

**Going Private But Staying Public:
Reexamining the Effect of Sarbanes-Oxley on Firms' Going-Private Decisions**

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Abstract:

This article examines whether the cost of complying with the Sarbanes-Oxley Act of 2002 (SOX) contributed to the rise in going-private transactions after its enactment. Prior studies of this issue generally suffer from a mistaken assumption that by going-private, a publicly-traded firm necessarily immunizes itself from SOX. In actuality, the need to finance a going-private transaction often requires firms to issue high-yield debt securities that subject the surviving firm to SEC-reporting obligations and, as a consequence, most of the substantive provisions of SOX. This paper thus explores a previously unexamined natural experiment: To the extent SOX contributed to the rise in going-private transactions, one should observe after 2002 a transition away from high-yield debt in the financing of going-private transactions towards other forms of “SOX-free” finance.

Using a unique dataset of going-private transactions, this paper examines the financing decisions of 468 going-private transactions occurring in the eight year period surrounding the enactment of SOX. Although SOX-free forms of subordinated debt-financing were widely available during this period, I find no significant change in the overall rate at which firms used high-yield debt-financing in structuring going-private transactions after SOX was enacted. Cross-sectional analysis, however, reveals that the use of high-yield financing marginally declined after 2002 for small- and medium-sized transactions, while significantly increasing for large-sized transactions. These findings are consistent with the hypothesis that the costs of SOX have disproportionately burdened small firms. They also strongly suggest that non-SOX factors were the primary impetus for the “name brand” buyouts commonly evoked as evidence that SOX has harmed the competitiveness of U.S. capital markets.

“I’d say on Sarbanes[-Oxley]... it’s probably been the best thing that’s happened to our business [as a private equity firm] and one of the worst things that’s happened to America.... I find corporate managers more or less quite defeated by Sarbanes. I think it’s taken a lot of the entrepreneurial zeal out of a lot of corporate managers, and as a result of that, when we talk to them about going private, they’re really quite excited about it.”

- Stephen Schwarzman, Founder and Chairman of The Blackstone Group (Schwarzman 2007)

1. INTRODUCTION

Since its enactment, the Sarbanes-Oxley Act of 2002 (SOX) has engendered a vigorous debate concerning whether the post-SOX increase in the cost of being a public company has harmed the competitiveness of U.S. capital markets. Of particular importance in this debate has been the remarkable growth since 2002 in “going-private” transactions—in general terms, the acquisition of a publicly-traded firm by a privately-held firm. As documented by the non-partisan Committee on Capital Markets Regulation (2006), going-private transactions have grown steadily since the enactment of SOX, comprising 25% of all public takeovers in 2005, over twice the level of pre-SOX going-private transactions. Not surprisingly, for many commentators and policy analysts the conclusion that the costs of SOX have contributed to the surge in going-private activity has been difficult to resist (see, for example, U.S. Congress 2007; Engel, Hayes and Wang 2007; Carney 2005; Thain 2004).

Notwithstanding this conventional wisdom, academic studies of the relationship between SOX and the rise in going-private transactions have struggled with two significant problems. First, prior studies have had difficulty controlling for other factors that could have affected firms’ decision to go private following the enactment of SOX (Leuz 2007; Kamar, Karaca-Mandic, and Talley 2007a). In particular, the corporate scandals that ushered in SOX contributed to a variety of economic developments after

2002—such as a marked reduction in financial market liquidity and a prolonged period of depressed stock prices—that have traditionally been associated with firms’ decisions to delist their equity securities. Likewise, firms may also have been influenced by other non-SOX regulatory developments after 2002, such as heightened criminal prosecution against publicly-traded firms and their executives, together with a significant increase in the size of settlement payments related to class action shareholder lawsuits (Committee on Capital Markets Regulation 2006).

More significantly, prior studies have assumed that in choosing to go private, a publicly-traded firm necessarily becomes immune from the compliance burdens imposed by SOX. In actuality, firms going private frequently remain subject to SOX’s compliance costs owing to the fundamental need to finance a going-private transaction. Specifically, unless a firm can finance a transaction with cash on-hand or private bank debt, it will often have to turn to high-yield debt markets to fund a portion of the transaction costs. Indentures for high-yield notes, however, have long required issuers to file periodic reports with the SEC, which after 2002, effectively requires issuers to comply with SOX given that most of its provisions have been formally incorporated into the periodic reports themselves. As a result, many of the buyouts frequently cited to illustrate how SOX has driven companies to go private—such as Toys R’ Us, Neiman Marcus, and HCA, Inc.—resulted in private companies that continue to comply with SOX (including, most notably, Section 404’s internal controls requirement).

To avoid these problems, this paper turns to a previously unexamined natural experiment to test the hypothesis that the compliance costs of SOX have caused firms to go private. In particular, the fact that a high-yield debt-offering results in on-going SEC-

reporting obligations provides a unique opportunity to examine how firms that went private viewed SOX's additional compliance burdens in isolation from other factors that might have contributed to the decision to go-private in the first place. Regardless of why particular firms went private, if firms viewed the compliance costs of SOX as excessive, the enactment of SOX should have resulted in a decrease in the incidence of going-private transactions funded with high-yield debt in favor of other forms of "SOX-free" finance. The hypothesis is made all the more tenable given that at approximately the same time that SOX increased the cost of issuing high-yield debt, innovations in the market for private debt instruments resulted in an explosion in the availability second-lien loans and mezzanine debt which are not subject to SOX.

Using a unique dataset of going-private transactions, I provide the first systematic analysis of the extent to which going-private firms have remained SEC-reporting companies on account of high-yield debt financing surrounding the enactment of SOX. Consistent with prior analyses, I find a sharp increase in the rate at which publicly-traded companies have gone private since SOX was enacted. The data presented here also reveals, however, that the overall rate at which these companies have elected to remain SEC-reporting companies due to the use of high-yield debt-financing has remained largely unchanged from the period prior to SOX. Indeed, for large going-private transactions, the rate at which formerly publicly-traded companies have remained SEC-reporting companies after going-private has significantly *increased* since SOX's enactment. It is only when one controls for this phenomenon that it becomes possible to detect a marginal decrease after SOX in the likelihood that a publicly-traded company opting to go private will remain an SEC-reporting company following the transaction.

This Article makes two contributions to the growing literature on SOX and going-private transactions. First, to date this is the only Article on SOX that expressly grapples with the fact that in going-private, firms have a choice whether to remain subject to its provisions. In so doing, it corrects a significant bias in prior studies that equate going-private with exemption from SOX and provides considerable evidence that the wave of large-scale buyouts that swept the U.S. economy during 2003-2007 was not driven by the costs of SOX.

Second, this Article provides a unique insight into how participants in a sophisticated, largely unregulated capital market view the disclosure obligations of SOX. Although frequently criticized for mandating a rigid, one-size-fits-all approach to corporate fraud detection (see, for example, Ribstein 2003), SOX does not by its terms apply to the issuance and trading of high-yield debt. Rather, it is through indenture covenants—an instrument of private ordering—that high-yield investors and issuers have subjected themselves to its provisions. As such, this Article provides an important counter-point to those studies documenting the inefficiencies of SOX (see, for example, Litvak 2007); in some markets, SOX may actually represent an efficient disclosure regime.

The remainder of this Article proceeds as follows. Section 2 provides an overview of going-private financing structures, followed by an explanation of how SOX can apply to firms that go private when they finance a going-private transaction with high-yield debt. Section 3 develops the hypothesis that going-private transactions should migrate away from high-yield debt-financing after 2002 given the costs of SOX compliance and the abundance of other forms of “SOX-free” debt-financing. Section 4

tests this hypothesis by presenting evidence of the rate at which firms have gone private but have remained public reporting companies on account of the use high-yield debt-financing both before and after the enactment of SOX. Section 5 concludes.

2. BACKGROUND: GOING-PRIVATE FINANCING AND SOX

2.1 An Overview of Going-Private Financing.

Although going-private transactions can be structured in a variety of ways, they most commonly result when a private firm acquires the publicly-held stock of a publicly-traded company for cash consideration.¹ Often, the acquiring company is simply a pre-existing private company (generally referred to as a strategic buyer) that merges the

¹ Although going-private transactions have been the subject of countless studies, analyses differ on exactly what it means to “go private.” The conceptual confusion no doubt arises from the fact that what we conventionally call a “public” company has two public characteristics. First, its equity securities will be traded on either a national securities exchange or electronic trading platform, and second, the company will be subject to the periodic reporting requirements of the Securities and Exchange Act of 1934 (the “Exchange Act”). Studies of going-private transactions tend to be inconsistent with regard to which one of these characteristics matters for purposes of distinguishing a public company from a private company, and consequently, what it means to go from being “public” to “private.” For instance, most studies of going-private transactions have focused on whether the equity securities of a publicly-traded company are acquired by a private firm, generally ignoring whether the surviving company might still be subject to the Exchange Act periodic reporting requirements (see, for example, Lehn and Poulsen 1989; DeAngelo et al. 1984). Others, however, have focused on whether a publicly-traded company ceases to file reports with the SEC, even though the company’s stock might continue to trade publicly in the over-the-counter bulletin board or “pink sheets” (see, for example, Block 2004). In general, because a company’s obligation to file reports with the SEC will cease if each class of its securities is held by fewer than 300 record holders, this latter category of studies will include companies that are acquired by private companies as well as companies that otherwise reduce below 300 their number of record holders (e.g., through a reverse stock split or self-tender offer). Still others have defined a going-private transaction as any transaction subject to the SEC’s “going private” regulations set forth in Regulation 13e-3 (see, for example, Engel, Hayes and Wang 2007; Carney 2006). This last category of studies represents something of a middle-ground approach in that 13e-3 transactions include public companies acquired by private companies (but only so long as the acquiring company is affiliated with the public target pursuant to Rule 13e-3) as well as companies that reduce the number of record stockholders below 300 thereby terminating the companies’ SEC reporting obligations.

