfair The fact that the offer in this case is one made publicly to all voters on the same terms—that each bondholder is free to accept or reject it—precludes, in my opinion, a conclusion that it disenfranchises any voter or group of voters²⁸

The court's reasoning implicitly rejects the idea that consent solicitations unfairly place bondholders in a prisoner's dilemma.²⁹

The *Katz* and *Kass* cases remain the leading cases in this area, and they are frequently cited to demonstrate that claims that an exchange offer is coercively structured will not be successful in court.³⁰

B. *The Securities and Exchange Commission*

The Securities and Exchange Commission ("SEC") has watched claims of coercion carefully and has taken some steps to increase the amount of information disseminated to all participants in the tender and exchange offer process, but it has thus far taken no drastic action.³¹ Several firms have petitioned the SEC to prohibit firms from combining consent solicitations with exchange or tender offers.³² Academics have made similar recommendations.³³ While the SEC has made no changes in direct response

28. *Id.* at *4.

29. The court reasoned:

Each holder is offered the opportunity to accept or reject the consideration offered. Each will continue to own bonds and thus each has an economic incentive of the same kind to evaluate the question whether any threat to the value of his or her bonds posed by the amendment is more or less valuable than the consideration offered for his or her consent. I recognize the ways in which the structure of the consent payment complicates that choice and increases the risk of withholding consent. But, even if one chooses to characterize that deliberate increase in risk as "coercive" (a murky concept of limited analytical utility), I cannot conclude that it is wrongfully so on this record.

Id. at *5.

30. See, e.g., Vlahakis, *supra* note 11, at 297 ("The decision in *Katz* [and *Kass*] . . . would appear to provide little leeway for debtholders seeking relief from the tender offer/exit consent procedure"); see also Saggese et al., *supra* note 4, at 598-600; Bab, *supra* note 4, at 854-55.

31. For a discussion of earlier regulation proposals, see Barbara Franklin, *SEC Considers Stiffer Rules for Tender Offers*, N.Y. L.J., May 24, 1990, at 5.

32. See, e.g., Lacy & Dolan, *supra* note 4, at 68 (describing petition of FMR Corp.). See generally Franklin, *supra* note 31; George A. Greenslade, *SEC and Consent Solicitations of Debentureholders*, N.Y. L.J., July 5, 1990, at 1.

33. Coffee & Klein, *supra* note 3, at 1217.

to these requests, it has recently stated that it will propose the establishment of a system to track transactions involving high-yield (junk) bonds, much like those for other corporate bonds and equity securities, in an effort to expand the range of information available to investors.³⁴

It is unclear whether the SEC will eventually accede to reformers' demands and so restrict consent offers. The SEC has not indicated the reasons for its inaction, but it may well be based on a lack of complete information, as well as caution and reluctance to interfere when interference may be unnecessary. The implications of the following theoretical and empirical analysis justify the limited action the SEC and the courts have taken, as well as their frequent refusal to intervene when reviewing claims of wrongful coercion in exchange offers.

III. DEFINING THE PROBLEMS

The following discussion isolates an important aspect of the problems associated with debt exchange offers. The current literature has identified and discussed some (but rarely all) of the elements of an offer which give rise to coercion or holdout problems.³⁵

A. Coercion

Coercion is said to occur when a firm attaches a consent solicitation, or "exit consent," to a tender or exchange offer, requiring participating bondholders to consent to the removal of protective covenants from the debt contract. Some have argued that firms use exit consents to force bondholders to accept the offered securities.³⁶ When a majority or sufficient number of bondholders (as required by the indenture) agrees to the changes, the entire class of debt—including debt held by those who did not consent—is modified.³⁷ The coercion stems in part from the individual bondholder's fear

34. See *SEC Requires New Fund Disclosures, Proposes One-Step, Off-The-Page Sales*, 25 Sec. Reg. & L. Rep. (BNA) No. 11, at 395 (Mar. 19, 1993).

35. Commentators have not given equal attention to all the payoffs necessary to make an offer have a given character. For instance, Coffee and Klein depict the bondholder's decision as concerning only "three values to be compared: (1) the offered exchange price, (2) the current value of the bonds without amendment, and (3) the value of the 'amended' bonds." Coffee & Klein, *supra* note 3, at 1225 n.56. With regard to the "current value of the bonds," however, these authors do not discuss the fact that the bondholder must also consider what will happen to the bonds after the exchange offer is completed or terminated. The current value is not a value that is attainable, since the success or failure of the exchange offer, as well as the information that is received from the process, will almost certainly have an impact on the price. This is the value that bondholders care about in making their decision.

36. This method has been used as a countermeasure to the holdout problem. Saggese et al., *supra* note 4, at 535-38.

37. The Trust Indenture Act of 1934, § 316(b), 15 U.S.C. § 77ppp(b) (1988), forbids certain "core provisions" (principal amount, maturity date, and interest provisions) from being modified without unanimous consent.

that unless he tenders, his non-tendered debt, stripped of protective covenants and facing possible liquidity problems, will be worth substantially less than even its low market price prior to the exchange, especially in the event of bankruptcy. This fear increases where the new securities offered will be senior to the old debt.³⁸ Therefore, exit consents, the priority of the securities being exchanged for the old debt, and the likelihood of bankruptcy contribute to creating conditions which make an offer coercive.

The threat of coercion is that firms may force bondholders into accepting suboptimal offers. An offer is suboptimal if bondholders and the firm would be better off if the offer failed; that is, if the value of the bonds after a failed offer is greater than the firm's offer price.³⁹ A coercive offer theoretically forces bondholders to accept such a bad offer and enables the firm to extract wealth from bondholders. In these cases, then, the value of the bonds after the bad offer fails should be higher than the offer price.⁴⁰

These coercive offers are analogous to the paradoxical game known as the "prisoner's dilemma," in which two parties who cannot coordinate their actions individually make choices that in combination generate lower total and individual payoffs than those that could have been achieved had coordination been possible.⁴¹ In the context of coercive offers, if all bondholders could organize or make credible commitments to reject, such offers would necessarily fail.

B. Holdouts

A potential holdout problem exists in debt exchange offers⁴² where a bondholder rejects an exchange offer, betting that a sufficient number of others will accept and the offer will succeed without him. The bondholder's decision

38. Gertner and Scharfstein point out that offers in which debtholders exchange debt for more senior securities or cash tend to create this "hold-in" (coercive) problem. Gertner & Scharfstein, *supra* note 4, at 1202-03. Thus, the non-tenderer "owns a junior claim that is potentially worthless in bankruptcy. The prospect of being further subordinated in the debt structure induces debtholders to tender" even if they are made worse off by the offer. PAUL ASQUITH ET AL., ANATOMY OF FINANCIAL DISTRESS: AN EXAMINATION OF JUNK-BOND ISSUERS 13 (National Bureau of Economic Research Working Paper No. 3942, 1991).

