

When Do Banks Take Equity in Debt Restructurings?

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This article examines the conditions under which bank lenders make concessions by taking equity in financially distressed firms. I show that the role banks play in debt restructurings depends on the financial condition of the firm, the existence of public debt in the firm's capital structure and the ability of public debt to be restructured. Empirically, I find that for firms with public debt outstanding banks never make concessions unless public debtholders also restructure their claims. When banks do take equity, on average they obtain a substantial proportion of the firm's stock, and they maintain their position for over two years.

A frequently cited benefit of borrowing from commercial banks and other private sources is that private debt is much easier to renegotiate and restructure in financial distress than public debt claims.¹ Consistent with this view, Gilson, John, and Lang (1990)

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¹See, for example, Bulow and Shoven (1978), Gilson, John, and Lang (1990), and Smith and Warner (1979). Much of the extant literature concerning the choice of private versus public debt focuses on the benefits (and potential costs) associated with bank monitoring and the ability to recontract with bank borrowers. See, for example, Berlin and Loeys (1988) and Rajan (1992). Chemmanur and Fulghieri (1994) examine the effects of a private lender's reputation on the incentives lenders have to restructure their claims.

find that the likelihood of out-of-court debt restructuring is positively related to a firm's reliance on bank debt. However, several recent papers raise questions concerning the role of banks in the workout process. For example, Gilson (1994) argues that regulatory restrictions on banks holding common stock limit the ability of banks to scale down their debt claims in distressed firms. In addition, Diamond (1993) and Gertner and Scharfstein (1991) argue that because the bank lenders are generally secured, they have little incentive to make concessions when a firm also has subordinated public debt outstanding.² In support of this view, Asquith, Gertner, and Scharfstein (1991) find that, among junk bond issuers, banks virtually never make concessions.

In this article, I investigate when banks take equity positions in financially distressed firms. A review of the legal and regulatory restrictions on commercial banks holding stock reveals that federal and state banking laws provide U.S. banks with broad authority to acquire and hold common stock in loan workout situations. Given their authority to take stock, I present a simple model designed to illustrate factors influencing a bank lender's incentives to scale down its debt unilaterally in firms that also have public debt outstanding. The model illustrates that the bank's incentives to make unilateral concessions are limited and depend on whether the bank's claim is impaired (i.e., the value of collateral relative to the face value of the bank's claim). An implication of the model is that bank incentives to make concessions depend on whether the banks claim is impaired, whether public debt is restructured, the amount of public debt outstanding, and the value of the firms growth opportunities.

The determinants of bank concessions are examined empirically using a sample of 102 debt restructurings occurring during the period 1981 through 1990. I find that conditional on a restructuring proposal, banks often (in 31 percent of the transactions) take equity positions in distressed firms. Moreover, banks maintain a substantial stake in these firms two years after the restructuring. Finally, I find that when firms have public debt outstanding, banks virtually never scale down their claims in the absence of a priority reducing public debt exchange.

Firms in which banks take equity differ in several ways from firms in which banks do not make concessions. Specifically, I find that the likelihood that a bank takes equity is negatively related to the proportion of the firm's debt that is publicly held and positively related to the value of the firm's growth opportunities. Firms in which banks take

²In Diamond's (1993) model, the ability to restructure debt outside of bankruptcy depends solely on the ability to exchange public debt claims successfully. The benefit of bank debt arises from a more efficient liquidation policy, which in turn implies structuring the firm's public and private debt so that the bank will not make concessions (i.e., the bank has no incentive to renegotiate).

equity are more cash-flow constrained and have poorer operating performance prior to the restructuring. In addition, these firms perform better after the restructuring transaction than firms with no bank stock ownership. Overall, the evidence indicates that while banks play an important role in the restructuring process; whether a bank participates in a debt restructuring depends on the amount of public debt outstanding and whether the public debt can be restructured.

The remainder of the article is divided into four sections. Section 1 provides a review of the legal restrictions on U.S. commercial bank holdings of common stock. Section 2 presents a simple model that examines the determinants of bank debt for equity exchanges. Section 3 describes the sample and methodology. Section 4 presents empirical evidence concerning debt restructurings. Finally, Section 5 provides a summary and conclusions.

1. Legal Issues Concerning Common Stock Holdings by U.S. Banks

Commercial banks and bank holding companies generally are prohibited from holding common stock in nonfinancial corporations.³ However, an important exception to this general prohibition is the authority for banks to hold corporate stock (as well as real property and securities convertible into common stock) in loan workouts. This authority arises from the so called “Debt Previously Contracted” (DPC) authority provided by 12 U.S.C. §24 (seventh) and 12 U.S.C. §29.

There is extensive federal case law concerning the authority of banks to take stock in DPC transactions (see 12 CFR 29 note 2 for a summary of court decisions). While DPC authority is limited in scope, courts consistently have held that banks may acquire common stock in DPC transactions or in settlement of disputed claims, reasoning that such an acquisition is permissible because it is “incidental to the business of banking.”⁴ Banks may take stock under DPC authority to “recover their costs and reduce their risk relating to the original extension of credit” (OCC Staff Interpretive Letter 89-01, January 25, 1989). Moreover, as explained by the comptroller, “the bank need not demonstrate that the loans are in default to exercise its DPC authority. It is sufficient if the debt was subject to recent rescheduling

³The Banking Act of 1933 (12 U.S.C. 24) contains a list of investment securities commercial banks are permitted to hold. Investments permitted under 12 U.S.C. 24 generally exclude common stock. For a summary of equity investments permitted by national banks, see *Equity Investments Permissible for National Banks and Activities Permissible for National Banks and their Subsidiaries*, FDIC, May 1993.

⁴See, for example, *First National Bank of Charlotte v. National Exchange Bank*, 92 U.S. 122 (1876). see also 12 CFR §1.12.

or has a documented history of poor performance.”⁵ Filly, there is no limit on the percentage of a firm’s common stock outstanding a bank may hold in a DPC transaction.

While banks are permitted to take stock in loan workouts, there are limits on the period of time the stock can be held. In particular, until 1980, the holding period for national banks was limited to five years (12 U.S.C. §29). However, in 1980 the maximum holding period was extended to 10 years (see Pub. L. 96-221, Title VII, §701(a), 94 stat 186 (1980)).⁶

In general, state banking laws mirror federal law with respect to taking stock in DPC transactions. However, state banking laws are generally less restrictive in terms of holding period limitations. For example, state chartered banks in New York (banks such as Morgan Guaranty) are subject to no holding period limitations.⁷

2. Determinants of Bank Debt for Equity Exchanges

While banks have the legal authority to take stock in financially distressed firms, whether a bank exercises this authority will depend on the benefits and costs of a private workout relative to bankruptcy. As Gertner and Scharfstein (1991) and Gilson, John, and Lang (1990) point out, a banks incentives to participate in a restructuring depends on the cost of bankruptcy. An important component of bankruptcy costs is the value of intangible assets or investment opportunities that are lost if the firm declares bankruptcy. A bank’s incentives to restructure also depend on the amount and priority of the firm’s other debt claims. Specifically, for firms with subordinated public debt out-

⁵OCC staff Interpretive Letter 8941, January 25, 1989.