This paper adopts the traditional definition of a going-private transaction as an acquisition of a publicly-traded company by a private company given that most analyses of the relationship between SOX and going-private transactions either use this definition explicitly (Committee on Capital Markets Regulation 2006; Kamar, Karaca-Mandic, and Talley 2007), or implicitly by relying on Form 13e-3 filings (Engel, Hayes and Wang 2007; Carney 2006). In contrast to prior studies, however, this paper addresses directly the difficulties of using this definition to analyze the effects of SOX on going-private transactions—namely, that public targets may still be subject to the Exchange Act reporting obligations after an acquisition and, consequently, most of the provisions of SOX.

operations of the two firms. In other cases, the acquiring company is a newly-formed shell corporation created for the sole purpose of merging with a public company and buying out its public stockholders. In this latter situation, the actual buyer is typically one or more private equity firms or private investors (generally referred to as financial buyers) who form the acquisition corporation for the sole purpose of executing the transaction.

Whether initiated by a strategic or financial buyer, going-private transactions entail buying out a target company's public shareholders, thus making it imperative for a buyer to identify a source of acquisition financing. For financial buyers, the need for external financing is particularly acute given that the newly-formed acquisition company will ordinarily have no pre-existing business or assets on which to draw. For example, in a typical leveraged buyout (LBO) sponsored by a private equity firm, the private equity sponsor will generally secure financing from two main sources: (a) cash contributions from the private equity firm itself and the company's future managers as well as (b) the cash proceeds from one or more loans made to the acquisition company. These two sources of acquisition financing—equity contributions and loan proceeds—are then used to fund the purchase of the target's shares from its shareholders, often by means of a merger (Figure 1).²

² Within this general structure, the operation of the private equity industry creates a further incentive for private equity firms to minimize the amount of equity contributions made to finance an LBO and to maximize the amount of debt-financing. In particular, the success of a private equity firm in raising future investment funds from its outside investors will ordinarily turn on the firm's ability to realize significant returns on its equity investments (Bartlett 2006). Because financing an LBO with considerable amounts of debt-financing can greatly enhance a private equity firm's return on investment, most private equity firms will therefore seek to use the smallest equity contribution possible when arranging acquisition financing. The end result is that most LBOs are financed with considerable amounts of external debt-financing. During the 1980s buyout boom, for instance, LBOs used an average debt-to-firm value ratio of almost 90% for completed buyouts (Kaplan and Stein 1993). Today, LBOs continue to seek funding primarily from

[Insert Figure 1 about here]

At first blush, a strategic bidder might appear to have less of a need to turn to external financing sources when executing a take-private acquisition. Given that a strategic bidder operates a pre-existing business, it should presumably be able to use its retained earnings to finance all or part of the acquisition consideration. In many cases, however, a company's existing cash on-hand will simply be insufficient to fund an acquisition of a publicly-traded company. More importantly, even if a company's cash were sufficient, using it in this fashion will often constitute poor financial management. In particular, acquiring a company with a bidder's cash on-hand effectively capitalizes the target's business with the bidder's equity, which is unlikely to be an optimal form of capital structure for the target's business. As postulated by Modigliani and Miller (1963), a company that uses debt-financing to fund its operations can lower its overall cost of capital given that interest payments on debt are tax deductible. For similar reasons, a bidder that purchases a company with cash will needlessly increase the target's cost of capital where the target previously used some form of debt-financing.³

In light of the practical necessity of securing external financing (particularly debt-financing), any bidder considering a going-private transaction must therefore confront the question of where to find it. For many privately-held bidders seeking to take private a

debt-financing, with LBOs completed in 2006 averaging a debt-to-firm value ratio of approximately 60% (Standard & Poor's 2006).

³ In fact, as suggested by Lewellen (1971), where the cash flows of the acquiring and target firms are less than perfectly correlated, the merger may actually provide an opportunity to increase the total debt capacity of the combined firms, which should further encourage an acquiring firm to fund the acquisition with some portion of debt.

publicly-traded company, however, the most obvious source of debt-financing—traditional bank loans—was effectively closed until the early 1980s. Like a home mortgage, corporate bank loans were historically negotiated as bilateral, individual credit agreements between a bank and a borrower. Consequently, it was the rare bank that could afford to underwrite and carry a loan large enough to support a take-private acquisition given the tremendous amount of debt-financing ordinarily needed to effect the transaction (Taylor and Yang 2007).

Starting in the 1980s, however, commercial banks began to provide loans to finance going-private acquisitions by means of syndicating a loan's funding requirements among a large group of banks. Within the bank syndicate, a single bank would generally act as the primary arranger in negotiating, drafting and closing the loan transaction, with each syndicate member holding a proportionate interest in the total loan (generally an amortizing term loan or revolving credit facility) (Taylor and Yang 2007). Through syndicating loans in this fashion, banks could thus reduce some of the investment risk associated with making non-investment grade—or “leveraged”—loans to fund leveraged acquisitions, and at the same time, could charge higher interest rates for each loan given a borrower's overall credit risk.⁴ As a result, since the mid-1980s, syndicated, senior secured bank loans have been a core source of acquisition finance for going-private transactions, providing approximately 70% of the debt-financing needs for LBOs

⁴ In general, loans made by banks to corporate borrowers can be divided into two classes: investment grade and leveraged loans. Investment grade loans are loans considered to have a low rate of default risk as reflected in the ratings assigned to the loan by one of the recognized debt ratings agencies. Loans rated Baa3/BBB- or higher reflect a judgment by these agencies that the borrower has adequate payment capacity to honor the loans and are therefore considered “investment grade.” The lower default risk associated with investment grade loans makes them easier to obtain from lenders and at lower interest rates. For a discussion of the manner in which ratings agencies rate loans and bonds and the resulting interest-rate differentials between those rated investment-grade and non-investment grade, see Damodaran 2001, pp. 177-79.

occurring between 1985 and 1990 (Kaplan and Stein 1993). Today, as in the 1980s, syndicated bank loans continue to dominate the financing structures of LBOs, with bank debt representing over 77% of all debt-financing used to fund LBOs during 2006 (Standard & Poor's 2006).

Notwithstanding the availability of bank loans to fund LBOs, however, bank debt will often be insufficient to cover all of the debt-financing needs of a going-private transaction, creating the need for an additional source of financing. It is the existence of this financing gap that encourages bidders to consider issuing high-yield notes (Levin 2006).

2.2 High-Yield Notes and SOX.

Like traditional bank loans, high-yield notes represent debt obligations of a bidder, but unlike loans, they are structured as fixed- or variable-rate promissory notes that are sold directly to institutional investors. Moreover, to ensure that the issuance of high-yield notes does not interfere with a bidder's ability to secure bank debt, the notes must be subordinated in right of payment and security to the primary syndicated loans. For this reason, successful marketing of high-yield notes requires a number of economic incentives, most notably a higher interest rate and the ability to resell the notes in the secondary trading market.⁵ To ensure the notes are freely-tradable, however, a private

⁵ High-yield notes are traded through a variety of means. The vast majority of bond-trading occurs in over-the-counter (OTC) markets whereby sales transactions are privately negotiated among investors based on initial bid and asked quotations carried on the relevant trading system. The two most prominent systems are the Private Offers, Resales and Trading Through Automated Linkages (PORTAL) system maintained by the National Association of Securities Dealers and the privately published National Daily Quotation Service (NDQS) "yellow sheets." PORTAL lists price quotations for notes that were issued pursuant to Rule 144A of the Securities Act of 1933 (the "Securities Act"), and is therefore limited to investors eligible under SEC Rule 144A. The yellow sheets cover a broad array of corporate bonds and are distributed to subscribing broker-dealers with information regarding the names and telephone numbers of persons

bidder issuing high-yield notes will generally take two steps that have important consequences under SOX.

First, in connection with issuing the notes, the underwriter of a high-yield debt-offering will ordinarily require the bidder to enter into a registration rights agreement committing the bidder to undertake what is commonly called an “A/B Exchange Offer” (Whelan 2007).⁶ Because the issuance of notes constitutes the sale of securities, the issuance will be subject to Section 5 of the Securities Act of 1933 (the “Securities Act”), thereby requiring the bidder to file a formal registration statement with the SEC or to rely on an appropriate exemption. To avoid the delay associated with filing a registration statement, most bidders choose to rely on an exemption such as those provided by Rule 144A (which exempts sales made to qualified institutional buyers) and Regulation S (which exempts sales made to non-U.S. investors). In so doing, however, a bidder significantly limits the marketability of the notes given that the notes will thereafter be deemed “restricted securities” under the Securities Act and subject to a number of resale limitations.⁷

expressing an interest in making a market in particular bonds and often the bid or asked price at which the market maker is willing to buy or sell the security. In addition to these OTC markets, corporate bonds are sometimes listed and traded on national securities exchanges such as the New York Stock Exchange. For an overview of bond trading markets, see Wilcox and Rievmann 1991.

⁶ These exchange offers are also referred to as “Exxon Capital” exchange offers after the seminal SEC interpretive letter that authorized this practice. A/B Exchange Offers are available only for non-convertible debt securities, certain non-convertible preferred stock, and initial public offerings of common stock by non-US issuers (Whelan 2007).