39. Because the price of bonds reflects in part the likelihood that the firm will repay the full amount of the debt, a reduction in bond price, all else being equal, reflects a reduction in the market's assessment of the future viability of the firm. If a coercive offer fails and bond price rises, the market is revealing that it believes that the offer works against the firm's long-term interests. Although wealth may be transferred from bondholders to the firm, thus benefitting the firm, such bad offers are suboptimal in the long run as indicated by their impact on bond prices. Such impact may be due to the fact that because most firms are repeat borrowers in the capital market, a reputation for coercively extracting wealth from bondholders increases future costs of borrowing. Finally, an offer could be intended to free a firm from financial distress, but be suboptimal if the firm attempts to take too much from the bondholders in the exchange, risking the failure of a much needed restructuring.

40. Also note that where the value of the bonds after a failed offer would be less than the pre-offer price, bondholders should accept the offer.

41. See, e.g., MORTON D. DAVIS, GAME THEORY: A NONTECHNICAL INTRODUCTION 108-09 (1983).

42. Hereinafter, the term "exchange offer" is used to mean both exchange and tender offers.

rests on the hope that very few others will behave as he does, and that reorganization will improve the firm's financial condition. If so, he will receive the full face value of his bonds rather than the lower exchange price paid to those who tendered their bonds. When enough bondholders use this reasoning, the offer fails.

Notice, however, that bondholders may reject an offer either to gain an advantage over their fellow bondholders (the holdout problem) or because the offer would indeed harm all bondholders by offering an extremely low exchange price (the inadequate offer). The failure of an offer is only inefficient when its success would have benefitted the bondholders as a class as well as the future viability of the firm—that is, where the offer increases firm value. More specifically, holdouts create an inefficient outcome when the value of the debt after a failed exchange remains below the offer price, but the value of non-tendered debt after a successful exchange is higher than the offer price.⁴³ Under these conditions (hereinafter “holdout offers”), players have an incentive to reject a beneficial offer in hopes of receiving a higher than average payoff, and their aggregate behavior causes a good offer to fail.⁴⁴

C. Conclusions

The characterization of an offer as coercive or not depends upon assumptions about the potential positive or negative effects of the offer on the bondholders and the firm, and on whether the firm can reduce the value of non-tendered debt. Commentators have not sufficiently clarified these assumptions, resulting in potentially faulty policy conclusions. To remedy this gap, the next section lays out all the possible types and outcomes of exchange offers. Using this framework, empirical tests can attempt to discover whether conditions exist under which an offer can truly coerce bondholders.

IV. ANATOMY OF A DEBT EXCHANGE OFFER

43. Note that when the offer price is less than the debt's value if the offer fails, holdouts are not a problem, since all bondholders are better off rejecting the offer.

44. A larger number of bondholders may aggravate the holdout problem. “We hypothesize that the holdout problem is more severe (and the probability of successful private renegotiation, lower) when relatively more creditors are allowed to participate in the restructuring plan.” Stuart C. Gilson et al., *Troubled Debt Restructurings*, 27 J. FIN. ECON. 315, 322 (1990). Increased numbers of debtholders increase the probability that a vote will be negative. On the other hand, “having fewer creditors could result in more frequent bargaining deadlocks if smallness of numbers causes individual creditors to feel more powerful and perceive greater dollar benefits to holding out.” *Id.* So the impact of the number of creditors is not clearly understood in the context of holdouts.

A. Introduction

This section dissects each component of a debt exchange offer, using the language and tools of game theory to pinpoint the conditions under which an offer can involve coercion or holdout problems. While previous literature on debt exchange offers has been far-reaching, it has not assembled all the pieces to develop a coherent picture of what factors, and, more importantly, what combinations of factors, are required to characterize an offer as coercive or holdout.

An illustrative example of an exchange offer will make this analysis more concrete.⁴⁵ Firm X is highly leveraged and has at least one class of publicly traded high-yield debt.⁴⁶ The debt trades at a discount to face value, since the firm's highly leveraged condition threatens its ability to make all payments in the future. The holders of the debt are numerous, making binding commitments between them unlikely or impossible and communication between them costly.⁴⁷

Firm X attempts to alleviate the pressure of its debt payments by making an exchange offer for its publicly traded debt. The offer consists of an exchange of cash, equity, debt securities, or some combination of these for the class of debt. The new debt securities may include an adjustment in face value, an earlier or later maturity date, and a change in coupon rate or a delay in its payment. The package of new securities will generally provide for a lower overall cash payment by the firm.⁴⁸ In addition, the firm may require all bondholders who tender to consent to amendments which, assuming a sufficient number tender, will strip non-tendered debt of significant protective covenants found in the bondholder's agreement (which the bondholders presumably paid for with a lower interest rate).⁴⁹ If enough bondholders consent to these amendments, the non-tendered debt will be more risky and may be less valuable. Tendering bondholders may be paid directly or through the exchange price for providing consents in consideration for the lost covenants and increased risk.

45. This example uses an exchange offer, but the analysis would be substantially the same under a tender offer.

46. Firm X has junk bonds. The firms in my sample, for instance, are exchanging securities rated below investment grade. *See infra* note 68. The high interest rates generally contribute to the need for an exchange offer.

47. Kahan and Tuckman examined a sample of 56 exchange offers (taken from a larger sample of 69) and found some evidence of bondholder groups forming. In only 16 cases did a bondholder group emerge. Kahan & Tuckman, *supra* note 11, at 32. Roe also makes the assumption that bondholder organization is costly. Roe, *supra* note 4, at 238.

48. Gilson et al., *supra* note 44, at 322-33.

49. Without the covenants, Firm X will be free to issue debt with higher priority, sell assets, and make significant business changes, without risking a technical default or breach of the agreement.

B. *Setting Up the Game*

1. *The Players and Assumptions*

Firm X's offer can be analyzed as a game to determine what decision a rational actor would make when faced with a variety of possible outcomes and circumstances. This game has three significant players: the firm, the individual bondholders, and the market. The market and the firm set the parameters that govern the bondholders' decisions.⁵⁰ The bondholders must make decisions based on what the market, the firm, and other bondholders do.

The following analysis assumes that all parties have symmetrical and accurate information about the value of the firm.⁵¹ Under this assumption, a firm cannot influence bondholders' estimates of the payoffs involved by misleading bondholders about the firm's value and the probability of bankruptcy.

Other assumptions are made at this stage, some of which will be relaxed below. First, bondholders are numerous and have small stakes, and therefore believe that their vote will not influence the final outcome.⁵² Second, the success of a good offer signals a firm's improved financial condition, by increasing the firm's liquidity and rendering the firm's capital structure more

50. The firm sets the tender price and the threshold percentage of bondholders who must accept the offer for it to succeed. The significant players could alternatively be defined as the firm and the bondholders as a group. Under this alternative framework, the firm is a crucial player since it should predict what offers will succeed or fail and has the capacity to eliminate failing equilibria. Schwartz, *supra* note 4, at 6-8, uses this alternative framework to discuss why exchange offers fail. The market, as will be shown, also establishes the parameters of the exchange offer, by determining the trading price of debt before and after a failed exchange offer and by determining the price of altered debt which was not exchanged.