⁶ The 1980 law permits the holding period to be extended to 10 years on the approval of the Comptroller of the Currency. As explained by the comptrollers office, "extension of the five year period would be dependent upon a showing by the association that it has ma& a good faith attempt to dispose of the DPC property (be it stock or real property) within the five year period, or that disposal within the initial five year period would be detrimental to the association" (OCC No Objection Letter (89-01)).

Nonbank subsidiaries of bank holding companies must dispose of stock acquired through a DPC transaction within two years unless granted an extension by the Board of Governors. The board can grant extensions up to an additional 5 years (see 12 USC 1843 c2).

Bank subsidiaries of bank holding companies may hold stock acquired in DPC transactions in accordance with regulations established by its primary supervisory agency (e.g., State Bank Supervisors in the case of state chartered banks and the OCC in the case of national banks). See 12 CFR 225.140f.

⁷state chartered banks in New York may hold common stock taken in DPC transactions for as long as the bad of directors of the bank "deems it advisable" (New York Statute section 97.5 pp 81b). Conversations with state bank supervisors indicate that state statutes frequently do not specify a maximum holding period for stock or real property taken in DPC transactions. Rather, state regulators require banks to dispose of the stock in a way that mitigates any loss that the bank might incur of as the bank’s board deems advisable.

standing, potential wealth transfers to bondholders limit the incentives senior banks have to restructure their claims.

In this section, I present a simple model that examines the conditions under which senior bank lenders will scale down their claims unilaterally in exchange for an equity stake in firms that also have public debt outstanding (e.g., the condition under which banks would make concessions even though holdout problems preclude a public debt restructuring).⁸ The model shows that the conditions under which banks make unilateral concessions are quite limited. As a result, my analysis suggests that the likelihood that banks take equity depends importantly on whether public debt is also restructured.⁹

While the analysis focuses on when banks make unilateral concessions, similar factors are expected to affect the likelihood that banks take equity in conjunction with public debt restructurings. In particular, as in Gertner and Scharfstein (1991), I argue that whether the bank makes concessions in conjunction with public debt restructurings depends on whether the bank's claims are impaired, the amount of public debt in the firm's capital structure, and the value of the firm's growth opportunities.

2.1 The model

Consider a firm with total face value of debt outstanding of F_T . The debt consists of secured debt from a single bank lender and subordinated debt held by a group of public bondholders. The proportion of total debt held by the bank is θ_B and the proportion consisting of public debt is θ_P , ($\theta_B + \theta_P = 1$). There are two dates in the model. At the initial date 0, the bank has the option either to call its loan (i.e., force liquidation) or to participate in a debt restructuring. At date 0, the firm's assets have a liquidation value of K . If the firm is not liquidated at date 0, it chooses between two mutually exclusive investment projects. One project, which I refer to as the "safe" project, generates a certain date 1 cash flow of M dollars. The second project, which I refer to as the "risky" project, generates an uncertain date 1 cash flow of H with probability p and L with probability $(1 - p)$ where ($H > L$).¹⁰ The safe project has a higher expected date 1 cash flow

⁸ Absent holdout problems and with a single priority of debt understanding, it is straightforward to show that in the context of my model debtholders always have an incentive to restructure.

⁹ My analysis differs from Gertner and Scharfstein (1991) in that I focus on the interaction between bank concessions, the value of collateral, and the proportion of public debt in a firm's debt structure.

¹⁰ To undertake these investments, I assume that the collateral is last. One interpretation of the collateral is that it analysts of an amount of cash sufficient to undertake the investment projects. Assuming, as do Gertner and Sharfstein (1991), that additional cash from bank lenders is needed to undertake the project does not qualitatively affect the results. The requirement of an additional

than the risky project, that is,

$$M > H_p + (1 - p)L. \quad (1)$$

For simplicity, assume that all agents are risk neutral and that the one-period risk-free interest rate is zero. All debt matures at date 1.

Since I am concerned with the role of banks in the restructuring process, I assume that liquidation is not always optimal. This requires that the value of the firm's assets in liquidation, K , be less than the value of the safe project. For simplicity, I also assume that the liquidation value of the firm exceeds the value of the risky project (below, I allow the risky project to have a positive NPV), that is,

$$M > K > H_p + (1 - p)L. \quad (2)$$

Since I am concerned with when banks take equity in debt restructurings, I limit the analysis to the case where the firm must restructure its debt or liquidate. As a result, I assume that in the absence of a restructuring, external equity financing is not feasible.¹¹ Specifically,

$$F_T > M > H_p + (1 - p)L. \quad (3)$$

Equation (3) states that total promised payments to debtholders exceed the expected cash flows from the firm's projects. Thus, the firm faces the well-known underinvestment problem associated with a debt overhang analyzed by Gertner and Scharfstein (1991) and Myers (1977).

The firm's choice of investment projects is assumed to be unobservable (or not contractible) at date 0 to both the bank and public debtholders (otherwise the bank or debtholders avoid restructuring by dictating the firm's investment choice). Date 1 cash flows, however, are observable and verifiable to all agents. To ensure that the firm's stockholders would have an incentive to continue in the absence of a restructuring (and not voluntarily liquidate), assume that the "risky" project has some option value to shareholders in that it generates a cash flow in excess of the firm's contracted debt payments (i.e., $H > F_T$). Given Equation (3), it follows that stockholders always will choose the risky project in the absence of a reduction in the amount of debt outstanding.

cash investment serves to increase the bank's reservation price in a restructuring.

¹¹No security junior to public debt is feasible by Equation (3).