⁷ In general, the resale restrictions that attach to “restricted securities” are designed to ensure that a purchaser of unregistered notes is not herself required to register the notes under Section 5 of the Securities Act (which prohibits *any* sale of unregistered securities) upon reselling them. Notwithstanding the broad scope of Section 5, Section 4(1) of the Securities Act provides an exemption from registration for “transactions by a person other than an issuer, underwriter, or dealer.” Section Act §4(1), 15 USC §77(d)(1)(2008). While a seller of restricted securities could seek to rely on this language by itself as a basis for an exemption from registration (often referred to as a “4 ½ transaction”), most holders of restricted securities seek to resell restricted securities in compliance with either Rule 144 or Rule 144A, which provide two safe-harbors by which holders can resell restricted securities without the need for registering the securities with the SEC. Each rule, however, imposes various resale restrictions that effectively limit the marketability of restricted securities. For instance, Rule 144 imposes (among other

An A/B Exchange Offer permits holders of high-yield notes to avoid these resale limitations. In the offer—which a bidder usually agrees to complete within 180 days of the initial sale of unregistered notes—investors exchange their unregistered high-yield notes for substantially identical notes that are registered with the SEC.⁸ By exchanging their unregistered notes for registered notes, investors thus cleanse the high-yield notes of their restricted status, thereby significantly enhancing their marketability in the secondary trading market.⁹

By filing a registration statement covering the replacement notes in the A/B Exchange Offer, however, a bidder becomes an “issuer” under SOX. Specifically, Section 7 of SOX defines “issuer” broadly to include any company “the securities of which are registered under section 12 of [the Securities Exchange Act of 1934 (the “Exchange Act”)] or that is required to file reports under section 15(d) [of the Exchange Act], or that files or has filed a registration statement that has not yet become effective

things) a minimum holding period before restricted securities can be sold, along with limitations on the volume of securities that can be sold at any one time. See generally 17 C.F.R. § 230.144 (2008). Rule 144A provides fewer resale limitations but requires that any sale of restricted securities be made to a qualified institutional buyer (in general, institutional investors that own and invest on a discretionary basis at least \$100 million in securities of non-affiliates). See generally 17 C.F.R. § 230.144A (2008).

⁸ A company’s failure to complete the A/B Exchange Offer within this time period will generally result in periodic increases of the interest rate payable on the notes until the exchange offer is completed (Ruegger 2005).

⁹ It should be emphasized that the issuance of “restricted” securities need not impair the functioning of an active secondary trading market. As discussed in note 5, high-yield notes are generally traded in markets limited to institutional investors, more specifically, to those meeting the definition of a “qualified institutional buyer” under Rule 144A. Accordingly, Rule 144A would permit active secondary trading of high-yield notes in these markets without the need for registration so long as issuers provided note holders with the financial information set forth in Rule 144A(7)(d)(4). The need for registration is entirely a product of investor demand. (Greenberg 2007). In addition to an A/B Exchange Offer, registration of notes is also possible by committing the issuer to file a resale registration statement covering the investors’ initial resale of the notes. Using a resale registration, however, will obligate the investors to comply with the prospectus delivery requirements under the Securities Act and will also require the issuer to identify the investors in the registration statement as selling noteholders, which potentially exposes investors to liability under the Securities Act. Under the SEC’s Exxon-Capital No Action Letter, investors in an A/B Exchange Offer need not comply with the prospectus delivery requirement nor be identified in the registration statement (Cocchiarella 2007). As such, a resale registration statement is usually limited to instances where an A/B Exchange Offer is not permitted (e.g., the issuance of convertible notes).

under the Securities Act of 1933” Under Section 15(d) of the Exchange Act, a company is required to file reports with the SEC commencing on the date that the SEC declares effective a registration statement under the Securities Act covering any type of security, including high-yield notes. Moreover, under the last clause of the definition of “issuer” in Section 7 of SOX, a company that merely files a registration statement with the SEC becomes a SOX “issuer” regardless of whether the SEC declares effective the registration statement. As a result, once a private bidder files a registration statement covering the A/B Exchange Offer, it becomes subject to most of the substantive provisions of SOX for however long it is required to file Exchange Act reports.

To be sure, the obligation to file Exchange Act reports will often be short-lived. Under Section 15(d), a bidder’s duty to file reports following an A/B Exchange Offer will be automatically suspended for any fiscal year (other than the fiscal year during which the bidder’s registration statement became effective) if the securities covered by the registration statement are held of record by fewer than 300 persons and the bidder is not otherwise required to file reports under the Exchange Act. And because high-yield notes—like most publicly-traded securities—are held indirectly through securities intermediaries, it is the rare high-yield issuer that has more than 300 record holders of its notes (Tresnowski and Nowak 2004, p. 53).¹⁰ Under Section 15(d), most privately-

¹⁰ As described more fully by Rogers 1996, holding securities in indirect form is the predominant means by which investors settle and clear securities transactions in liquid secondary securities markets. In an indirect system, the beneficial owners are not recorded on the books of the issuer as holders of the securities. Rather, the direct holder is a clearing corporation or other intermediary, such as the Depository Trust Company (DTC) in the United States or Euroclear in Belgium. These intermediaries hold the securities for the benefit of their participants, which are the hundreds (sometimes thousands) of broker-dealers and banks who are themselves interested in trading securities on the secondary market or who have customers who are interested in such trading. Trades by investors in securities are then consummated by entries on the books of these intermediaries without any need for any entry on the records maintained by the issuer. The fact that the issuer’s books will show only the clearing corporation as the record holder has permitted countless publicly-traded companies to cease making Exchange Act filings and thereby “go dark” because an issuer’s

owned bidders will therefore be entitled to cease filing periodic reports with the SEC at the end of the fiscal year in which they complete an A/B Exchange Offer.

It is at this point, however, that private bidders will have to take the second action that has important SOX consequences: Issuers of high-yield notes must generally agree to issue the notes pursuant to an indenture containing an express obligation to file periodic reports with the SEC even after the issuer is required to do so under Section 15(d) of the Exchange Act (Tresnowksi and Nowak 2004; Committee on Trust Indentures 2006). Indeed, this contractual provision commonly requires a private bidder to commence filing periodic reports with the SEC even before the A/B Exchange Offer is completed. Although a company in this situation will be only a “voluntary filer” for purposes of the Exchange Act, the bidder will remain subject to most (although not all) of the requirements of SOX. The reason stems from the fact that most of SOX’s requirements (such as the internal controls provision of Section 404) have been formally incorporated into the Exchange Act’s periodic reporting requirements.

Figure 2 provides a summary of the key provisions of SOX that apply to private bidders issuing high-yield notes, whether by virtue of being an “issuer” under SOX or a “voluntary filer” under the Exchange Act. Not surprisingly, the messy patchwork of regulations that applies to high-yield issuers has been a constant source of consternation for companies and their attorneys since SOX first took effect (see, for example, Campbell and Bird 2003, pp. 85-86).

[Insert Figure 2 about here]

securities are held by fewer than 300 holders of record. Such going-dark transactions are studied in Leuz, Triantis and Wang 2008 and Marosi and Massoud 2007.

3. The Availability of SOX-Free Debt-Financing.

Given that a high-yield issuance will ordinarily be the sole reason a private bidder will be subject to SOX, one might reasonably wonder whether privately-held bidders might actively seek to avoid high-yield debt just to avoid the costs involved in complying with the legislation. This hypothesis would seem especially appropriate in the post-SOX credit environment where a quiet revolution in syndicated bank lending has dramatically increased the availability of “SOX-free” debt-financing.

As noted above, a core source of acquisition financing for going-private transactions has long been the syndicated loans traditionally funded by a syndicate of commercial banks. Beginning in the 1990s, however, a variety of factors resulted in a significant drop-off in the willingness of commercial banks to fund private, leveraged loans at the same time that a new group of institutional investors emerged as major purchasers of syndicated loan interests (Taylor and Yang 2007).¹¹ As Figure 3 illustrates, the abrupt transformation of the leveraged lending market from one in which traditional, commercial banks were the primary lenders to one in which these non-bank, institutional investors have become the primary source of lending capital has been nothing short of extraordinary.

[Insert Figure 3 about here]

¹¹ In 1989, the Office of the Comptroller of the Currency, the Federal Reserve and the Federal Deposit Insurance Corporation provided guidelines regarding highly leveraged transactions that resulted in banks limiting their holdings of leveraged loans. At the same time, banks also began utilizing portfolio management techniques and profitability models that biased banks against holding leveraged loans (Miller 2002).

Comprised of high-yield mutual funds, insurance companies, hedge funds, and collateralized loan obligations (CLOs), institutional investors radically redefined the leveraged-loan market during the late 1990s. As documented by Taylor and Yang (2007), the emergence of these investors facilitated the development of the syndicated loan market into a mature asset class which only enhanced the attractiveness of syndicated loans as an investment option. A clear indicator of the rapid maturation of the market was the exponential growth of the secondary trading market in loan interests. Whereas a total of \$8 billion of syndicated loans traded in the secondary market during 1991, the annual trading volume of these loans increased to \$238 billion by 2006 (Taylor and Yang 2007). Significantly, the vast majority of these trades—over 80% by value—involved leveraged loans. As a consequence, during the 1990s the leveraged loan market began to attract investors not only because of the yields on the underlying loans, but also because of the opportunity to capitalize on price movements and temporary market inefficiencies (Taylor and Yang 2007).

The ultimate result of this transformation was a meteoric rise in the demand for leveraged loans. In each of 2004, 2005, and 2006, U.S. leverage loan issuances set new records at \$265 billion, \$295 billion, and \$466 billion, respectively (Standard & Poor's 2007).¹² For both private and publicly-held companies, the widespread availability of leveraged loans encouraged borrowers that had traditionally used high-yield debt to look increasingly to leveraged loans. As Figure 4 illustrates, by the end of 2006 overall

¹² Much of this growth stemmed from the rapid emergence of CLOs as the dominant institutional investor in market (Fitch Ratings 2006). A relatively recent financial innovation, CLOs are special-purpose investment funds structured to invest in a portfolio of syndicated loans. Since their debut in the early 1990s, their growth has been remarkable. The amount of outstanding CLOs grew from less than \$1 billion in 1994 to nearly \$260 billion in 2004, while their share of the leveraged loan market increased from less than 5% to over 60% during the same time period. Between 2003 and 2006, more than \$200 billion of CLOs were issued, with \$105 billion being issued in 2006 alone (Bobrow 2007).

leveraged loan issuances were four times as large as high-yield bond issuances. Within individual firms, a 2007 study by Fitch Ratings found that the annual growth rate of leveraged loans in borrowers' capital structures was 28%—more than three times the 9% growth rate of high-yield notes (Fitch Ratings 2007a).