51. Others have argued that the firm has more information than its creditors and therefore can lie about its future prospects. This misinformation convinces creditors that the value of their debt will be substantially lower if the exchange offer fails, thus creating a coercive offer based on false valuations. "[M]anagement may have non-public information, so that management can better estimate Debtor's ability to repay on the bonds' maturity. Rationally, management might not release such information because it wants the bonds to trade at a discount in order to economize on their repurchase." Coffee & Klein, *supra* note 3, at 1214-15 n.25. It seems unlikely that management facing possible default and bankruptcy would withhold information that would increase the value of the firm. Although withholding of such information could ultimately benefit shareholders by reducing the amount of wealth distributed to debtholders in a reorganization, shareholders may not appreciate this method of "increasing value" since they may be worse off if the offer fails and the firm enters bankruptcy.

Furthermore, to the extent that the parties involved are repeat players (which is logical, since a firm will require financing in the future) it is against a firm's interest to be known as one that withholds information and extorts value from creditors through deception. This reputation raises the cost of future borrowing. Finally, practitioners have argued that almost all relevant information will be known by all parties in a very short period of time. *E.g.*, Telephone Interview with Barry Volpert, Vice President, Principal Investment Area, Goldman, Sachs & Co., (Feb. 12, 1993).

52. Asquith suggests that most debtholders have "small stakes" and therefore perceive themselves as having "no effect on whether the exchange goes through." ASQUITH ET AL., *supra* note 38, at 12. In fact, a large number of high-yield bonds are held by large institutions such as mutual funds and insurance companies. Robert Lenzner, *Insiders Thrive as Junk Bonds Get New Cachet*, BOSTON GLOBE, Apr. 18, 1991, (Business Section), at 52. Other players, such as vulture funds, are also likely to own significant numbers of bonds. *See, e.g.*, Bab, *supra* note 4, at 882-83.

flexible. Thus, the market price of non-tendered debt will rise after a successful good offer, reflecting the improved prospects that the firm will remain solvent and repay the remaining debt.⁵³ A failed good offer, on the other hand, will be followed by a decline in bond value, reflecting the increased likelihood of insolvency.

2. The Payoffs

Using the assumptions just outlined, we can construct a game in which players must choose among a set of payoffs. For this example, assume that the face amount of the bond is \$1500 (F). Assume further that the bonds currently trade on the market at \$500 (M). The firm has offered a package worth \$750 (E) in exchange for the bonds, representing a premium above market value. These are the only observable values prior to the bondholder's decision. The remaining values can only be accurately determined after the offer has succeeded, failed, or been withdrawn, and are based on the foregoing conditions. Tables 1a and 1b collect and summarize the assumed and potential values in the games discussed below.

TABLE 1A. *Summary of Assumed Bond Values at Time of Offer*

Face Value	F = \$1500
Market Value	M = \$500
Exchange Value	E = \$750

TABLE 1B. *Summary of Potential Post-Offer Bond Values*

Value if Offer Fails	$F_c = \$1000$ (indicating a "bad" coercive offer)
	$F_h = \$400$ (indicating a holdout problem threatening a good offer)
Value if Offer Succeeds	$S_c = \$300$ (indicating either a "good" or "bad" coercive offer)
	$S_h = \$1500$ (indicating an incentive to holdout)

53. The "buoying up" effect is identified by Roe, *supra* note 4, at 236.

3. *The Games*

This section describes the exchange offer game under the preceding payoff conditions, as well as three variations of the game generated by relaxing or changing the operative assumptions. These four games make up the set of possible scenarios that a bondholder faces in an exchange offer. It will be shown that simple differences in assumptions substantially impact the outcomes of the games and the desirability of the outcomes. The empirical study which follows will test the specific characteristics of these games.

Many commentators characterize this game as one in which one bondholder ("B1") is playing against all others ("Sufficient Others"). A bondholder who considers his vote non-determinative views his decision as having a negligible effect on the action of the group as a whole. The following analyses adopt this approach.

a. *Game 1—Holdout: Greedy Individuals Block a Good Offer*

The value of the bonds after the failure of a good exchange offer should, as shown, decrease below previous market value, say to $F_h = \$400$. The other important value is that of the bonds kept by holdouts who do not participate in a successful exchange, a value which should increase. In this game, let this value be $S_h = \$1500$. Figure 1 shows this payoff structure.⁵⁴

FIGURE 1. *Holdout Offer* ($S_h > E > F_h$)

		Sufficient Others	
		Accept	Reject
B1	Accept	750;750	400;400
	Reject	1500;750	400;400

This game is the "holdout offer" scenario described in Part III. Here, the payoff structure is such that the offer, which is in the best interests of the firm and the bondholders, will fail under most circumstances. The typical bondholder, who assumes that his vote will not affect the outcome of the game, will compare his expected payoffs resulting from the success or failure of the offer. In this case, if "sufficient others" accept the offer, B1 will reject it so that he can get \$1500 rather than \$750. On the other hand, if "sufficient others" reject the offer, B1 will be indifferent as to his own decision since his

54. Figures on the left represent payoffs to B1, and figures on the right, payoffs to "sufficient others."

payoff, \$400, would be the same in either case. Thus, B1 will reject the offer. Each bondholder will have the same incentive to reject the offer, and the offer will fail. The offer and game described here is the inefficient holdout offer, because holdouts cause a good offer to fail. This simple analysis would predict that all offers with similar payoff structures will fail.

Under a more complex analysis, some probability exists that each bondholder will accept if it is assumed that each bondholder perceives a slight probability that his vote may determine the offer's success.⁵⁵ In this case, where bondholders apply mixed strategies, basing their decision to accept or reject the offer on probability calculations, the holdout offer has some chance of succeeding.⁵⁶ However, due to the low probability of an individual bondholder actually accepting, this equilibrium is not likely to occur.

If the assumption of nondeterminative votes is further relaxed, however, to account for the possibility of voting blocks, or of single owners of a significant percentage of bonds, it is easier to see how, under mixed strategies, such an offer could succeed with some regularity. A significant bondholder may believe that there is a high probability that his vote will determine the outcome of the game. He will also recognize the advantage of rejecting the offer if he thinks "sufficient others" are participating.⁵⁷ Thus, equally plausible equilibria can be determined in which the offer succeeds or fails. The extent to which the simple model reflects reality, and the accuracy of its assumptions (i.e., $S_h > E > F_h$), will be empirically tested in Part V below.

b. *Game 2—The Inadequate Offer*

Now assume that the firm proposes an offer that is not in the best interests of the firm and the bondholders (a "bad offer"),⁵⁸ perhaps in an attempt to extract value from bondholders through an unnecessary or unfair exchange offer.⁵⁹ In this case, instead of decreasing when the offer fails (as above), the value of the bonds will increase. Assume that in this instance the price rises to $F_c = \$1000$ (higher than the offer price, E). Simply changing this one initial assumption of the nature of the offer can reverse the desirability of defeating

55. Alternatively, as Schwartz suggests, bondholders may be aware that it is in their collective interest for the offer to succeed. See Schwartz, *supra* note 4, at 50-51.