More generally, shareholders choose the risky project for a level of debt F such that the risky project provides them a higher return, that is,

$$M - F < p(H - F)$$

or, rearranging,

$$F > \frac{M - pH}{(1 - p)}. \quad (4)$$

The potential increase in firm value associated with scaling down the firm's debt is the difference between the payoffs from the safe project and the liquidation value of the firm's assets:¹²

$$M - K > 0 \quad (5)$$

In analyzing the conditions for secured lenders to scale down their claims unilaterally, I consider two general cases. In the first case, bank debt is secured and unimpaired, that is, $\theta_B F_T < K$ (the face value of the bank's claim is less than the liquidation value of the firm). In the second case, bank debt has an impaired but secured claim: $\theta_B F_T > K$.¹³ I focus on the case in which bank claims are secured since, as discussed in Section 4, bank debt is typically secured. At the end of this section, I examine how the results change when the bank has an unsecured position.

2.2 Unimpaired bank debt

The following proposition describes the conditions for the bank to scale down its riskless claim unilaterally in exchange for equity.

Proposition 1. *If the bank holds an unimpaired secured claim ($\theta_B F_T < K$) and there is Public debt outstanding, the bank will scale down its claim only if public debtholders also scale down their claims.*

¹²Given that a debt restructuring is feasible, how the gain in value is divided among the firm's claimants will depend on the bank's bargaining power and the bargaining power of public debtholders and stockholders

¹³I assume that in liquidation absolute priority is adhered to. This assumption is consistent with the treatment of secured creditors in bankruptcy. See Weiss (1990).

The proof of this proposition is as follows.¹⁴ For the bank to scale down its debt claim, it must receive some combination of new debt and equity worth at least $\theta_B F_T$. In the absence of a public debt restructuring, the bank accepts a restructuring offer involving a fraction of the firm $\alpha_B \in [1, 0)$ and debt of $\hat{F}_B$ ($\hat{F}_B < \theta_B F_T$) and shareholders choose the safe project only if

$$\alpha_B [M - \theta_P F_T - \hat{F}_B] + \hat{F}_B \geq \theta_B F_T. \quad (6)$$

The left-hand side of Equation (6) equals the value of the bank's claim in the restructured firm. The right-hand side of Equation (6) equals what the bank receives in liquidation.

Let $\alpha_B = 1$ (i.e., the bank holds all of the equity in the restructured firm). Then Equation (6) implies

$$M \geq \theta_P F_T + \theta_B F_T = F_T \quad (7)$$

However, Equation (7) implies that external financing is feasible, which means that the bank debt need not be restructured.

The intuition behind Proposition 1 is straightforward. Unless subordinated debtholders scale down their claims, none of the value gain associated with a restructuring is available to the bank, and as a result the value of securities offered to the bank is less than what the bank receives in liquidation.¹⁵ As a result, the bank will refuse to restructure its claim.¹⁶

¹⁴ If $\theta_B F_T < L$, then bank debt need not be restructured since the bank has no incentive to call its loan. If $Hp + (1 - p)L > \theta_B F_T > L$, then it may be feasible for the firm to offer the bank equity and undertake the inefficient high-risk project rather than liquidate. However, in this case even though the bank restructures by taking an equity position, it will not scale down its claim. Specifically, the bank will take equity and not liquidate if

$$\alpha_B p(H - F_T) > (1 - p)(\theta_B F_T - L). \quad (i)$$

The left-hand side of Equation (i) is the value of the bank's equity stake. The right-hand side is the loss in value of the bank's debt claim if the risky project is chosen. In this case, the bank has no incentive to scale down its claim. Indeed, scaling down its claim may lead to selection of the safe project which makes the bank worse off. In a more general model with a continuum of date 1 cash flows from the risky project, the bank strictly prefers its original face value claim $\theta_B F_T$ and equity to liquidation. By retaining the face value of its debt claim, the bank minimizes any wealth transfer to bondholders. Furthermore, exchanging riskless debt for equity violates bank regulatory policy concerning DPC transactions (see Section 1).

¹⁵ If side payments are made to the bank that permit a restructuring, the ability to make these payments violates the external financing restriction.

¹⁶ Equation (6) is based on the assumption that public debt is not restructured. If public debt can be restructured, then the bank will accept a restructuring offer if

$$\alpha_B [M - \hat{F}_T - \hat{F}_B] + \hat{F}_B \geq \theta_B F_T, \quad (6')$$

where $\hat{F}_T$ is the face value of restructured public debt claims ($\hat{F}_T < \theta_P F_T$).

2.3 Impaired bank claims

Consider next the case where bank debt is impaired in the sense that the face value of the bank's claim exceeds the liquidation value of the firm $\theta_B F_T > K$. Whether the bank unilaterally scales down its claim in the absence of public debt restructuring depends on the amount of public debt outstanding and the value of the firm's growth options (i.e., the difference between the value of the safe project and liquidation, $M - K$). There are two cases to consider. The first case involves a sufficiently large amount of public debt outstanding so that public debt must be restructured for the safe project to be chosen [i.e., $\theta_P F_T > (M - pH)/(1 - p)$], that is, there is a public debt overhang in that the level of public debt is high enough so that without a public debt restructuring the payoff to shareholders is higher if the risky project is chosen. The second case involves a less pivotal role for public debt in that scaling down bank debt is sufficient to induce the firm to take the safe project, that is, $F_T > (M - pH)/(1 - p)$ but $\theta_P F_T < (M - pH)/(1 - p)$.

2.3.1 A public debt overhang. Consider first the case of a public debt overhang. Since high-yield public bond issuers rely primarily on public debt and use only a small proportion of secured bank debt, this case is likely to be applicable to a junk bond issuer in distress [the focus of Asquith, Gertner, and Scharfstein (1991)]. The following proposition describes the conditions under which a secured lender scales down its claims unilaterally.

Proposition 2. *With risky senior bank debt, for a sufficiently high level of public debt s.t. $\theta_P F_T > (M - pH)/(1 - p)$, bank lenders scale down their claims only if public debtholders also scale down their claims.*

The proof of Proposition 2 is straightforward. If public debtholders do not restructure their claims and the firm invests, shareholders choose the risky project. However, Equation (2) implies that the bank strictly prefers liquidation to continuation with the high-risk project. Therefore, the bank will not scale down its claim. Proposition 2 suggests that for firms with large amounts of public debt outstanding, bank debt for equity swaps will occur only coincident with public

¹⁷For notational simplicity, assume $L < \theta_B F_T$ (i.e., bank debt is risky if the risky project is chosen).

debt restructurings. Again, as in the previous case, investment efficiency requires public debt to be restructured.¹⁸

2.3.2 No public debt overhang. Consider next the case where there is no public debt overhang. In this case, the avoidance of liquidation does not necessarily require public debt to be restructured. Whether the bank unilaterally scales down its claim depends on the value of the collateral, the value of the firm's investment opportunities, and the proportion of the firm's total debt held by bondholders.