In many cases, the role of high-yield notes was taken by a particular type of subordinated leveraged loan, the “second-lien” loan (O’Leary 2006; Fitch Ratings 2007b). Also known as junior secured or Tranche B loans, second-lien loans resemble ordinary, syndicated bank loans, but they are subordinated in right of payment and security to the primary “first-lien” bank loans. Although rarely used during the 1990s, second-lien loans became an increasingly important source of subordinated debt after 2003. By 2006, second-lien issues represented 9% of total institutional loan volume, commonly crowding-out the need for high-yield debt (Fitch Ratings 2007c). Figure 5, for instance, summarizes the final financing structure for the \$18 billion LBO of Georgia-Pacific by privately-owned Koch Industries. Notwithstanding the considerable size of the transaction, Koch Industries was able to finance its bid entirely with an equity contribution combined with several leveraged loans.

[Insert Figure 5 about here]

Significantly, by turning to leveraged loans in lieu of high-yield debt, a privately-held issuer could also avoid subjecting itself to SOX. Participants in the leveraged loan industry have long maintained that an issuer of loans has no need to conduct a registered offering of loan obligations given that by issuing “loans” rather than “notes” an issuer has

not issued any securities within the meaning of federal or state securities laws (Bason 2007, p. 87). As a result, an issuer of loans has no need to file a registration statement covering the loan interests, thereby allowing the issuer to avoid becoming an “issuer” under Section 7 of SOX. For similar reasons, by concluding that loan interests are not securities, participants in the loan industry have likewise maintained that federal and state securities laws do not apply to the subsequent trading of leveraged loans, thus making it unnecessary for a borrower to file periodic reports with the SEC in order to ensure loan interests are freely tradable (Bason 2007, p. 87). In short, by maintaining that loan interests are not securities, the leveraged loan industry has developed a well-established history of issuing and trading leveraged loans without any attempt to subject borrowers to the regulatory burdens associated with the issuance and trading of high-yield notes.

For privately-held bidders, then, the notion that after 2002 a going-private transaction might be financed using entirely private, SOX-free debt was hardly idle speculation. If privately-held bidders really wanted to avoid the hassle of complying with SOX after a high-yield issuance, the buyout of Georgia-Pacific illustrated that SOX-free financing alternatives were available. As summarized by the head of corporate finance at Lathams & Watkins (Sargent 2005),

People are annoyed, to say the least, by SOX. And so the alternatives—to do a mezzanine financing or a second-lien deal—are more attractive than they used to be. That’s because these alternative forms of junior capital don’t drag the whole Sarbanes-Oxley program with them.

4. Empirical Findings

4.1 Methodology and Data Description

To better understand whether the regulatory costs of SOX might be driving the rise in going-private transactions, I analyzed the financing decisions for all going-private transactions that occurred during the four years prior to the year of SOX's enactment (1998-2001) and the four years after it (2003-2006) and that involved non-financial U.S. target firms that had publicly-traded equity securities on either the New York Stock Exchange (NYSE), the American Stock Exchange (ASE) or the Nasdaq Market. The year 2002 was excluded given the difficulty of discerning whether transactions that closed in the first half of that year might have been influenced by the anticipation of the new statute which was formally enacted in July 2002. By excluding 2002, the sample thus permits a clean comparison of those transactions that were structured before the market was aware of the costs of SOX and those transactions that were structured after such awareness was widespread.

To assemble the sample, I first compiled a listing of all firms that had any equity securities delisted from the three exchanges as recorded in the historical delisting data maintained by the Center for Research in Securities Prices (CRSP). Because CRSP maintains comprehensive price and trading information for all securities listed on these three exchanges, this approach had the benefit of providing a comprehensive list of all firms trading on the three major U.S. stock exchanges that might have gone private. This methodology also avoided the pitfalls of other studies of going-private transactions which have tended to rely on Schedule 13e-3 filings, Form 15s or the database of acquisitions maintained by Thomson Financial's Securities Data Corporation. For a variety of

reasons, these methods tend to either over-state or under-state the number of going-private transactions.¹³

For each security that was recorded in CRSP as having been delisted, data was then hand-collected from the issuer's Exchange Act filings on the SEC's Edgar retrieval system to confirm whether the delisting represented an acquisition of the issuer's publicly-traded stock by another firm. After excluding equity recapitalizations not involving a change-in-control and acquisitions by foreign companies, this process yielded a total of 2,269 acquisitions. The SEC filings for each target corporation were then further examined to determine whether the stock of the acquiring firm was publicly-traded or privately-held. Overall, 468 of the 2,269 acquisitions were initiated by privately-held bidders.

4.2 Descriptive Statistics

Table 1 provides summary statistics for the full sample of acquisitions.

[Insert Table 1 about here]

¹³ In particular, studies relying entirely on Schedule 13e-3 filings (see, for example, Carney 2005; Engel, Hayes and Wang 2007) will understate the number of going-private transactions given that a Schedule 13e-3 need not be filed for a take-private transaction initiated by a bidder that is not affiliated with a target or target's management (17 CFR §240.13e-3(a), defining a "Rule 13e-3 Transaction" as a take-private transaction initiated by the issuer or an affiliate of the issuer). As such, these studies omit take-private acquisitions by an unrelated private company as well as many conventional LBOs sponsored by private equity firms. On the other hand, studies (see, for example, Block 2004) that focus on those firms that filed a Form 15 covering their equity securities—that is, the primary form notifying the SEC that a class of security is held by fewer than 300 persons—will often be over-inclusive. In this case, the sample will include many firms that continue to have their equity publicly traded on the over-the-counter market and may still have other securities (in particular, debt securities) that require the company to file periodic reports with the SEC. Likewise, studies that have used the SDC's database of acquisitions to identify going-private transactions (see, for example, Kamar, Karaca-Mandic and Talley 2007) will also be over-inclusive. By relying on SDC's coding scheme in which bidders are classified as "public" or "private", these studies assume that all "private" bidders—as well as the surviving firm—are immune to the SEC periodic reporting requirements. For the reasons discussed in Section 2, private bidders often remain subject to the Exchange Act by virtue of having issued high-yield debt either prior to the acquisition or in connection with the acquisition.

In general, the figures in Table 1 differ only modestly from other studies of going-private transactions. Figure 6, for instance, compares the annual rates of going-private transactions in Table 1 with the rates reported by the Committee on Capital Markets Regulation (2006, pp. 34-35). As Figure 6 illustrates, acquisitions of NYSE-, Nasdaq-, and ASE-traded companies clearly conformed to the general rise in going-private transactions after the enactment of SOX in 2002. In fact, the data for the NYSE, Nasdaq and ASE firms suggest even a greater rise in going-private transactions after SOX with private bidders accounting for an average of 31% of all acquisitions between 2003 and 2006. Figure 7 shows that when the data are analyzed in terms of the market value of equity that was delisted in connection with each acquisition, the trend is equally striking. Clearly, privately-held bidders have had a greater relative presence in the public takeover market since the enactment of SOX in terms of both transaction volume and the market value of equity acquired.

[Insert Figures 6 & 7 about here]

These aggregate figures ignore, however, the extent to which target firms acquired by private bidders might still be subject to SOX. As shown in Table 2, approximately 28% (n=130) of the listed companies that went private in the sample remained Exchange Act reporting companies or became Exchange Act reporting companies within twelve months of the transaction. Table 2 provides a breakdown for the primary reasons why these “private firms” remained public reporting companies. As the table reveals, the vast majority of these companies (75%) remained Exchange Act

filers due to either the bidder's use of high-yield acquisition financing followed by an A/B Exchange Offer (an "A/B Exchange Transaction") or the assumption of a target's pre-existing high-yield debt. An additional 12% remained reporting companies because the private bidder had its own pre-existing high-yield debt or because the surviving firm would complete a high-yield debt offering within twelve months of the transaction. Thirteen percent of the companies remained reporting companies due to the listing of the bidder's equity securities in connection with the acquisition or because the surviving firm conducted an offering of equity securities to the public within twelve months of the acquisition.

[Insert Table 2 about here]

Overall, these data suggest that prior studies and reports regarding the rise in going-private transactions after SOX may have dramatically overstated the extent to which SOX is driving firms to go private. Certainly, the data confirm that going-private transactions have accounted for a greater proportion of all public company acquisitions since SOX, but the data also make clear that a large proportion of these going-private transactions resulted in firms that remained Exchange Act reporting companies and, consequently, subject to SOX after 2002. The significance of this point is underscored by the significant proportion of firms that went-private-but-stayed-public: in each year of the study, anywhere from 18% to 47% of going-private transactions represented transactions in which the surviving firms remained Exchange Act reporting companies. Based on this fact alone, one might reasonably question the reliability of studies that

purport to draw conclusions about the effect of SOX by looking simply at the relative number of going-private transactions since its enactment.

Moreover, using the proportion of going-private transactions to analyze the effect of SOX is further complicated by the considerable fall-off after 2002 in public bidder activity in general. Whereas an average of 337 public bidders completed acquisitions each year during the period 1998-2001, the annual average fell to only 113 during the period 2003-2006. A *t*-test indicates that this difference in averages is statistically significant at the 1 percent confidence level ($p=0.000$, two-tailed). In contrast, the average number of annual going-private transactions fell modestly and insignificantly between the periods 1998-2001 and 2003-2006, from 65 to 52 ($p=0.156$, two-tailed). Consequently, the increased proportion of going-private transactions after 2002 was driven not by any absolute increase in private bidder activity but by a dramatic fall-off in *public bidder* activity. To be sure, this finding is consistent with the hypothesis that SOX created a competitive disadvantage for public bidders, but it is also consistent with explanations having little to do with SOX. For instance, to the extent the bull stock market of the late 1990s might have encouraged public bidders to pursue stock-for-stock transactions, the collapse of the stock market after 2001 might have simply restored the normal equilibrium between public bidders and private bidders.

4.3 SOX and the Use of High-Yield Debt-Financing.

To avoid these analytical difficulties a more manageable examination of the hypothesis that SOX has encouraged companies to go private is to focus on the rate at which public targets remained Exchange Act reporting companies after an acquisition by

a private bidder. If the costs of SOX are truly encouraging companies to go private, then one should observe after 2002 a general decline in the rate at which publicly-traded targets have elected to remain Exchange Act reporting companies after their acquisition. As noted previously, this would seem especially true given the ready availability of SOX-free forms of acquisition finance during the period 2003-2006.