56. For a similar discussion of mixed strategies in the context of tender offer prices for firms, see Alan Schwartz, *The Fairness of Tender Offer Prices in Utilitarian Theory*, 27 J. LEGAL STUD. 165, 171 n.14 (1988) (citing MARTIN SHUBIK, *GAME THEORY IN THE SOCIAL SCIENCES* 240-41 (1983)). In the case of exchange offers for debt, as seen in the text, two equilibria of success and failure would result. In the holdout context, failure should predominate. The opposite would occur in consent offers.

57. For a more extensive showing of how this type of game generates coercive and holdout equilibria see Kahan & Tuckman, *supra* note 11, at 10-22.

58. See *supra* note 39 and accompanying text.

59. For arguments that such "bad" offers will occur with frequency, see Brudney, *supra* note 3, at 1822 (asserting that "dispersed bondholders" are "compelled" by the debtor to consent to such disadvantageous offers).

the offer (as in Game 1). This game, which technically involves holdouts, merely represents a situation where the firm makes an offer that no bondholder would rationally accept.

FIGURE 2. *Inadequate Offer* ($S_h > F_c > E$)

		Sufficient Others	
		Accept	Reject
B1	Accept	750;750	1000;1000
	Reject	1500;750	1000;1000

The bondholder's decision, as seen in Figure 2, is the same as before—he is indifferent between accepting and rejecting if others reject, and prefers to reject if others accept and the offer succeeds ($S_h > F_c > E$). The difference with this game is that the bondholder has no incentive, even under mixed strategies, to accept the offer: there is no probability that a bondholder would choose to accept, since there is absolutely no chance that the bondholder would be made better off by accepting. The individual's interest is aligned with that of the class. Thus, all such offers should fail.

c. *Game 3—"Good" Coercive Offers: Forcing the Greedy Individual for the Good of the Group*

Offers have the potential to coerce under similar assumptions and circumstances as those described in Section 2 (good offer, nondeterminative vote), as long as one structural aspect of the offer is included. This structural change is the addition of exit consents. Commentators have previously assumed—without explicitly acknowledging the importance of the assumption—that such tactics reduce the value of the debt of a bondholder who refuses to tender. Specifically, they have assumed that by stripping non-tendered debt of protective covenants via a successful exchange offer, a firm can reduce the value of non-tendered debt.⁶⁰ Such tactics would generate a new payoff, $S_c = \$300$, which reflects the decrease in value caused by lesser protection. As shown in Figure 3, this structural change alters the nature of the game and its predicted equilibrium.

60. Most previous commentators have assumed that this payoff is possible, and that it is possible for a firm to reduce the value of non-tendering debt by using these techniques. See Schwartz, *supra* note 4, at 3 n.4.

FIGURE 3. "Good" Coercive Offer ($E > F_h > S_c$)

		Sufficient Others	
		Accept	Reject
B1	Accept	750;750	400;400
	Reject	300;750	400;400

Note that one fundamental characteristic of a coercive offer is that the offer price is higher than the expected value of the non-tendered debt after the offer succeeds ($E > S_c$), inducing bondholders to tender. Thus, while this example shows the value of such non-tendered debt as having decreased from the pre-offer market price of \$500 to \$300 (S_c), this value could actually increase above \$500 while remaining below the offer price of \$750, and the offer would still be coercive ($E > S_c > F_h$). Nevertheless, for purposes of this example and the empirical tests, I use the common assumption that successful consent offers reduce the value of non-tendered debt.

As seen in Figure 3, under the current assumptions the offer will undoubtedly succeed since, no matter what his fellow bondholders do, each bondholder (B1) is better off accepting the offer. Like the inadequate offer, this game is not controversial since its equilibrium solution is clearly also desirable from the individual bondholder's standpoint. Nevertheless, it is a notable type of offer because it has implications for the empirical analysis below.

d. *Game 4—"Bad" Coercive Offers: Forcing Rational Investors to Accept Inadequate Offers*

This offer has been the subject of much controversy in recent years. A coercive offer is considered "bad" when it is apparently designed to benefit the firm at the expense of bondholders.⁶¹ Tactics intended to reduce the value of non-tendered debt arguably suggest underhanded intentions by the firm ultimately to hurt bondholders, the implication being that "good" offers do not require coercive tactics to succeed. Figure 4 shows the game that bondholders must play under this scenario.⁶²

61. See *supra* note 39 and accompanying text.

62. This is the same game used by Coffee and Klein to describe the operation of consent offers. Coffee & Klein, *supra* note 3, at 1229.

FIGURE 4. "Bad" Coercive Offer ($F_c > E > S_c$)

		Sufficient Others	
		Accept	Reject
B1	Accept	750;750	1000;1000
	Reject	300;750	1000;1000

Again, for this offer to be coercive, the value of the non-tendered debt after the offer succeeds (S_c) need not decline from the pre-offer market price of \$500 to \$300, but must only remain below the exchange price of \$750 ($S_c < E$). This situation produces behavior similar to that produced by holdout offers discussed above. If the bondholder believes that "sufficient others" will reject, he is indifferent between accepting and rejecting the offer presented. However, if he believes the offer will succeed, he prefers to accept and receive the firm's price of \$750. Thus, believing that he has no control over the success of the offer, the rational bondholder accepts. Where all bondholders reason similarly, the offer succeeds, even though this outcome is against the group's best interests ($F_c > E$).

If we relax the assumption that bondholders believe their choices do not affect the outcome, equilibria exist under which this offer can fail. Thus, if each bondholder assumes some positive probability that some other bondholders will reject the offer and that, therefore, his vote has some positive probability of impacting the outcome, the bondholders, pursuing mixed strategies, may reject and cause the offer to fail.⁶³ As in the preceding games, the probability of an offer failing increases if we relax further the assumption of small-stakes bondholders by postulating the existence of voting blocks.

D. Conclusions and Implications for Empirical Tests

The critical distinction between helpful and harmful coercion can be found in the relationship between the offer price (E) and the value of the debt after the offer fails (F_c or F_h). All else being equal, "good" coercion occurs when the offer price is greater than the price of debt after the offer fails ($E > F_h$). "Bad" coercion occurs when the price offered is less than the price of debt after the failed offer ($E < F_c$).

Additionally, the difference between holdout problems and coercion lies in the relationship between the value of the offer made by the firm (E) and the value of debt held by holdouts from successful offers (S_h or S_c). If the firm's

63. See Kahan & Tuckman, *supra* note 11, at 10-22.

offer price is greater than the value of non-tendered debt ($E > S_c$), this provides a condition for coercion. If the offer price is less than the value of non-tendered debt ($E < S_h$), the holdout problem should prevail. These distinctions are tested in Part V.

To clarify the preceding analysis, Table 2 sets forth a summary of the four games and the values associated with them.