In the absence of a public debt restructuring, a necessary condition for the bank to make concessions in exchange for an equity share is

$$M - \theta_p F_T > K \quad (9)$$

The value of the bank's potential equity stake exceeds what it would receive in liquidation. Notice that the greater the proportion of public debt (θ_p), the greater the coinsurance effects or wealth transfer associated with the bank taking equity. This wealth transfer lowers the value of the stock the bank receives and thus makes a restructuring less likely. (Note that if $\theta_p = 0$, Equation (9) is always met and the bank always restructures.) Also note that the more valuable the firm's investment opportunities are relative to liquidation (i.e., the larger $M - K$), the greater the gain is from continuation and thus the more likely the bank takes equity unilaterally.¹⁹

To, summarize, the analysis indicates that the bank scales down its debt unilaterally in exchange for equity only when its claim is

¹⁸It is interesting to note that Proposition 2 holds even if the high-risk product has a positive NPV. In this case, Equation (2) is modified so that

The bank will accept a restructuring involving some share of the firm's equity $\alpha_B \in (1, 0]$ without a public debt restructuring

$$\alpha_B [p(H - \theta_p F_T)] + (1 - p)L > K. \quad (ii)$$

In words, the bank will take some equity if the expected value of the stock it receives plus its debt claim [the left-hand side of Equation (ii)] exceeds the value of the bank's claim in liquidation. Since the size of the bank's debt claim has no effect on investment policy (since $\theta_p F_T > (M - pH)/(1 - p)$), absent a public debt restructuring, the bank and stockholders prefer the offer with the least amount of stock because this thus maximizes the surplus available to the other parties involved. In this case, even if the bank takes equity, it does not scale down its debt claim.

¹⁹If the risky project has a positive NPV, then the analysis is more complicated. Specifically, the bank must choose between scaling down its claim, liquidation, or taking on some stock and having the firm invest in the high-risk project. In the absence of a public debt restructuring, the bank will scale down its debt and the safe project will be undertaken if

$$M - \theta_p F_T > \max[K, p(H - \theta_p F_T) + (1 - p)L].$$

that is, the bank's payoffs exceed the maximum of its payoffs in liquidation and the payoffs associated with retaining its debt position and taking equity position in the high-risk project.

impaired. If bank debt is impaired, whether the bank swaps debt for equity depends on (1) the proportion of total debt that is held by public bondholders, (2) the value of the firm's growth options relative to the liquidation value of the firm's assets, and (3) whether public debt is also restructured.

While the model focuses on the conditions under which banks grant unilateral concessions, I conjecture that a similar set of factors will influence when banks take equity in conjunction with a public debt restructuring. In particular, banks have little incentive to make concessions (i.e., reduce the principal amount of their loan in exchange for equity) unless their claims are impaired.²⁰ In addition, the higher the proportion of public debt (and the smaller the proportion of bank debt), the less likely senior bank lenders are impaired. As a result, I expect a negative relation between the likelihood of banks taking equity and the proportion of public debt. In addition, with a higher proportion of bank debt, the greater the likelihood that there is a bank debt overhang so that bank concessions are required for a restructuring. In Section 4, I examine empirically the effect of these factors on the likelihood of banks taking equity in distressed firms.

2.4 Extensions and modifications

The model is based on the assumption that bank debt is senior to public debt. If bank debt is *pari passu* with public debt, then the bank's reservation price is lower since it must share collateral with other lenders (i.e., $\theta_B K$ versus K), and thus its willingness to restructure increases. As a result, if holdout problems preclude a public debt restructuring, the threshold proportion of public debt below which the bank will restructure unilaterally is increased. Specifically, a necessary condition for a bank to prefer taking equity to liquidating is $\theta_p F_T < (M - pH)/(1 - p)$ (there is no public debt overhang) and $M > \theta_B K + \theta_p F_T$ (an equity offer meeting the banks reservation price is feasible). This contrasts with the secured debt case that requires $M > K + \theta_p F_T$. While the bank's reservation price is lower when its debt is unsecured, this does not imply necessarily that the bank is more likely to exchange its claim for equity. In particular, shareholders may prefer offering the bank a secured claim to limit wealth transfers to subordinated debtholders.²¹

²⁰ There may be costs of taking equity positions also in terms of lender liability claims and claims of equitable subordination. See Gilson (1994).

²¹ In the context of the present model, if the safe project is chosen, the choice of senior debt or equity is not relevant (i.e., both have certain payoffs). More generally, as discussed in Brown, James, and Mooradian (1993), if the efficient investment project is risky, among feasible restructuring offers, shareholders and the bank prefer the one with the greatest amount of secured debt and the least amount of equity (to avoid wealth transfers).

3. Sample Selection

I examine empirically the determinants of bank loan restructurings using a sample of debt restructurings. The sample covers the period 1981 through 1990 and was obtained through a key word search using the Dow Jones News Retrieval service. The key words used in the search were "loan restructuring," "debt restructuring," and "financial restructuring." My sample does not contain firms that filed for bankruptcy or voluntarily liquidated assets without proposing a restructuring. As a result, the empirical results should be interpreted as conditional on an offer being made. Since my concern is with restructurings that occur in financial distress, the search was restricted to articles that also contained the key words "default," "troubled," "distressed," or "bankruptcy."

The final sample includes transactions identified in the key word search if (1) the firm was traded on the AMEX, NYSE, or NASD during the year the restructuring announcement was made, (2) the firm's annual report or 10k report was available for the fiscal year of the restructuring announcement, and (3) the firm was not a regulated utility or a financial institution (i.e., bank, S&L, or insurance company). This selection procedure resulted in a total of 102 proposed bank or public debt restructurings.²² All of the firms in the sample attempted to restructure their bank debt. In addition, 40 firms also proposed exchange offers involving public debt.

Bank loan restructurings fall into one of two categories according to whether or not the bank received equity (defined as common stock, preferred stock, or warrants) in exchange for (1) forgiving some portion of interest or principal due and/or (2) a waiver of a covenant or an extension of the maturity of the loan. Public debt restructurings were classified according to whether public debtholders made concessions (i.e., an exchange offer involved public bondholders exchanging debt for a lower face value debt claim plus stock).²³ The *Wall Street Journal* article describing the transaction, and the firm's 10k filings and annual reports, provides information on the nature of the restructuring transaction.²⁴ I obtained information on the priority

²²Six firms are included twice in the sample. These firms completed debt restructurings and then were forced to recontact again with their creditors. For these firms, the second restructuring announcement follows the completion of the first transaction by at least six months.