As shown in Figure 8, however, the overall data do not support this hypothesis. On the contrary, the rate at which public targets remained Exchange Act reporting companies following a going-private transaction consistently *increased* between 2003 and 2006. Isolating those transactions that were financed through an A/B Exchange Transaction indicates a similar trend. As Figure 8 reveals, in contrast to the Georgia-Pacific buyout discussed previously, the buyout wave that occurred during 2003-2006 continued to use high-yield debt as a principal component of acquisition financing.

[Insert Figure 8 about here]

Moreover, comparing the period 1998-2001 against the period 2003-2006 reveals no significant difference in the proportion of public targets that remained Exchange Act reporting companies following a going-private transaction. Overall, approximately 30% of the going-private transactions that occurred from 1998-2001 resulted in surviving firms that remained subject to the Exchange Act reporting requirements, compared to 25% during the 2003-2006 period. Figure 8 reveals that the only major drop in the proportion of public targets that remained Exchange Act reporting companies following a going-private transaction occurred several years prior to SOX in 1998-1999. This

considerable fall-off is worth noting, as it stemmed from the fact that the late 1990s witnessed a booming high-yield debt market (Wilmarth 2002). In each of 1997 and 1998, for instance, high-yield debt issuances set record highs on account of extremely favorable credit conditions. The market came to an abrupt halt in the autumn of 1998, however, following Russia's debt default and the collapse of the highly-leveraged hedge fund Long-Term Capital Management.¹⁴ Our sample of pre-SOX transactions therefore reflects the tail end of the 1990s boom in high-yield debt issuances.

Yet even including 1998 data, a Pearson's chi-square test of the proportion of public targets in going-private transactions that remained Exchange Act reporting companies during 1998-2001 compared to 2003-2006 reveals little evidence of a statistically significant difference (chi-square=1.82, d.f.= 1, $p=0.177$). There is even less evidence of a significant difference between the two periods when comparing the proportion of going-private transactions that utilized an A/B Exchange Transaction (chi-square=1.05, d.f.= 1, $p=0.305$). In aggregate, these figures suggest SOX may have had very little effect on the general rate at which public targets chose to remain Exchange Act reporting companies following a going-private transaction.

4.4 Multivariate Analysis of the Use of High-Yield Debt-Financing

Notwithstanding these overall findings, it is important not to place too great a weight on these aggregate figures, as they raise a number of potential problems in testing the hypothesis that SOX has encouraged companies to go private. In particular, the

¹⁴ As documented in Wilmarth (2002), these two events triggered a global "flight to quality" as investors reallocated investment portfolios away from illiquid, high-risk debt securities towards "safer," highly-liquid securities such as U.S. Treasuries. As a result, yield spreads between investment and non-investment grade corporate bonds widened dramatically, bringing an abrupt halt to the booming corporate bond market.

absence of any significant difference in the rate at which public targets remained Exchange Act reporting companies before and after SOX may be the result of other differences between the two periods in question. But for these differences, post-SOX going-private transactions might reveal a larger proportion of private bidders opting to avoid the burdens of the Exchange Act reporting requirements and, therefore, the costs of SOX.

Predicting exactly which variables influence private bidders to become Exchange Act reporting companies (and relatedly, how these variables change over time) is beyond the scope of this Article, but there are at least two variables of particular interest for purposes of this study. First, as noted above, several of the acquisitions in the pre-SOX sample occurred during a period of remarkably high demand for high-yield debt until Russia's debt default and the collapse of LTCM in 1998. Data on high-yield issues after 2002 likewise suggests that many of the going-private transactions after 2004 occurred during a period of buoyant demand for high-yield debt among institutional investors.¹⁵ To the extent robust credit markets encourage the use of high-yield debt to finance a going-private transaction, the increased rate at which companies went private but stayed public after 2002 might simply reflect the strength of the post-SOX credit markets. In other words, but for SOX, we might see *considerably more* going-private transactions that were funded through an A/B Exchange Transaction after 2002 than actually occurred.

Second, the debate about the costs of SOX requires an examination of one additional variable. Namely, the significant rate at which private bidders opted to

¹⁵ For instance, evidence of the extraordinary demand for high-yield bonds appeared in the price trends for bonds rated CCC through C in 2006. During 2006, Merrill Lynch reported that these low-rated issues had produced an overall return of 18.6% (Fitch Ratings 2007d).

become Exchange Act reporting companies after 2002 may stem from the well-documented trend of private equity firms to acquire ever larger public targets between 2004 and 2006.¹⁶ If high-yield debt-financing is a practical necessity to fund large acquisitions, the presence of these larger transactions after 2003 might require private equity bidders to turn increasingly to high-yield debt markets and, consequently to A/B Exchange Transactions notwithstanding their SOX implications. If true, the continued use of A/B Exchange Transactions after 2002 would, in turn, mask the extent to which bidders in smaller acquisitions have opted to use SOX-free forms of debt-financing in lieu of high-yield debt-financing. Stated differently, our examination so far has ignored an important criticism often leveled at SOX: that the cost of compliance is disproportionately higher for smaller public companies (Kamar, Karaca-Mandic, and Talley 2007b). Might these disproportionate costs be encouraging *smaller* public companies to avoid going-private structures after 2002 that would subject them to SOX?

To understand these two considerations, it is important to establish as a threshold matter whether there exists in fact a relationship between the use of an A/B Exchange Transaction and either of these two variables—that is, the demand for high-yield debt or the size of a particular going-private transaction. Table 3 presents a correlation matrix that confirms a strong relationship in both cases for all going-private transactions in the main sample (n=468). Specifically, the second row of Table 3 reveals a significant, negative correlation between whether a going-private transaction used an A/B Exchange Transaction and the credit spread for high-yield bonds as of the closing date of each

¹⁶ From 2004 to 2006, the average size of LBOs increased approximately 40% per year from an average of \$706 million in 2004 to \$1,308 million in 2006 (Standard & Poor's 2006).

transaction.¹⁷ Because credit spreads for high-yield bonds narrow with greater demand for high-yield debt securities, this relationship confirms a significant, *positive* correlation between whether a going-private transaction used an A/B Exchange Transaction and the demand for high-yield bonds at the time of the transaction. Likewise, using a target's book value of assets as a proxy for transaction size,¹⁸ the third row of Table 3 reveals a strong, positive correlation between the size of a target and whether the target was acquired using an A/B Exchange Transaction.

[Insert Table 3 about here]

In addition to confirming each of these two relationships, Table 3 also reveals how each of these variables changed before and after the enactment of SOX. In particular, the fourth row in Table 3 indicates a significant, positive correlation exists between the demand for high-yield debt after 2002 as well as a significant, positive correlation between the size of a target and whether a going-private transaction occurred after 2002. These latter results thus confirm the conventional wisdom that the period 2003-2006 was characterized by both larger going-private transactions as well as strong demand for high-yield debt. Consistent with the finding reported above, however, Table 3 also shows no significant difference between the periods 1998-2001 and 2003-2006 in

¹⁷ The credit spread was measured as of the closing date for each going private transaction by taking the difference between Moody's Seasoned Baa Corporate Bond Yield and the 10-Year Treasury Constant Rate as reported by the Federal Reserve Bank of St. Louis (<http://research.stlouisfed.org/fred2/categories/22>).

¹⁸ Data for each firm's book value of assets was collected from Compustat, in each case as measured for the financial quarter immediately preceding the date of the going-private transaction. Data for firms not included in Compustat was hand-collected from Edgar. As discussed below, the majority of going-private transactions involved companies having less than \$300 million in total assets, which results in a positively skewed distribution of data. All analyses involving target assets were therefore done after a logarithmic transformation. The results in Table 3 are unchanged if the market value of target's delisted equity is used in lieu of target's total assets.

the rate at which going-private transaction used an A/B Exchange Transaction. Overall, Table 3 is therefore highly suggestive that after 2002, the continued use of A/B Exchange Transactions in the face of SOX resulted from the fact that private bidders increasingly turned to favorable high-yield markets to fund ever-larger going private transactions.

This conclusion is further supported by the dearth of small public targets among those transactions that were financed with high-yield debt. Table 4 breaks down the incidence of A/B Exchange Transactions by target size within the sample of going-private transactions. Following Linck, Netter, and Yang (Forthcoming), size categories were formed by ranking the sample of target firms into quintiles based on their book value of assets. Firms were labeled “small” if they fell within the first two quintiles and “medium” if they fell within quintiles three and four. To isolate the effect that very large transactions might have on the overall rate at which firms remained Exchange Act reporting companies, the fifth quintile was divided into “large” and “very large” firms. Specifically, a firm was labeled “large” if it fell within the 80th-90th percentile and “very large” if it fell above the 90th percentile. The mean (median) book values of assets for small, medium, large, and very large targets were \$45.6 (\$41.7) million, \$221.27 (\$193.0) million, \$668.84(\$664.33) million, and \$4,027.8 (\$1,970.8) million, respectively.

[Insert Table 4 about here]

Table 4 shows that while small firms comprise nearly 40% of the sample of going-private transactions (n=188), they accounted for only three of the eighty-one transactions that used A/B Exchange Transactions. A likely explanation for this finding

is that high-yield offerings have traditionally entailed higher fixed costs than other forms of debt-financing such as bank loans.¹⁹ Consequently, bidders should be expected to avoid high-yield acquisition financing unless a transaction is sufficiently large that these fixed costs can be amortized over a larger deal value. Visual inspection of the entire sample suggests that this inflection point prior to SOX probably occurred where a target had a book value of assets greater than \$75,000,000. If correct, Table 4 indicates that the enactment of SOX may very well have pushed higher the inflection point whereby bidders begin considering the use of high-yield financing. Whereas three acquisitions of small targets used high-yield financing during 1998-2001, no acquisitions in this size category used this form of financing during the period 2003-2006. Care must be used in interpreting this result, however, as the difference is not statistically significant under conventional standards ($p=0.277$, Fisher's exact; $p=0.215$, one-sided Fisher's exact). The finding is further hampered by the low number of total observations of A/B Exchange Transactions involving small targets.