TABLE 2. *Games and Their Corresponding Payoffs*

1. "Bad" Coercion	$S_c(300), F_c(1000)$
2. "Good" Coercion	$S_c(300), F_h(400)$
3. Holdout Offer	$S_h(1500), F_h(400)$
4. Inadequate Offer	$S_h(1500), F_c(1000)$

The preceding discussion and identification of all potential payoffs show that whether an offer is coercive or not, or "good" or "bad," depends on the differences between (1) the value of the debt before the offer, (2) the offer price, and (3) the value of the debt after the offer. First, it is critical to understand that the value of non-tendered debt after a successful exchange might be greater than (S_h) or less than (S_c) the value the firm has offered in the exchange (E), and that the direction of this difference in value indicates whether an exchange offer can be considered coercive. Second, it is important to determine whether the value of the debt if an offer fails is greater than (F_c) or less than (F_h) the market value prior to the exchange offer (M) as well as the offer price (E), to know whether the offer is "good" or "bad."⁶⁴

The question throughout this discussion is which of the games described above are actually played by those participating in the many exchange and tender offers. The purpose of this Note is to take some steps toward discovering evidence of coercion or holdout problems in past offers. To accomplish this task, the sample of past offers must be separated into categories of those that were probably coercive and those that were probably troubled by holdouts. Of course, this distinction presumes that one can actually

64. Some authors have recognized these scenarios and the problems associated with them. However, most authors have not emphasized that a given offer can only be of one of the following types: coercive, holdout, or fairly structured. Coffee and Klein, for instance, seem to conflate the coercive and holdout structures. Coffee & Klein, *supra* note 3, at 1215. It is insufficient to assume that offers may coerce without identifying all the essential elements of coercion, and to base the assumption on guesses as to what circumstances might create the payoffs necessary to create a coercive offer. Such analyses rely on an incomplete picture of the exchange offer process and can result in overly narrow theoretical conclusions and policy suggestions. Furthermore, some assumptions are implicit and are not justified or even discussed in the literature, in particular, the issue of whether bond prices rise or fall after a failed exchange offer.

predict from the terms of an offer the type of payoff structure that will occur.⁶⁵ Past authors have done this, in spite of the fact that it is an imperfect method of determining the type of offer *ex ante*.⁶⁶

An offer's terms may nevertheless be used to separate the offers based on the *potential* problems of coercion and holdouts in order to apply tests to determine whether or not such problems exist. I will assume, then, that it is possible to identify *ex ante*, based on the terms of the offer, whether it is coercive and whether it is likely to create holdout problems. This assumption will allow the use of empirical tests to discover whether, under the potentially problematic scenarios, the expected payoffs actually occur. These assumptions are spelled out in Part V.

V. EMPIRICAL FINDINGS

A. Introduction

Observers have argued that all offers employing exit consents (consent offers) are potentially coercive.⁶⁷ If consent offers involve "bad" coercion, one would expect the value of the non-tendered debt after a successful consent offer (S_c) to be less than the value of the same debt before the offer (M), or at least less than the price offered in the exchange (E). Similarly, the value of the debt after the failure of such an offer (F_c) should rise above the value of the offer price (E). If, on the other hand, the offer involves "good" coercion,

65. It is debatable whether it is possible to distinguish *ex ante* the type of payoff structure an offer presents. Because bondholders' decisions may be modelled in numerous ways, and bondholders may use different methods in making their decisions, simply examining the terms of the offer may not show that one offer will coerce, another will suffer from holdouts, a third is clearly acceptable, and so forth. This unpredictability presents the possibility that successes or failures in exchange offers may have little to do with the expected outcome and payoff structure of a particular offer. In addition, even if bondholders use a dominant methodology in their decisions, and all material information concerning the firm is public, exchange and tender offers require parties to estimate the future viability of the firm. Because the future is unforeseeable (except perhaps in cases where a near future bankruptcy is virtually certain), bondholders and regulators will be unable to discern with certainty the resulting outcome if the offer succeeds or fails (S_b or S_c ; F_c or F_b).

However, even if it is impossible to predict *ex ante* whether an offer is coercive, holdout, or fair, the conclusions of this Note do not change. This analysis still supports arguments against regulation—not simply because parties can organize to evade what might be coercive or because coercion is benign—but because it does not make sense to regulate *all* tender and exchange offers in hopes of stopping those few "potential" problems from arising. Furthermore, this Note shows that exit consents can benefit bondholders by making beneficial offers succeed; and it is extremely difficult to discern *ex ante* offers that might wrongfully coerce. If the results of this Note are accepted, advocates of regulation must find another litmus test for wrongful coercion.

66. For instance, Coffee and Klein assert, while providing no empirical evidence or justification, that "the potential power of the corporate issuer to strip the bonds of their protective covenants places the bondholders in a kind of prisoner's dilemma, which coerces the bondholders . . ." Coffee & Klein, *supra* note 3, at 1225. These authors simply assume that the exit consent reduces the value of the altered debt.

67. Offers to exchange existing debt for new debt with an earlier maturity or a higher priority can also have the same effect as consent offers, by threatening to reduce the value of non-tendered debt. Because these new debt issues usually require the consent of a majority of holders of existing debt, however, the term "consent offers" will be used hereinafter to include all such potentially coercive offers.

then the value of the non-tendered debt after a successful consent offer (S_c) should remain below the offer price (E), but the value of the debt after the failure of such an offer (F_c) should not rise above the exchange price (E).

We can determine the frequency of holdout problems by examining the values of non-tendered debt before and after non-consent tender and exchange offers. If holdout problems are common in non-consent offers, the value of non-tendered debt should rise significantly after a successful offer, and should decline when an offer fails.

These tests, although imperfect, should be adequate to evaluate the theoretical conclusions in the previous literature on exchange offers. They should assist scholars by providing a meaningful measurement of whether, in the pool of offers with potential coercion and holdout problems, any of the offers actually exhibit the essential characteristics predicted by their theories. Before doing this, it will be instructive to get a rough idea of the success and failure rates of offers in the previously described categories. Summary statistics reveal interesting patterns, that, when combined with price data, show that cries of coercion have been misdirected, while holdouts silently cause many offers to fail.

B. *Summary Statistics*

Between January 1, 1990, and September 30, 1992, 118 exchange and tender offers for high-yield debt were completed or terminated in the United States.⁶⁸ Table 3 summarizes the number of offers in each category. Offers were relatively evenly distributed among the different categories. Exchange offers without exit consents represented 28% of the offers, and tender offers without exit consents made up 25%. Exchange offers with exit consents represented 19% of all offers, and tender offers with exit consents, 28%. Also, not shown in Table 3 but significant to this discussion, fifteen exchange and tender offers were filed as prepackaged bankruptcies, eleven during the first nine months of 1992, making this the second most common type of restructuring in this period, after tender offers with exit consents.⁶⁹

68. Information on exchange and tender offers was compiled from the following sources: SALOMON BROTHERS, HIGH-YIELD RESTRUCTURING REPORT: RUNNING LOW ON RESTRUCTURINGS (Nov. 3, 1992); SALOMON BROTHERS, HIGH-YIELD RESTRUCTURINGS: TROUBLED NO MORE (July 8, 1992); SALOMON BROTHERS, HIGH-YIELD RESTRUCTURINGS—1990 SUMMARY (Jan. 28, 1991); SALOMON BROTHERS, HIGH-YIELD RESTRUCTURINGS—QUARTERLY UPDATE (Aug. 24, 1990). Additional information was gathered from searches of DIALOG, Standard & Poors Daily News. The sample appears to be a complete collection of all offers made during this period.