²³In the case of mixed offers (i.e., offers involving both debt and equity), the offer was classified as one Involving a debt for debt exchange if bondholders were offered senior claims of equal or greater the claims that they exchanged. On the other hand, if bond holders scaled down the face value of their claim for equity, then the transaction was classified as a debt for equity swap.

²⁴Since many of the firms in the sample had a number of news stories concerning restructuring transaction, transactions are classified according to terms proposed in the final restructuring proposal.

of the firm's debt claims in the year prior to the restructuring from the firm's annual report and 10k filings. This information typically appears in the notes to the financial statements.

A number of transactions involved proposed restructurings. Transactions were classified as completed if there was a subsequent news announcement indicating the transaction was completed, the firm's annual report indicated that the restructuring was completed or, absent any announcement, the firm did not file for bankruptcy protection within two years of the announcement of the proposed restructuring. All other transactions were classified as not completed.²⁵

Accounting information for the firms in the sample was obtained from the firm's annual report, 10k filings, Moody Manuals, and Compustat. Information on the number of shares of common stock outstanding and the market price of the firm's common stock was obtained from the CRSP master file.

4. Sample Characteristics and Empirical Results

4.1 Sample characteristics

Panel A of Table 1 provides a summary of restructuring transactions contained in the sample and the frequency of each type of transaction. As shown, 31 percent of the bank loan restructurings (32 restructurings) involved the bank taking equity. In most (91 percent) of these transactions, the bank took equity in exchange for some forgiveness of principal on the loan. It is interesting to note that in nearly half (47 percent) of the transactions in which the bank took equity, the firm had public debt outstanding. Thus, it is not the case that banks provide concessions only when the firm has no public debt outstanding. However, the proportion of firms with public debt outstanding is significantly lower (at the 0.05 level) in the sample in which the bank takes equity than in the sample in which the bank does not take equity.

As discussed in Section 2, a potential impediment to a bank making unilateral concessions is that the transaction results in a wealth transfer to more junior public debtholders. However, as shown in Table 1, every transaction in which the bank took equity and there is public debt outstanding, the public debt was also restructured. Moreover, all

²⁵There is some clustering of restructuring transactions by industry. Specifically, 43 percent of the transactions involving banks taking equity are in the gas and oil extraction industry (SIC Code 1300-1399). Twenty-seven percent of the firms in which the bank did not take equity are in oil and gas extraction.

Table 1
Descriptive statistics for a sample of 102 debt restructuring proposals made by financially distressed firms during the period 1981-1990¹

Panel A: Frequency of proposed transactions				
	Number of observations	Percent with public debt outstanding	Percent with public debt restructuring public debt	Percent of public debt restructurings in which bondholders swap debt for equity
Bank debt restructurings				
Bank receives equity ²	32	47%	100%	100%
No equity taken	70	64%	55%	72%
	Number of observations	Percentage of transactions in which banks receive equity		Percentage of transactions in which banks take no equity
Public debt restructurings	40	37%		63%
Exchange offer; equity received	32	43%		57%
Exchange offer; debt received	8	0%		100%

¹ All the restructuring transactions undertaken to alleviate or avoid a default or are undertaken to avoid a bankruptcy filing.

² These are transactions in which the bank receives common stock, preferred stock, or warrants in exchange for reducing the principal balance on the loan, forgiveness of interest, or extending the maturity or waiving of the covenant associated with the loan. The subcategories are not mutually exclusive.

Table 1
(continued)Panel B: Description of bank debt for equity swaps classified by bondholder actions³

	Amount of bank debt reduction (in millions)	Principal reduction as percent of bank debt outstanding	Percent of common stock acquired by bank ⁴	Cash received by bank as percent of principal amount of debt	Amount of public debt reduction (in millions)	Public Debt principal reduction as a percent of public debt outstanding	Percent of common stock acquired by bondholders ⁵
Transactions in which both banks and bondholders receive equity, $N = 15$							
Mean	\$107.17	37.15%	51.51%	.50%	\$110.18	48.60%	29.12%
(Median)	(\$44.00)	(39.53%)	(52.91%)	(0%)	(\$17.00)	(45.62%)	(20.55%)
Transactions in which there is no public debt outstanding, $N = 17$							
Mean	\$11.15	44.74%	35.66%	2.60%	NA	NA	NA
(Median)	(\$7.22)	(49.56%)	(27.64%)	(0%)			

³ Information on the nature of the restructuring transactions was obtained from the firm's annual report, 10k filing and the *Wall Street Journal* article describing the transaction.

⁴ The percentage of common stock acquired by the bank is computed as the number of shares acquired by the bank divided by the number of shares outstanding at year end prior to the restructuring proposal plus shares acquired by the bank. In cases where the bank acquired securities convertible into common stock (e.g., convertible preferred), the bank shares equal the amount of common stock the bank would hold assuming full conversion.

⁵ This variable is computed in the same way as described in note 4.

of these public debt restructurings involved debtholders scaling down their claims in exchange for equity.²⁶

While banks do not take equity without public bondholders also restructuring their claims, the converse is not true. In particular, in only 43 percent of the transactions in which public bondholders swapped debt for equity did the bank also take equity. Thus, it appears that bondholders are more likely to act unilaterally and exchange their debt for equity than are private lenders. Finally, banks did not swap debt for equity in any transactions in which bondholders engaged in debt for debt swaps (all of these transactions involved exchanges for senior debt with interest payable in common stock).

Table 1 also provides descriptive statistics concerning the transactions involving banks taking an equity stake in the firm classified by whether bondholders also scale down their claims. If potential wealth transfers to unsecured creditors limit the concessions senior bank lenders make, one would expect to observe banks providing greater concessions for firms without public debt outstanding. As shown in Panel B, when banks take equity, they make significant concessions in terms of reducing principal. The average reduction in principal is 41 percent of the loan amount (the median reduction is 39.6 percent). Both the mean and median percentage reduction in principal is higher for the firms that have no public debt outstanding than for firms with public debt outstanding (although the differences are not significant at the 0.10 level).

Panel B also indicates that banks take a significant percentage of the firm's common stock.²⁷ Specifically, on average, banks are offered 43 percent of the firm's common stock.²⁸ For firms where both pub

²⁶A question that arises is whether banks ever reduce the principal amount of their loans without bondholders also making concessions. In all cases in which a bank took equity in exchange for debt, bondholders also reduced their claims. There are, however, five transactions in which the bank forgives principal without taking equity. Two of these transactions involve firms with public debt outstanding. In one case (Gearhart Industries), institutional investors, including the banks, scaled down their claims as part of the acquisition of the distressed firm. In this case, bondholders exchanged their debt for some equity. In the second case (Cleveland Cliffs), a group of banks scaled down their unsecured claims and public debt was not restructured. However, this case involved the firm buying back (at a 15 percent discount) the bank debt of a subsidiary for cash. Thus, instances in which banks scale down their claims unilaterally when there is public debt outstanding are extremely rare.