Nonetheless, Table 4 clearly illustrates that the persistence in the use of A/B Exchange Transactions before and after SOX was driven primarily by the acquisitions of targets classified as medium, large, and very large. The incidence of A/B Exchange Transactions among very large targets is especially noteworthy. Whereas the rate of A/B Exchange Transactions fell slightly after SOX among small, medium and large targets, the rate significantly *increased* for acquisitions of very large targets. For going-private

¹⁹ In addition to underwriting fees, issuers of high-yield debt must prepare offering documents and meet with prospective investors. In the case of an A/B Exchange Offer, there is also the considerable expense of preparing a registration statement to be filed with the SEC and the subsequent cost of making periodic Exchange Act filings. Because the direct costs of issuing bonds tend to be fixed, they will consume a greater proportion of the total gross proceeds of a small offering than a large offering. For instance, Lee et al. (1996) found that while the direct costs of an underwritten non-investment grade bond offering consumed 2.90% of the proceeds where an issuer raised more than \$500 million, these direct costs consumed more than 4% of the proceeds where an issuer raised less than \$40 million in the offering.

transactions involving targets classified as very large (i.e., targets having assets greater than \$985 million), approximately 56% utilized an A/B Exchange Transaction after 2002. This difference in the incidence of A/B Exchange Transactions after the enactment of SOX within each size category confirms a possible interaction between the effect of transaction size and the marginal costs of SOX. That is, the incremental costs of SOX might affect differently the likelihood of using an A/B Exchange Transaction for targets of varying sizes.

To better untangle the relationship between transaction size and the effect of SOX on the incidence of A/B Exchange Transactions, I ran a logistic regression using the full sample of going-private transactions (n=468). The dependent variable in the model was `AB_Exchange`, which was set to 1 if the bidder executed the acquisition using an A/B Exchange Transaction; otherwise, it was set to 0. To measure the effect of SOX on the use of A/B Exchange Transactions, I included in the model an independent dummy variable called `POSTSOX`, which was coded as 1 if the transaction occurred during 2003-2006 and 0 if it occurred during 1998-2001. To control for the influence of transaction size on the decision of whether to use an A/B Exchange Transaction, I also included an independent variable reflecting the size of target—specifically, whether it was coded as small, medium, large or very large using the classification criteria described previously. To control for the strong demand for high-yield notes during the period 2003-2006, an independent, continuous variable called `HIGH_YIELD_SPREAD` was used. This variable was set at the spread for high-yield bonds as of the closing date for each going-private transaction and mean-centered for each observation. Finally, to control for

unmeasured variation in the use of high-yield debt-financing across industries, industry fixed effects were also included (as measured by SIC division codes).

For the primary regression, AB_Exchange was regressed on each of the three independent variables, controlling for industry fixed effects. If transaction size and the state of the high-yield debt market influence whether a bidder uses an A/B Exchange Transaction, the intuition was that controlling for these variables in the regression should reveal a clearer picture of how the costs of SOX have affected the decision to use high-yield debt-financing. Specifically, if the conventional analysis of SOX and going-private transactions is correct, a negative relationship should exist in the regression between POSTSOX and whether a transaction used an A/B Exchange Transaction.

To test the potential interaction between the size of the transaction and the costs of SOX, I also ran three additional specifications. In each, POSTSOX was interacted with one of the target size categories (i.e., medium, large, and very large) to determine what effect, if any, the costs of SOX have had on the decision to use an A/B Exchange Transaction for acquisitions within each size category. To the extent these categories represent qualitatively different types of transactions, these interactions allow an examination of how SOX has affected the use of A/B Exchange Transactions on an apples-to-apples basis. The results of all regressions are reported in Table 5.

[Insert Table 5 about here]

Table 5 sheds considerable light on the relationship between transaction size, SOX, and the decision to use an A/B Exchange Transaction. In the first model, the

coefficients for each target size category are all positive and highly significant as well as increasing in magnitude with each size category, as expected. Because all models were run as a probit, the coefficients reflect the effect on a cumulative normal function of the probability (measured in probit units) that a going-private transaction would use an A/B Exchange Transaction. The strength of the relationship between transaction size and the use of an A/B Exchange Transaction can also be expressed in terms of the probability that a transaction would use an A/B Exchange Transaction, which provides a more intuitive understanding of the relationship.²⁰ Specifically, regardless of whether a transaction occurred prior to or after SOX, the probability that a small target in a going-private transaction would use an A/B Exchange Transaction ranged from only 3% to 5%, holding constant the high-yield credit spread at its mean.²¹ In contrast, these probabilities increased to between 30% and 38% for transactions involving medium targets and to between 55% and 64% for transactions involving large targets. For targets classified as very large, the probabilities that a going-private transaction would use an A/B Exchange

²⁰ The relationship between probit units, y , and the probability (P) that $AB_Exchange=1$ is given by the cumulative distribution function (CDF) of the normal distribution, or $\Phi(y)$:

$$P(AB_Exchange = 1) = \Phi(y) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^y e^{-\frac{u^2}{2}} du$$

²¹ The marginal effect of transaction size on the use of an A/B Exchange Transaction is reflected as a range of values due to the underlying mathematics of converting a probit unit into a measure of probability. As the first model in Table 5 indicates, an increase in transaction size has a purely linear increase in probit units; however, using $\Phi(y)$ to transform the probit scale into a measure of probability creates a non-linear relationship between the predicted probit and the probability of using an A/B Exchange Transaction. Moreover, because the size of the predicted probit will turn on both transaction size and the measure of the other independent variables in the model, the marginal effect of transaction size will be conditional on the value of the other independent variables (Green 1997, p. 876). In light of this issue, it is common to compute the marginal effect of a single discrete variable in a probit model by holding all other variables constant at their means. In the present case, however, such an approach is unhelpful where so many variables represent discrete categories and would therefore provide the marginal effect of transaction size for a transaction that never existed (i.e., no transaction took place with an average of “POSTSOX” or an average of the medium size category). Accordingly, I present the marginal effect of transaction size as a range of values based on the actual transactions in the sample, holding constant at its mean only the high-yield spread.

Transaction were between 60% and 68%. Similarly strong and significant coefficients for each size category are found in the three other models.

Likewise, all four models reveal a significant, negative relationship between the use of an A/B Exchange Transaction and the high-yield credit spread at the time of a transaction. Again, given that yield-spreads move in the opposite direction to bond prices, this finding suggests a strong, *positive* relationship between demand for high-yield notes at the time of a going-private transaction and the use of an A/B Exchange Transaction.

In contrast, the relationship between SOX and the decision to use an A/B Exchange Transaction is less pronounced. In the first three models, the coefficients for POSTSOX are each negative (as predicted by the hypothesis) but not significant under conventional standards. Moreover, the coefficients in all three models are modest in size. For instance, in the primary model, the reported coefficient of -0.22 indicates that the probability of using an A/B Exchange Transaction in 2003-2006 was only one-fifth to one-eighth less than the probability of using an A/B Exchange Transaction in 1998-2001 for targets classified as medium, large and very large after controlling for the demand for high-yield debt. Similarly weak and insignificant coefficients appear for both POSTSOX and the interaction of POSTSOX in models 2 and 3, where POSTSOX was interacted with the target size categories medium and large.²² These results suggest that even after controlling for transaction size, there is no reason to believe that just because a particular

²² I further analyzed the interactions in models 2 and 3 using the INTEFF program recommended in Norton, Wang and Ai 2004, which confirmed the absence of a significant interaction between POSTSOX and the medium and large size categories for all observations in the data set. In contrast to looking solely at the magnitude or statistical significance of the coefficient on the interaction term, the INTEFF program provides a more accurate estimate of the marginal effect of two interacted variables in a non-linear model by calculating the cross derivative (or, if applicable, the cross difference) of the model with respect to the interacted terms at each observation and then calculating a z-statistic for the estimated interaction effect.

transaction occurred after SOX was enacted, there was any greater or less probability that it would use an A/B Exchange Transaction.

In light of these findings, the fourth model presents something of a surprise. As in all cases, the coefficients for each target size category are strongly significant and positive. The interaction of POSTSOX and the very large size category, however, indicates that for acquisitions involving targets with more than \$985 million in total assets, the probability of conducting an A/B Exchange Transaction was actually higher *after* the enactment of SOX. Specifically, for very large targets, the probability of using an A/B Exchange Transaction after 2002 was over twice the probability of using an A/B Exchange Transaction prior to 2002 after controlling for the condition of the high-yield debt market.²³

Moreover, controlling for this interaction alters the effect of POSTSOX. In model 4, the negative coefficient for POSTSOX is not only larger than in the primary model; it is also marginally significant ($p=0.06$). In terms of the probability of using an A/B Exchange Transaction, the reported coefficient of -0.36 on POSTSOX in model 4 indicates that the probability of using an A/B Exchange Transaction after 2002 was approximately 3% lower for targets classified as small, 13% lower for targets classified as medium, and 14% lower for targets classified as large. In short, it is only by controlling for the greater likelihood of using an A/B Exchange Transaction associated with very large buyouts after SOX that it becomes possible to detect any meaningful

²³ As with the interactions in models 2 and 3, I used the INTEFF program to confirm that the interaction in model 4 was both significant and positive for all observations in the dataset. Results from running the INTEFF program indicated that the interaction increased the probability of using an A/B Exchange Transaction from between 20 to 40 percentage points across all observations.

decrease in the likelihood that a going-private transaction would be financed with an A/B Exchange Transaction after SOX.²⁴

5. Conclusion

As the foregoing analysis illustrates, understanding the relationship between the costs of SOX and the sharp rise in going-private transactions after 2002 requires considerably more refinement than has traditionally been afforded the subject. Given that a company can remain subject to SOX after it goes private due to the use of high-yield debt to finance the transaction, accurate analysis of this relationship requires assessing whether companies have increasingly gone private with SOX-free forms of financing rather than simply the relative frequency with which companies have gone private at all.