69. SALOMON BROTHERS, HIGH-YIELD RESTRUCTURING REPORT: RUNNING LOW ON RESTRUCTURINGS, *supra* note 68.

TABLE 3. *Total Number of Offers by Type (1/1/90—9/30/92)*

Exchange Offers	33 (28%)
Tender Offers	30 (25%)
Exchange Offers With Exit Consents	22 (19%)
Tender Offers With Exit Consents	33 (28%)
Total:	118 (100%)

Table 4 summarizes by year the success and failure rates of the various types of offers.⁷⁰ Previous analyses, based on smaller samples, indicated that consent offers failed a majority of the time and that non-consent offers were much more likely to succeed.⁷¹ The data here, which make up the largest sample yet analyzed, show the opposite: tender and exchange offers that used exit consents succeeded in 65% of the cases. Non-consent offers succeeded at the lower rate of 59%.

By separating the data on tender offers from exchange offers one can see that offers in either category with supposedly coercive elements (exit consents) succeed slightly more often than offers without such coercive elements. Specifically, as Table 5 shows, between 1990 and 1992, exchange offers succeeded only 45% of the time, which is consistent with previous findings.⁷² However, exchange offers with exit consents succeeded slightly more often, that is, 50% of the time. Similarly, tender offers succeeded more often than exchange offers, at 73%, but tender offers with exit consents succeeded 76% of the time.

70. Since the firm aims to retire as much debt as possible, an offer is considered a failure if fewer than 40% of the shares were tendered or exchanged. Almost all offers either succeeded with high percentages or were withdrawn. Very few offers had extremely low responses, and these were considered failed.

71. Bab, *supra* note 4, at 880. In Bab's Note, a sample covering an eight-month period revealed that more than half of the coercive offers failed and more than half of the non-coercive offers succeeded. Bab used these statistics to prove that exit consents do not create a coercion problem. Similarly, Schwartz cites a working paper purportedly showing that 68% of 56 offers in its sample that used coercive techniques were modified or had failed. Schwartz, *supra* note 4, at 6 n.8. However, the working paper itself describes only 41 of the offers as "probably coercive," and of these, only 32 were "ascertainably coercive." Kahan & Tuckman, *supra* note 11, at 27. Furthermore, some of these were consent solicitations that were not tied to an offer. *Id.* at 7. Of the 69 total offers in the sample, the working paper indicates that 38 were either modified or failed but does not say how many failed. Nor does the working paper specify whether the failed and modified events offers were coercive or not. *Id.* at 32.

72. See *supra* note 71.

TABLE 4. *Summary by Year of Successful and Failed Non-Consent and Consent Offers (1/1/90—9/30/92)*

		Successful	Failed
Non-Consent Offers (Holdout)	1990	11 (52%)	10 (48%)
	1991	13 (48%)	14 (52%)
	1992	13 (87%)	2 (13%)
	Total:	37 (59%)	26 (41%)
Consent Offers (Coercion)	1990	15 (68%)	7 (32%)
	1991	7 (47%)	8 (53%)
	1992	14 (78%)	4 (22%)
	Total:	36 (65%)	19 (35%)

These data show that consent offers have succeeded at higher rates than non-consent offers. However, statistical tests of the difference in success rates between consent and non-consent offers do not provide conclusive evidence that coercive offers are significantly more likely to succeed. Chi-square tests reveal that coercive elements are not determinatively linked to the success and failure of the offers in this sample at a 10% significance level.⁷³ However, these chi-square tests should not be read as evidence that there is *no* relationship between coercive elements and a higher success rate. Rather, the *prima facie* evidence provided by the summary statistics indicates that coercive elements probably do have some effect on the success of an offer.

C. Price Information—Do the Payoffs Exist?

The most interesting empirical question is whether the payoffs that are considered prerequisites to holdout and coercion problems actually occur in practice. This question can be answered by examining what happens to the value of bonds after offers fail or succeed. Recall that we expect that for “bad” coercive offers, which is how consent offers have been characterized in the past, the price of the non-tendered bonds should fall when the offer succeeds

73. The chi-square test of the relationship between the success of an offer and the presence of coercive elements generated a chi-square value of 1.45. The chi-square value required for significance at the 10% level is 2.71. The 1.45 value generated by the test is significant at approximately a 20% to 30% level, meaning that there is an increased probability that the connection found is due to a bias in this particular sample. Regardless, a significance level of 20% indicates a strong connection between the coercive elements and the success of the offer. A larger sample would be necessary to achieve more accurate results.

(or, at best, that it should not rise above the firm's offer price), and that the price of the bonds should rise when the offer fails ($F_c > E > S_c$). We call a coercive offer "good," on the other hand, when, after a failed offer, the price of the bonds remains below the offer price ($E > F_h > S_c$). Where holdout problems exist, the price of the non-tendered bonds should rise if the offer succeeds (S_h), and drop if the offer fails (F_h).

TABLE 5. *Summary by Year of Successful and Failed Offers*

		Successful	Failed
Exchange Offers Without Exit Consents	1990	5	8
	1991	5	8
	1992	5	2
	Total:	15 (45%)	18 (55%)
Tender Offers Without Exit Consents	1990	6	2
	1991	8	6
	1992	8	0
	Total:	22 (73%)	8 (27%)
Exchange Offers With Exit Consents	1990	6	3
	1991	2	7
	1992	3	1
	Total:	11 (50%)	11 (50%)
Tender Offers With Exit Consents	1990	9	4
	1991	5	1
	1992	11	3
	Total:	25 (76%)	8 (24%)

Of the 118 offers in the sample, price information was available for 93 debt issues affected by 69 offers.⁷⁴ For each offer, two prices were collected: closing prices one month prior to the announcement of the offer, and closing prices one month after the date of completion or termination of the offer. Table 6 provides a summary of these data, indicating the number of debt issues in

74. Price information was gathered and compiled from Bloomberg, Moody's, and Standard & Poor's reporters. Many of the offers resulted in 100% or close to 100% of all debt being exchanged or tendered, and this outcome accounts for a large portion of offers for which post-exchange prices were not available.

the analysis, the number of these that experienced an increase in price after the offer was completed, the number that experienced a decrease, and two measures of change in prices.

Column D contains values that were gained or lost for a category of offers (e.g., successful consent offers) as a whole, calculated by computing the percentage change between the total pre-offer value of all debt issues involved in that subset with its total post-offer value. Column E shows the average price change for any given issue in a certain category, derived from averaging the percentage changes for each individual issue in the category. Column E gives a more normalized representation of relative changes in prices of individual issues by accounting for the possibility that certain issues are worth much more than others. Both Columns D and E reflect the same relative effects, and show consistent results.⁷⁵

The data in Table 6 strongly support the theoretical prediction that non-consent offers will have holdout problems. In this sample, the average bondholder who held out from a successful non-consent offer benefitted from an increase of 27% in price over pre-offer prices ($S_h > M$). Also, the aggregate value of non-tendered debt in successful non-consent offers increased 16%. Furthermore, prices rose in almost 80% of all such issues. This result accords with theoretical predictions that holdouts are more likely to receive full payment on their debts where there are fewer outstanding bondholders, and where the firm is in improved financial condition following a successful offer.