²⁷The percentage of common stock acquired by the bank and/or public bondholders is computed as follows. For transactions in which common stock is offered, the percentage acquired equals the shares offered to the bank (or public debtholders) divided by the number of shares outstanding at fiscal year end prior to the offering plus the number of shares offered in the transaction. For public bond exchange offers, the percentage was calculated using actual tendering rates or, when unavailable, the minimum tendering rates described in the proposed transaction. For transactions involving securities convertible into common stock, the percentage of stock ownership is based on the assumption of full conversion into common stock.

²⁸Consistent with Gilson (1990), I find that among creditors, on average, banks become the largest stockholder after the restructuring.

lic and bank debt are restructured, banks, on average, take a larger percentage of the firm's stock than do bondholders. The difference between the mean and median percentage stock ownership of banks and public bondholders is statistically significant at the 0.10 level.

Finally, banks continue to hold substantial amounts of common stock two years after the transaction was completed. In particular, in only 3 of the 27 completed transactions did the bank completely divest itself of the firm's stock within two years. For the remaining transactions, banks reduced their stock holdings by an average of 4.37 percent (the median change is zero) within two years of the completed restructuring. Thus, bank stock holdings in workout situations do not appear to be transient positions.²⁹

Overall, the results in Table 1 indicate that banks frequently take substantial equity stakes in financially distressed firms in exchange for substantial reductions in loan principal. Table 1 also indicates that banks never make concessions unilaterally for firms with public debt outstanding.

4.2 Financial characteristics

Table 2 provides descriptive statistics concerning the financial characteristics of the firms in my sample.³⁰ There are several significant differences in the financial characteristics of firms based on whether banks take an equity position. First, the mean and median ratio of bank debt to total debt outstanding (i.e., the sum of public debt and other private claims) is significantly higher for firms in which banks take equity. Indeed, for this group, the median firm has no public debt outstanding and the average ratio of public debt to total debt outstanding is only 11 percent – about half of the average ratio for firms where banks do not hold stock. The lower ratio of public debt to total debt outstanding for restructurings in which banks take equity

²⁹ Following the bank's position cut beyond two years is difficult because some firms are acquired, merge, or the 10k reporting is stopped for other reasons. However, I was able to obtain 10k information for 20 of the 32 firms which the banks took equity. Of these, only two banks liquidated their equity between year $t + 2$ and year $t + 3$.

³⁰ Information on industry leverage and cash flows is from Compustat which contains the most recent industry classification for a firm's main line of business. However firms in financial distress frequently sell assets and restructure their operations so that the most recent industry classification may not correspond to the firm's line of business at the time of the restructuring. To ensure that proper industry classification was used, the SIC code reported in Compustat was compared to the description of the firm's main line of business as reported in the firm's annual report or 10k filing at the time of the proposed restructuring. In cases in which the four-digit SIC code as reported in Compustat differs from the industry description contained in the annual report, I used the SIC code that corresponds to the line of business reported in the annual report.

³¹ However, it is interesting to note that among the firms with public debt outstanding, the mean and median proportion of public debt to total debt is not significantly different between the two samples.

is consistent with either transactions being structured to mitigate transfers to bondholders (so called “coinsurance effects”) or the absence of a public debt overhang.

A second difference is that the average proportion of bank debt that is secured is significantly higher among firms that offer their banks equity. Indeed, 74 percent of these firms have fully secured debt claims compared to only 51 percent of the firms not offering equity. Moreover, where the bank is fully secured and equity is offered, in all but one transaction, the bank also is offered additional security.³² Among the transactions in which the bank was not offered equity and was not fully secured, all of the firms with public debt outstanding offered their bank additional collateral. This result is consistent with transactions being structured to minimize the coinsurance effects associated with bank debt restructurings.

As shown in Table 2, firms in which banks take equity are more highly levered, have lower coverage ratios and higher solvency ratios, and have lower earnings (measured by earnings before interest taxes and depreciation (EBIT) relative to assets). Firms in which banks take equity appear to be experiencing more serious cash flow problems and are more cash constrained than firms that do not offer stock to their banks. This result is consistent with the hypothesis that banks are more likely to take equity when their claims are impaired.

4.3 Regression results

The summary statistics reported in Tables 1 and 2 suggest that whether banks make concessions depends on the amount of public debt relative to total liabilities and whether public debt restructures and scales down its claims. To examine the factors influencing when banks take junior claims, I estimate a logistic regression relating the likelihood of an equity offer to firm characteristics. In particular, based on the discussion in Section 2, I expect that the likelihood that the bank will take equity in exchange for some concession of principal to be negatively related to the proportion of the firm’s debt that is publicly held, positively related to the value of the firm’s growth options, and higher when public bondholders also take equity.³³

Whether the bank takes equity is also expected to be related to the firm’s cash flows relative to its interest expense. The lower the level of cash flows relative to interest expense, the more likely the firm

³² The exception is World Airlines. In this case, the bank had an unsecured debt claim and virtually all of the firm’s assets either were leased or pledged as collateral to other private lenders.

³³ Following Smith and Watts (1992) and others, I measure the value of the firm’s growth options by the ratio of the market to book value of the firm’s assets. This variable is calculated as (book value of assets – book value of equity + market value of equity)/book value of assets.

Table 2
Selected financial and industry characteristics for 102 firms attempting debt restructurings during the period 1981 to 1990

Variable	Entire sample ¹		Bank takes equity		No equity taken	
	Mean	Median	Mean	Median	Mean	Median
Book value assets (millions)	762.15	135.95	446.03	143.85	888.20	117.99
Market value equity (millions)	79.30	21.13	56.23	11.26	89.67	27.57
Book value equity (millions)	90.97	4.68	-19.52	3.36	139.09	6.48
Debt ÷ Total liability						
Bank	0.63	0.67	0.719*	0.839*	0.58	0.57
Publicly traded	0.19	0.08	0.114*	0.00*	0.22	0.16
Private	0.18	0.07	0.16*	0.05*	0.19	0.09
Secured bank debt/Bank debt	0.67	1.00	0.81*	1.00	0.61	1.00
Secured private/Private debt	0.57	0.37	0.85*	0.63*	0.47	0.23
Leverage ratio ²	0.66	0.58	0.80*	0.71*	0.59	0.53
Market/Book assets ³	1.28	1.12	1.27	1.14	1.29	1.12
Solvency ratio (market) ⁴	0.75	0.78	0.80	0.86	0.72	0.76
Solvency ratio (book) ⁵	1.02	0.80	1.40*	1.00*	0.84	0.72
Coverage ratio ⁶	0.35	0.68	0.14*	0.07*	0.44	0.88
EBIT/Assets	0.018	0.047	-0.005*	0.005*	0.063	0.053
Industry EBIT/Assets ⁷	0.074	0.761	0.071	0.059	0.073	0.091
Industry leverage ⁸	0.18	0.16	0.18	0.17	0.18	0.15
Capital expenditures/assets	0.086	0.092	0.067	0.033	0.093	0.056
Number	102		32		70	

¹Balance sheet information is for fiscal year end immediately preceding the debt restructuring announcements. All accounting data are from Compustat and the firm's 10k or annual report.