Using this more refined approach, this Article has revealed that the large-scale take-private transactions that are so often cited as proof that SOX is driving companies to go private have generally failed to remove firms from the domain of SOX. Indeed, I find that after SOX, private bidders are actually *more likely* to subject themselves to continuing SEC-reporting obligations (which now include SOX's disclosure obligations) when structuring a large-scale take-private transaction than prior to SOX. Rather, it is only for small- and medium-sized public companies in which SOX appears to have encouraged firms considering a going-private transaction to turn increasingly to SOX-free forms of financing.

²⁴ In an unreported regression, I ran the same probit specification used in model 4 but replaced the target size categories with the mean-centered log of target assets and interacted this term with POSTSOX. Analysis of the model using the INTEFF program confirmed that that the marginal effect of this interaction was positive and significant for most of the observations that fell within the very large size category.

At their most general level, these empirical findings therefore provide considerable evidence that the wave of large-scale buyouts that swept the U.S. economy during 2003-2007 was not driven by the costs of SOX. At the same time, however, they also seem to confirm the widespread concern that SOX has been particularly burdensome on small- and medium-sized public companies. Yet in extending this latter finding to the broader debate about the relationship between SOX and the competitiveness of U.S. capital markets, it is also important to emphasize the need for caution. Notwithstanding the attention given to the increased rate of take-private transactions since SOX, there is nothing inherently problematic with capital market regulations that deter some firms from issuing securities (equity or debt) that are intended to be publicly-traded. As noted by Kamar, Karaca-Mandic, and Talley (2007), the very objective of securities regulations—SOX included—might be to minimize the public trading of securities of those firms that are prone to financial fraud. Focusing exclusively on how SOX has encouraged some types of companies to go private thus risks emphasizing how these firms perceive its compliance costs while overlooking how investors (and even other firms) might view its benefits in terms of fraud detection and prevention.

In this regard, the findings presented here suggest an intriguing possibility about the perceived benefits of SOX. For all the criticism that has been leveled at SOX for mandating a rigid, one-size-fits-all approach to fraud detection, it bears emphasizing that the high-yield debt market is fundamentally the product of private contractual relationships. Indeed, the promulgation of Rule 144A was intended to open the way for issuers and institutional investors to establish an active market for high-yield debt that would be immune from the mandatory reporting obligations associated with publicly-

traded equity securities. That the market responded with privately negotiated indentures obligating issuers to comply with these reporting obligations is therefore telling evidence of the value institutional investors place on a firm's commitment to comply with the Exchange Act's disclosure requirements. For similar reasons, the persistence of this covenant after 2002 may very well reflect institutional investors' desire to opt into the SOX regulatory regime and thereby benefit from its additional compliance obligations.

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Table 1: Acquisitions of Firms Trading on the NYSE, NASDAQ, and ASE, 1998-2001 & 2003-2006

This table reports summary statistics on size and deal characteristics for the sample of 2,269 acquisitions of publicly-traded companies trading on the NYSE, Nasdaq, and ASE. Data are reported for the full sample and by the type of winning bidder. *Publicly-Traded Bidder* is a U.S. bidder having publicly-traded equity securities at the time of the acquisition. *Privately-Owned Bidder* is a U.S. bidder that is privately-held at the time of the acquisition. *Market Value of Target Equity* is the average value of target's equity (stock price*shares outstanding) over the 30 days prior to the acquisition's closing date.

	Total Acquisitions	Publicly-Traded Bidders	Privately-Owned Bidders	% Public Bidders	% Private Bidders	Market Value of Target Equity Acquired	Market Value of Target Equity Acquired by Public Bidders	Market Value of Target Equity Acquired by Private Bidders	% Equity Acquired by Public Bidders	% Equity Acquired by Private Bidders
1998	398	336	62	84.4%	15.6%	\$372,181,314	\$359,620,151	\$12,561,162	96.6%	3.4%
1999	447	378	69	84.6%	15.4%	\$637,673,759	\$626,900,576	\$10,773,183	98.3%	1.7%
2000	450	372	78	82.7%	17.3%	\$824,533,417	\$809,241,546	\$15,291,871	98.1%	1.9%
2001	314	262	52	83.4%	16.6%	\$373,726,807	\$364,140,461	\$9,586,347	97.4%	2.6%
Subtotal:	1609	1348	261	83.8%	16.2%	\$2,208,115,297	\$2,159,902,734	\$48,212,563	97.8%	2.2%
2003	163	106	57	65.0%	35.0%	\$119,947,279	\$111,836,992	\$8,110,287	93.2%	6.8%
2004	149	102	47	68.5%	31.5%	\$134,275,805	\$95,355,247	\$38,920,558	71.0%	29.0%
2005	152	115	37	75.7%	24.3%	\$340,110,634	\$289,188,815	\$50,921,819	85.0%	15.0%
2006	196	130	66	66.3%	33.7%	\$368,195,411	\$286,851,337	\$81,344,074	77.9%	22.1%
Subtotal	660	453	207	68.6%	31.4%	\$962,529,130	\$783,232,392	\$179,296,737	81.4%	18.6%
Total	2269	1801	468	79.4%	20.6%	\$3,170,644,426	\$2,943,135,126	\$227,509,301	92.8%	7.2%

Table 2: Going-Private Transactions That Resulted in an Exchange Act Reporting Company

This table reports summary statistics regarding the reasons why 130 of the 468 going-private transactions resulted in surviving firms with continuing SEC-reporting obligations. Observations were limited to those firms that became an SEC-reporting company within 12 months of the closing date of the going-private transaction.

% of Going-Private Transactions Resulting in an Exchange Act Reporting Company:			Reason for Remaining an Exchange Act Reporting Company:						
Year	Total	% of Going - Private Transactions	High-yield Acquisition Financing Followed by A/B Exchange Offer	Target Has Reporting Obligations Under Pre-Existing High-Yield Notes	Bidder Has Outstanding High-Yield Notes at Time of Acquisition	Subsequent High-Yield Issuance by Surviving Firm	Subsequent Listing of Equity Securities by Surviving Company	Surviving Firm Listed Equity Securities in Connection with Acquisition	Surviving Firm Continued To File Due to Over-the-Counter Trading of Common Stock
1998	29	47%	19	4	4	2	0	0	0
1999	22	32%	12	4	2	0	0	4	0
2000	17	22%	5	3	2	0	3	3	1
2001	11	21%	5	2	0	1	2	1	0
Subtotal:	79	30%	41	13	8	3	5	8	1
2003	10	18%	6	1	1	1	0	1	0
2004	12	26%	10	0	0	1	0	1	0
2005	10	27%	9	1	0	0	0	0	0
2006	19	29%	15	1	1	0	0	2	0
Subtotal:	51	25%	40	3	2	2	0	4	0
Total:	130	28%	81	16	10	5	5	12	1

Table 3: Correlation Matrix Examining Incidence of A/B Exchange Transactions

This Table presents pair wise correlation coefficients for: (a) whether a transaction utilized an A/B Exchange Transaction (denoted “A/B Exchange”), (b) the credit spread for high-yield bonds as of the closing date of each transaction, measured by taking the difference between Moody’s Seasoned Baa Corporate Bond Yield and the 10-Year Treasury Constant Rate for such date (denoted “High-Yield Spread”), (c) the natural log of the book value of target assets as reported in target’s last SEC-filing prior to the date of acquisition (denoted “Log(Assets)”), and (d) whether the transaction occurred during the period 2003-2006 (denoted “Post-Sox”). The numbers in parentheses are the probability levels (p-values) of observing these coefficients by chance alone using two-tailed tests.

	A/B Exchange	High-Yield Spread	Log(Assets)	Post-Sox
A/B Exchange	1.00			
High-Yield Spread	-0.1694 (0.000)	1.00		
Log(Assets)	0.4167 (0.000)	-0.2342 (0.000)	1.00	
Post-SOX	0.0475 (0.306)	-0.2620 (0.000)	0.1648 (0.000)	1.00

Table 4: Incidence of A/B Exchange Transactions By Target Size.

This table reports statistics on the percentage of transactions in the main sample of going-private transactions (n=468) that used an A/B Exchange Transaction, taking account of the size of target and whether the transaction occurred before or after the enactment of SOX. The actual number of transactions is included in brackets. “Pre-Sox” represents transactions within the sample that occurred during the period 1998-2001; “Post-Sox” represents transactions that occurred during the period 2003-2006. Differences between Pre-Sox and Post-Sox proportions were tested for statistical significance using Fisher’s exact test. The resulting p-values appear in the last column in parentheses.

Target Size:	No. of Targets in Sample:			Incidence of A/B Exchange Offers Within Each Target Size Category :		
	Pre-SOX	Post-SOX	Total	Pre-SOX	Post-SOX	Difference
Small	113	75	188	2.7% [n=3]	0.0% [n=0]	-2.7% (0.277)
Medium	112	75	187	22.3% [n=25]	16.0% [n=12]	-6.3% (0.351)
Large	25	21	46	44% [n=11]	38.1% [n=8]	-5.9% (0.769)
Very Large	11	36	47	18.2% [n=2]	55.6% [n=20]	37.4% (0.041)
Total	261	207	468	15.7% [n=41]	19.3% [n=40]	3.6% (0.326)

Table 5: Incidence of A/B Exchange Transactions – Multivariate Analysis

This table reports regression estimates on the association between a bidder’s decision to use an A/B Exchange Transaction, whether the transaction occurred before or after SOX, the strength of the high-yield credit markets, and transaction size. The dependent variable in all models is AB_EXCHANGE, set to 1 if the acquisition used an A/B Exchange Transaction and 0 otherwise. * = statistically significant at 90% confidence; ** = statistically significant at 95% confidence; *** = statistically significant at 99% confidence. All models are run as probit regressions and include a constant term (not reported). Standard errors appear in parentheses.