The data for failed holdout offers similarly support theoretical predictions that holdouts cause good offers to fail. According to theory, bond prices should drop where holdout offers fail ($F_h < M$). Indeed, the aggregate value of the bonds in this category dropped 9% from the pre-offer market price, while the average bondholder experienced only a 5% increase in price, significantly lower than the holdout's increase in a successful non-consent offer. Also, the prices of more than half of the issues in this category of failed holdout offers decreased. Therefore, the data reveal that holdout offers are strongly represented in this sample, which accounts for the high 41% failure rate indicated in the summary statistics.

75. The majority of issues in each sample increased in price, except for failed holdout offers; the average percentage changes in Column E also show that positive price increases dominated. An upward drift in bond prices during the past three years may account for this general increase. For this reason, in determining the theoretical significance of these data, emphasis is placed on comparing relative increases in prices.

TABLE 6. *Summary of Price Information*

Differences in debt prices in coercive and non-coercive exchange and tender offers from Jan. 1, 1990 to Sept. 30, 1992.						
		A. Total Number of Debt Issues in Sample (93 offers)	B. Number (Percent) of Debt Issues That Increased in Price	C. Number (Percent) of Debt Issues That Decreased in Price ⁷⁶	D. Percentage Change in Total Price	E. Average Percentage Change in Price
Consent Offers (Coercion)	Successful	25	16 (64%)	7 (28%)	+12.26%	+16.87%
	Failed	23	14 (61%)	7 (30%)	+6.27%	+11.40%
Non-Consent Offers (Holdout)	Successful	27	21 (78%)	4 (15%)	+15.99%	+27.35%
	Failed	18	8 (44%)	9 (50%)	-9.13%	+5.40%

The data, though equivocal in this regard, do not support the assertion that consent offers are "bad" coercive offers. Theoretically, "bad" coercive offers work against the interests of the bondholders and firm, and thus, by definition, bond prices should rise when bad offers fail ($F_c > M$). The data provide some evidence of this effect: on average, bond prices in the category of failed consent offers rose 11% after termination of the offer. Sixty percent of the issues in this category increased in price, and 30% fell in price. The value of all issues in this category increased by 6%. This information, however, does not support the theoretical prediction that the increase in price should be greater than the premium reflected in the offer that was rejected ($F_c > E$). Anecdotal evidence compiled during my research suggests that offers commonly include a 20% premium over the pre-offer market price, and often include an even higher premium.⁷⁷ This observation indicates that the increases found here may be insufficient to support the claim that bondholders are better off because the offer failed. Thus, bondholders in these failed consent offers, while better off than they would have been had there been no offer, are worse off than they would have been had they accepted these consent offers.

This finding is supported by comparisons between the value of the offer presented to the bondholders and the post-offer price of the bonds. If firms most often make "bad" coercive offers, we would expect to find, when an offer

76. Because in some instances the reported prices were unchanged, Columns B and C do not add up to 100%.

77. A comparison of the value of offers made in tender offers with the market value of bonds prior to the announcement of the offer reveals that the average premium is approximately 30% higher than the pre-offer price. See also Bab, *supra* note 4, at 849 & n.20.

fails, that the post-offer price of the debt is higher than the value that was offered. The figures in Table 7 strengthen and clarify the results of Table 6.

TABLE 7. *Average Price Difference Between Offer Price and Non-Tendered Debt Price (Post-Offer)*⁷⁸

Consent Offers (Coercive)	Successful	-11.14 %
	Failed	-7.70 %
Non-Consent Offers (Holdout)	Successful	+15.09 %
	Failed	n/a

Table 7 shows that the post-offer price of debt held by non-tendering bondholders in failed consent offers (F_c) was significantly lower than the offer price (E). This result confirms the hypothesis that bondholders are actually worse off when supposedly coercive consent offers fail ($F_c < E$), contradicting the notion that bondholders are being forced to accept consent offers against their best interests ($E < F_c$). The fact that the firm's offer price is consistently higher than the value bondholders would receive upon rejecting the offer demonstrates that the conditions necessary for the prisoner's dilemma described in the discussion of "bad" coercive offers do not exist in practice. It appears that the offers are "good" coercive offers which benefit bondholders and firms.

The data on successful coercive offers in Table 6, which seem to support the assumption that a firm can reduce the value of dissenting bondholders' debt, are also revealing. Recall that theory predicts that for coercion to exist, the value of non-tendered debt must fall after successful offers ($M > S_c$), or at least not rise higher than the offer price ($E > S_c$). The data from Table 6 show that 64% of the issues in this category experienced an increase in price while only 28% decreased in price. The increase in prices dominated, as shown by the fact that the average percentage price increase was almost 17%, and, as a whole, this category of non-tendered debt increased 12% in value. This result ($S_c > M$) contradicts what has become common wisdom regarding the effects of exit consents on non-tendered debt.⁷⁹ It is significant, however, to note that

78. There were insufficient data to derive an average price difference for non-consent/failed offers. Price data were not available for all offers in any category. Sixty-two percent of the non-consent/successful sample is represented, 60% of the consent/successful sample, and 57% of the consent/failed sample. However, in each of these categories, the overwhelming consistency of the results suggested that the remainder of the sample would behave similarly.

79. One authority describes the conventional wisdom of the negative aspects of holding stripped debt "which will be covenant-less and, in all likelihood, will trade at prices even less than the pre-tender offer all-time lows." Vlahakis, *supra* note 11, at 292; see also Schwartz, *supra* note 4, at 3 n.4 ("Commentators

the price increase in coercive offers is substantially lower than that experienced by non-tendering bondholders in holdout offers. Thus it appears that coercive elements can at least reduce the value of the non-tendered debt compared to non-coercive offers.

Furthermore, it is impossible to determine whether such price increases provide evidence that the offers cannot coerce without comparing the price increase in successful offers of non-tendered debt with the value of what was offered (E). That is, an increase in the value of non-tendered debt may still effectively coerce if it is lower than what is offered. The findings presented in Table 7 substantiate this. Table 7 shows that the increase in price of non-tendered debt does not rise higher than the value of the firm's offer ($S_e < E$). In fact, not one instance was found in which the value of non-tendered debt rose above the offer price, and on average, the value was 7.7% lower. Therefore, consent offers are not without a coercive element, even though they fail to reduce the value of non-tendered debt. The strength of the coercive element must be called into question, however, in light of the summary statistics' indication that over one-third of consent offers fail.

E. *Summary*

The data suggest that while, as commentators have predicted, consent offers do include elements of coercion, these elements are present only to a moderate degree. These coercive elements have not—as commentators have assumed—guaranteed the success of past restructurings. Results of statistical tests of the difference between the price changes in the coercive and non-coercive offers further support this conclusion. T-tests comparing the mean percentage changes in price in the consent and non-consent categories show that the difference between the two categories is not statistically significant.⁸⁰

More remarkable is the nature of coercion found in the sample. Debt issues increased an average of 11% in value after a failed consent offer. At first glance, this increase suggests that bondholders simply rejected offers that were against their interests. However, in no case did the post-offer debt value reach the firm's offer price. In fact, by defeating these offers, bondholders forwent an average increase of 8% in value. Because bondholders are worse off when coercive offers fail, the conclusion follows that they reject good offers. Thus, while the data presented in this Note show that coercive tactics have some bite,

nevertheless assume that a firm can reduce the value of its earlier dissenting debt.").