²Leverage ratio equals book value of short- plus long-term debt/book value of assets.

³Computed as (book value assets - book value equity + market value equity)/book value of assets.

⁴Solvency ratio equals the ratio of book value of short-term and long-term debt to total debt plus the market value of equity.

⁵Solvency ratio equals the ratio of book value of short-term and long-term debt to total debt plus the book value of common stock.

⁶Coverage ratio equals EBIT/Interest expense.

⁷Industry EBIT/Assets represents the EBIT/Assets for the median firm in the same industry as the firm restructuring its debt. The Industry is defined by four-digit SIC code.

⁸Industry leverage is the median of short-plus long-term debt/assets for firms with the same industry as defined by the four digit SIC code.

* Significantly different at the 0.05 level from the mean (median) for the sample where banks do not take equity. Medians tests is based on Wilcoxon sum rank test statistics.

will need to exchange either interest or principal payments for common stock. Thus, the higher the firm's coverage ratio (EBIT/interest expense), the less likely an equity offer. As discussed in Section 2, whether the bank takes equity depends on the size of the firm's debt overhang (as an additional measure of whether the bank is impaired). As a proxy for whether the bank is impaired, I use the firm's solvency ratio (the ratio of total debt to the sum of total debt plus the market value of equity). The higher the solvency ratio, the more likely the bank's position is impaired. As a result, I expect a positive relation between the likelihood of a bank taking equity and the firm's solvency ratio.

Finally, the effect of the priority of the banks claims on the likelihood of the bank taking equity is uncertain. On the one hand, the higher the proportion of the banks claims that are secured, the higher is the bank's reservation price, and therefore the less likely the bank will be to scale down its claims. However, while unsecured bank lenders may have a lower reservation price in a restructuring, if stockholders and/or the bank act unilaterally, they prefer offering the bank senior claims (since senior claims mitigate the wealth transfer to bondholders associated with the restructuring).

Table 3 reports the results of the logistic regression. The logistic regression is estimated using 84 observations for which complete data are available. The likelihood of bank concessions is negatively related to the ratio of public debt to total debt outstanding. This result is consistent with the argument that wealth transfers to public bondholders (or the existence of a public debt overhang) reduce the likelihood that banks will make concessions. The positive and statistically significant coefficient on the ratio of the market to book value of the firm's assets is consistent with the argument that firms with substantial intangible assets are more likely to restructure their debt.

The likelihood that banks take equity is significantly higher the higher the firm's solvency ratio. Assuming the solvency ratio represents a reasonable proxy for the likelihood the bank's position is impaired, this result is consistent with the arguments presented in Section 2. The likelihood of a bank taking equity is significantly higher when bondholders also take equity. This result is consistent with the argument that the bank's reservation price is higher if the firm has public debt. Finally, the likelihood of the bank taking junior claims is not significantly related to the proportion of the banks claims that are secured.

Columns 2 and 3 of Table 3 provide estimates of the logistic model

Table 3

Logistic regression relating the likelihood the bank is offered equity in a restructuring to the firm's financial characteristics for a sample of debt restructuring 1981 to 1990

Variable	Coefficient (asymptotic <i>t</i> -statistic)		
	(1)	(2)	(3)
Intercept	-680 (-3.16)	-6.71 (-3.15)	-5.93 (-3.07)
Public debt/Total debt ¹	-8.24 (-2.89)	-8.14 (-2.85)	-7.83 (-2.84)
Market/Book assets ²	1.99 (2.60)	2.33 (2.69)	1.91 (2.57)
Public debt takes equity ³	2.03 (2.43)	2.09 (2.47)	2.04 (2.48)
Solvency ratio ⁴	4.03 (2.21)	4.08 (2.32)	3.78 (2.14)
Coverage ratio ⁵	-0.003 (-0.40)	0.23 (1.17)	—
Proportion of bank debt secured ⁶	0.96 (1.35)	—	—
Log likelihood ratio	-38.90	-34.55	-35.39
Pseudo R ²	0.27	0.27	0.26

Dependent variable = 1 if bank takes equity and reduces the face value of its claim; *N* = 84.

¹Ratio of publicly held debt to total debt (bank debt + other public claims + public debt). This information is from the firm's annual report for the fiscal year end prior to the restructuring proposal.

²This variable is computed as (book value assets - book value equity + market value of equity)/book value of assets. Information on book values is from Compustat for the year end immediately prior to the restructuring proposal. Market value of equity is from CRSP.

³This variable equals one if the transaction involved public bondholders taking equity in an exchange offer.

⁴Solvency ratio equals the ratio of book value of short-term and long-term debt to total debt plus the market value of equity.

⁵Coverage ratio equals EBIT/interest expense. This information is from Compustat for the year prior to the restructuring proposal.

⁶This information is from the firms 10k or annual report for the year prior to the restructuring.

using slightly different specifications.³⁴ The results for the alternative specifications are quite similar to those reported in column 1. Finally,

³⁴ If the logistic regression is estimated using only data for firms with public debt outstanding, the results are virtually identical to those reported in Table 3. I also estimate several other specifications of the logistic regression. In one specification, I use as the dependent variable whether the bank was offered equity (including transactions with no concession of principal). The results of this logistic regression are similar to those reported in Table 3.

diagnostic tests of the residuals do not suggest the results in Table 3 are driven by outliers.³⁵

The result in Table 3 provides a possible explanation for Asquith, Gertner, and Scharfstein's (1991) finding that for high-yield bond issuers, banks virtually never scale down their claims in exchange for equity. As Asquith et al. point out, high-yield bond issuers in financial distress have a high ratio of public debt to total debt outstanding and have limited growth opportunities. The results in Table 3 indicate that banks are less likely to take equity in these types of firms.