80. Tests comparing the successful samples generated a t-statistic of $t = .593$, which is not close to the necessary $t = 1.675$ needed for significance at the 5% level. Similarly, for the failed samples, the t-statistic was $t = .341$, far from the required $t = 1.684$ to show at the 5% level that the samples came from different populations. Nevertheless, it should be noted that 28% of the holdouts in successful coercive offers sample did drop in value, which provides evidence that in some circumstances coercive elements may have the predicted effects of lowering the value of the holdout's debt.

they do not appear to be used maliciously by firms attempting to make bondholders worse off. It appears that the “good” coercive offers predominate, and that “bad” coercive offers are not a significant problem.

On the other hand, the evidence unambiguously indicates the existence of holdout problems. In successful non-consent offers, the price of non-tendered debt increases an average of 27%, and the aggregate value of non-tendered debt increases significantly. Furthermore, the value of non-tendered debt is on average 15% higher than the offer made by the firm. In contrast, bond values decline in 41% of the non-consent offers that fail. This decline suggests a predominance of holdout offers, where holdouts cause good offers to fail.

One aspect of the data remains to be explained: why do offers with the presumably coercive exit consents fail 35% of the time? On the other hand, why do non-consent offers succeed more than half of the time, in spite of holdout problems?

First, note that the success rates of the two samples differ considerably from each other. Although this difference is not statistically significant at the 10% level, statistical analysis provides some evidence that the samples of consent offers and non-consent offers behave differently.⁸¹ Such disparity implies that elements of coercion and holdouts do have an impact. The question, then, is why their impact is not complete: why does any consent offer fail, and why does any non-consent offer succeed?

To understand the findings of this Note, games with multiple equilibrium outcomes must be further developed—where players employ mixed strategies—rather than games with one clear equilibrium result of success or failure. Recall the discussion in Part IV regarding instances in which, if some assumptions were relaxed and if mixed strategies predominated, multiple equilibria would result.⁸² The data in this Note imply that some assumptions, such as the assumption that small-stakes bondholders cannot communicate or meaningfully commit to a decision, must be modified. Such refinements would require additional empirical investigation.

The models presented in this Note explain the outcome of tender and exchange offers with respect to the prices of offers, non-tendering bondholders, and failed offers. They also accord with the relative success rates shown in the consent and non-consent samples. The exact causes of the models’ failure to predict with certainty the success and failure of these samples, however, may be impossible to determine without further empirical work incorporating additional information, such as: concentration of bond ownership, perception of the financial distress of the company, the firm’s capital structure and debt load, and the involvement of vulture funds in the negotiations.

81. See *supra* note 73.

82. Schwartz models a game with conditions of holdouts and multiple equilibria outcomes in which offers can succeed with some regularity. Schwartz, *supra* note 4, at 10-14.

VI. CONCLUSION

Courts and regulators have allowed firms to use supposedly coercive elements in financial restructurings without imposing additional rules or potential litigation costs. The research here confirms the wisdom of the government's refusal to attempt to fix alleged coercion problems.

The evidence presented suggests that contrary to predictions by many commentators and authorities, coercive elements in offers do not have an enormous impact on an offer's chances of success. Furthermore, the price data indicate that use of coercive elements does not make dissenting bondholders worse off. On the other hand, the data demonstrate the significance of holdout problems, particularly because price data for both coercive and non-coercive offers reflect the payoffs associated with holdout problems.

The high failure rate of out-of-court restructurings is a significant problem and has attracted the attention of many scholars. The findings of this Note provide evidence that holdouts are a large part of this problem since they have strong incentives to reject the offers. Even offers that were designed to coerce bondholders into accepting seem to have been troubled by holdouts, as demonstrated by the low success rates of consent offers.

This evidence should encourage a shift in research emphasis from coercion to holdout problems. If out-of-court restructurings are less costly and more efficient,⁸³ and if it is assumed that they are structured to be fair to all parties (not "bad" offers), then holdouts create more serious problems in causing good offers to fail than coercive elements do in causing bad offers to succeed. Indeed, evidence suggests that the recent increase in prepackaged bankruptcies is a sign that firms are unable to make fair offers succeed due to holdout problems.⁸⁴

While some proposed regulations, such as stricter disclosure rules for firms, may ensure the important element of symmetric information, other, more dramatic, changes would likely be detrimental. The policy implications of this research suggest that regulators should not impose blanket regulations on a group of potentially coercive restructurings that are already failing at significant rates. Many regulations have been proposed to eliminate the coercion problem, including a required separation of the consent solicitation transaction from the exchange offer,⁸⁵ and the application of SEC rules currently governing tender offers for equity to those for debt which would

83. See Schwartz, *supra* note 4, at 1-2.

84. See *supra* note 72. Barry Volpert of Goldman, Sachs & Co. confirmed this view, stating that firms are turning to prepackaged bankruptcies because they are "tired of paying off holdouts." Telephone Interview with Barry Volpert, Vice President, Principal Investment Area, Goldman, Sachs & Co. (Dec. 12, 1992).

85. Coffee & Klein, *supra* note 3, at 1242-51.

substantially increase disclosure and filing requirements.⁸⁶ Without stronger evidence of negative effects from consent offers, such recommendations seem unwarranted, especially in light of holdout problems.

If private solutions to financial distress are indeed less costly than official bankruptcy proceedings, and if, as this Note suggests, coercive elements are not significant in ensuring an offer's success and are not deployed to push through bad offers, the private restructuring process should not be further burdened.⁸⁷ It may even be wise to take steps in the opposite direction. Professor Roe argues that holdout problems could be alleviated through the legalization of majority-rule contract clauses that make private workout offers binding on rejecters if a majority of creditors accept.⁸⁸ Professor Schwartz argues that in their contracts with debtholders, firms should be able to waive the right to use formal bankruptcy proceedings and to enforce a "successful workout offer term" to which all parties agreed *ex ante* during contract negotiations.⁸⁹ It is beyond the scope of this Note to evaluate these proposals. The purpose here is merely to refocus attention on the problems created by incentives to hold out. Improved methods are needed to allow firms to discipline bondholders, or for bondholders to discipline themselves, and to prevent, not greedy firms, but greedy bondholders from taking actions that are ultimately contrary to their own interests and the interests of all parties involved.

86. See, e.g., Saggese et al., *supra* note 4, at 616-17; Vlahakis, *supra* note 11, at 299-301.

87. This position may justify revisiting Roe's proposals about the voting prohibition in workouts, which are directed towards resolving the problem of holdouts. See Roe, *supra* note 4, at 269-77.

88. See Roe, *supra* note 4.

89. Schwartz, *supra* note 4, at 32-42.