4.4 Analysis of changes in capital expenditures

A potential problem arises in interpreting the market to book ratio variable in the logistic regressions reported in Table 3. Specifically, one explanation for the positive relation between the likelihood of an equity offer and the market to book ratio is that banks are more likely to take equity in firms with more valuable growth options.³⁶ Alternatively, since creditors taking equity can result in a wealth transfer to existing stockholders (absent any firm value gain), the positive coefficient on the market to book ratio may simply reflect market expectations of a debt restructuring that benefits stockholders (but does not affect investment activity or overall firm value). If this second argument is correct, the market to book value ratio may be a poor instrument for the value of future investment opportunities.

To distinguish between these two explanations, I compare the growth in capital expenditures for firms in which banks hold equity to the growth in capital expenditures for firms in which banks do not take an equity position. I also compare the growth in industry capital expenditures for these firms. In this analysis, I restrict the sample to firms that completed restructuring transactions. Seventy-eight percent of the transactions in the sample were completed (86 percent of transactions in which banks take equity and 76 percent of the remaining transactions were completed).

Table 4 contains firm and industry adjusted cash flows as well as the growth in capital expenditures for the firm and industry around the restructuring proposal. Industry cash flows and capital expenditures are for the median firm within the four-digit SIC code. Industry adjusted cash flows are computed as the difference between the firm's

³⁵To identify outliers, I constructed a standardized residual using residuals from O.L.S. estimates of the model estimated in Table 3. The maximum and minimum standardized residuals are 2.03 and -1.80. Eliminating these observations from the sample and reestimating the logit model yields results virtually identical to those reported in Table 3.

³⁶For example, Petersen and Rajan (1993) argue that restrictions on bank stock ownership can inhibit investment since bank lenders do not have a mechanism to determine ex ante the division of rents when the firm's prospects turn out better than expected.

cash flows and the median firm within the industry. Growth in capital expenditures is measured relative to the year prior to the restructuring proposal.

The results reported in Table 4 reveal striking differences in the growth in capital expenditures between the two groups. Notice that for the firms in which banks hold stock, capital expenditures increase substantially in the two years following the restructuring. In particular, by the end of the second year following the restructuring, capital expenditures for these firms have increased over 100 percent relative to their prerestructuring levels. In contrast, the average growth in capital expenditures for firms in which banks do not take equity is less than 2 percent (both the mean and median growth in capital expenditures in years 1 and 2 are significantly greater at the 0.05 level). As Table 4 also shows, firms in which banks hold equity are located in industries with significantly higher growth rates in capital expenditures than firms in which banks do not take an equity position.

Finally, while firms in which banks hold stock have significantly lower average cash flows relative to assets prior to the restructuring (both with and without industry adjustment), alter the restructuring they have higher average cash flows than the firms in which banks do not take an equity stake. Moreover, the mean and median change in cash flows from $t - 1$ to $t + 2$ is significantly higher for the sample in which banks take equity (at the 0.05 level). The better ex post performance of firms in which banks take equity is consistent with the argument that these firms have greater going concern value than firms in which banks do not hold equity.

5. Conclusion

This article examines the conditions under which banks take equity in loan workouts. Conditional on a restructuring proposal, banks often scale down their debt claims in exchange for an equity position. The likelihood that a bank takes equity is related positively to the value of the distressed firm's growth opportunities and is related negatively to the firm's reliance on public debt. Firms in which banks take equity also have significantly poorer operating performance in the year prior to the restructuring. Among firms with public debt outstanding, I fail to find a single instance in which a bank scaled down its claim in exchange for equity in the absence of a public debt for equity swap. This result suggests that the existence of public debt in the firm's capital structure significantly influences the actions of banks in debt restructurings.

Overall, the empirical evidence suggests that the role banks play in debt restructurings depends on the ownership and composition of the

Table 4
Cash flow and capital expenditures for firms restructuring their bank debt grouped by the nature of their restructuring.

	Year relative to restructuring ¹							
	<i>t</i> = -1		<i>t</i> = 0		<i>t</i> = 1		<i>t</i> = 2	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Bank takes equity								
Cash flow/assets ²	.72%*	1.51%	4.09%	4.70%	7.43%	7.26%	9.24%**	9.91%*
Industry adjusted cash flow/assets ³	-8.26%*	-9.91%*	-4.00%*	-2.27%*	-1.81%*	1.21%*	0.07%	0.85%
Capital expenditures/Assets	4.33%*	2.92%	3.33%	2.51%	4.01%	3.20%	4.79%	3.99%
Growth in capital expenditures from year <i>t</i> - 1 ⁴		NA	1.11%	-27.57%	23.52%*	10.98%*	125.28%*	4.31%*
Growth in industry capital expenditures		NA	9.34%	4.98%	37.14%*	15.08%*	66.92%*	22.54%*
No equity taken								
Cash flow/assets	4.72%	5.43%	3.23%	5.62%	3.66%	7.31%	4.80%	6.86%
Industry adjusted cash flow/Assets	-3.24%	-3.80%	-2.81%	-2.55%	-3.42%	0%	-1.42%	-0.50%
Capital expenditures/Assets	8.67%	4.24%	5.55%	2.73%	4.70%	3.40%	4.89%	2.84%
Growth in capital expenditures from year <i>t</i> - 1		NA	-9.98%	-37.71%	-14.98%	-60.64%	1.91%	-62.28%
Growth in industry capital expenditures		NA	10.18%	-16.16%	-12.92%	-31.73%	44.94%	-17.39%

¹ Data are for completed transactions. All information is from Compustat.

² Cash flows/Assets equals the ratio of operating earnings before interest taxes and depreciation to book value of assets.

³ Industry EBIT/Assets represents the EBIT/Assets for the median firm in the same industry as the firm restructuring its debt. The industry is defined by the four-digit SIC code. Industry adjusted cash flows are computed by subtracting the industry median cash flow from the individual firm's cash flow.

⁴ Growth in capital expenditures equals the ratio of the change in capital expenditures from the year prior to the restructuring to capital expenditures in year zero.

* Significantly different than the mean (median) for the sample in which the bank does not take equity. Medians test is based on Wilcoxon sum rank test statistics.

firm's other debt claims. Firms with public debt outstanding appear to lose much of the flexibility in recontracting generally associated with borrowing from bank lenders. Specifically, while banks have the legal authority to take equity in debt restructuring transactions, my results suggest that potential wealth transfers to public bondholders limit bank incentives to unilaterally scale down their claims. As a result, for firms with public debt outstanding, restructuring both public and private debt claims depends critically on overcoming information and holdout problems that impair public debt restructurings.

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