Model # →	1	2	3	4
POSTSOX	-0.22 (0.18)	-0.09 (0.27)	-0.19 (0.19)	-0.36 (0.19)*
Controls:				
Target Size:				
Medium	1.31 (0.27)***	1.38 (0.29)***	1.30 (0.27)***	1.32 (0.27)***
Large	1.96 (0.31)***	1.94 (0.31)***	2.02 (0.36)***	1.98 (0.31)***
Very Large	2.08 (0.32)***	2.03 (0.33)***	2.07 (0.32)***	1.18 (0.52)**
High-Yield Spread:	-0.47 (0.19)**	-0.46 (0.19)**	-0.47 (0.19)**	-0.43 (0.19)**
Industry Fixed Effects:	Included	Included	Included	Included
Interaction				
Medium*POSTSOX		-0.22 (0.34)		
Large*POSTSOX			-0.14 (0.42)	
Very Large*POSTSOX				1.23 (0.53)**
Number of observations	468	468	468	468
McFadden’s Pseudo R-sq	0.2256	0.2266	0.2259	0.2391

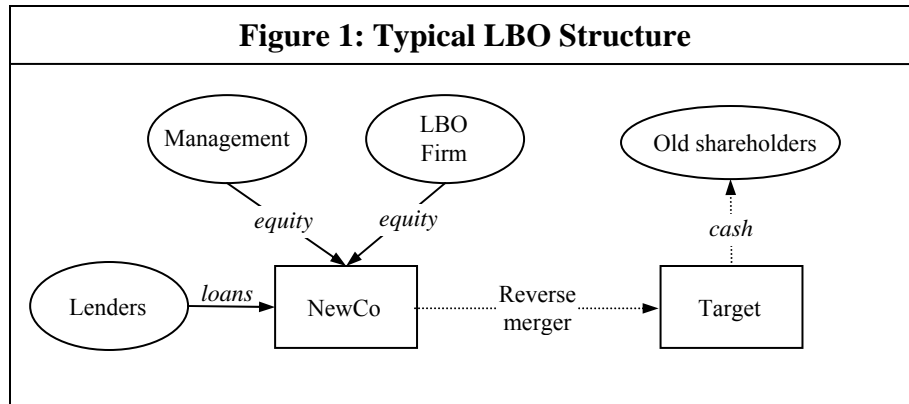
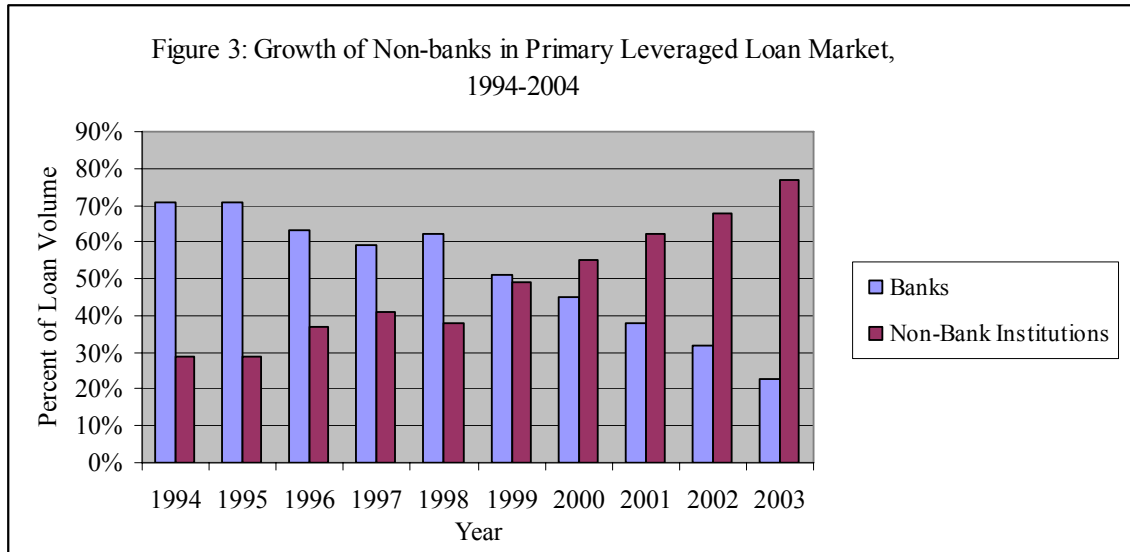
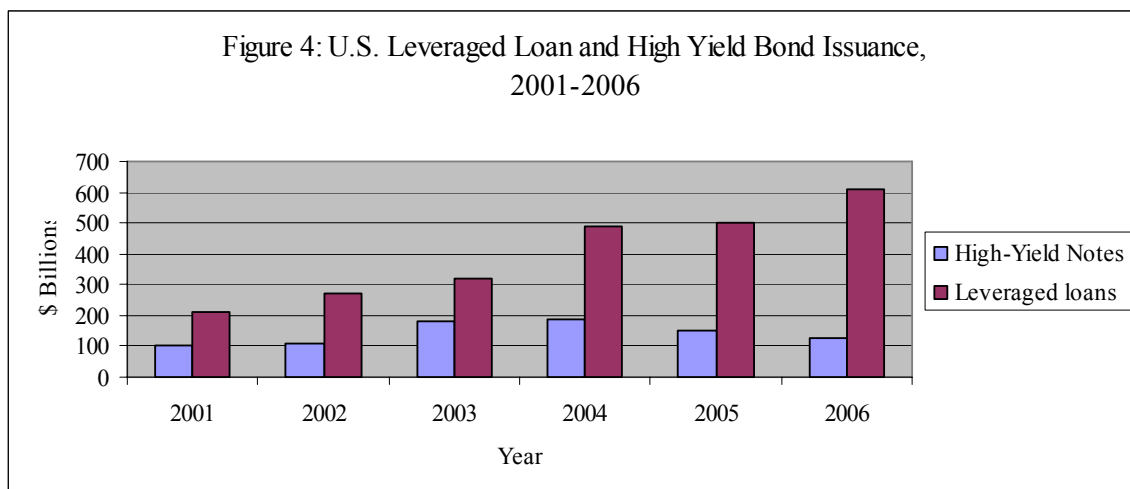


Figure 2: Significant Provisions of SOX Applicable to High-Yield Issuers

	Applies Upon Filing of Registration Statement and to all voluntary filers:	Inapplicable Until Filing of Registration Statement:
Operative Provision:		
Management assessment of internal controls (Section 404)	X	
Principal executive officer and financial officer civil certification (Section 302)	X	
Principal executive officer and financial officer criminal certification (Section 906)		X
Prohibition on extending personal loans to executives (Section 402)		X
Forfeiture of bonuses and profits if company issues an accounting restatement as a result of misconduct (Section 304)		X
Conditions for use of Non-GAAP financial measures (Section 401)		X
Audit committee financial expert disclosure (Section 407)	X	
Code of ethics disclosure (Section 406)	X	
Disclosure in MD&A of off-balance sheet arrangements and aggregate contractual obligations (Section 401)	X	
Restriction on providing nonaudit services and requirement of pre-approval of auditing and nonauditing services (Sections 201, 202 and 204)*	X	
Auditor conflicts of interest (Sections 203, 206)		X
Prohibition on improperly influencing the conduct of audits (Section 303)		X
Rapid and current “plain English” disclosure of material changes (Section 409)	X	
*Although auditor independence rules do not technically apply prior to the filing of a registration statement, they do apply to the auditors; therefore as a practical matter, these rules apply even prior to filing the registration statement.		



Source: Page and Swaffield (2007, p. 54).



Source: Fitch Ratings 2007a.

Figure 5: Georgia-Pacific Financing	
Source of Funds:	Amount
Equity Contribution from Koch Industries:	\$7.1 billion
Senior Secured Term Loan (the "Tender Facility")*	\$6.4 billion
The Merger Facility:	
- First Lien Senior Secured Credit Facility	\$8.5 billion
- Second Lien Senior Secured Credit Facility	\$2.5 billion
*To be repaid with proceeds from the Merger Facility.	

Source: Georgia-Pacific Corp., Offer to Purchase For Cash, p. 31 (Schedule TO-T) (Nov. 11, 2005).

Figure 6: Going-Private Transactions as a Percentage of All Acquisitions, Main Sample vs. Findings of Committee on Capital Markets Regulation

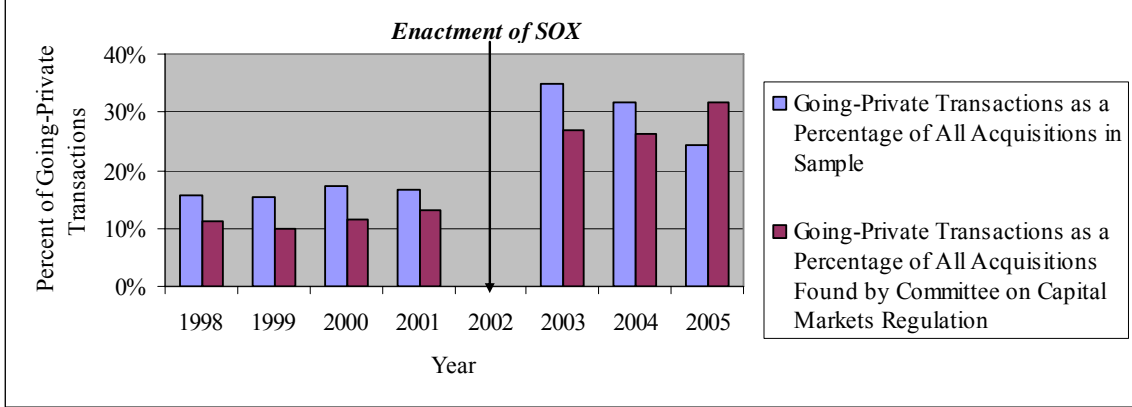


Figure 7: Going-Private Transactions As a Percentage of All Acquisitions by Transaction Value, 1998-2001 & 2003-2006

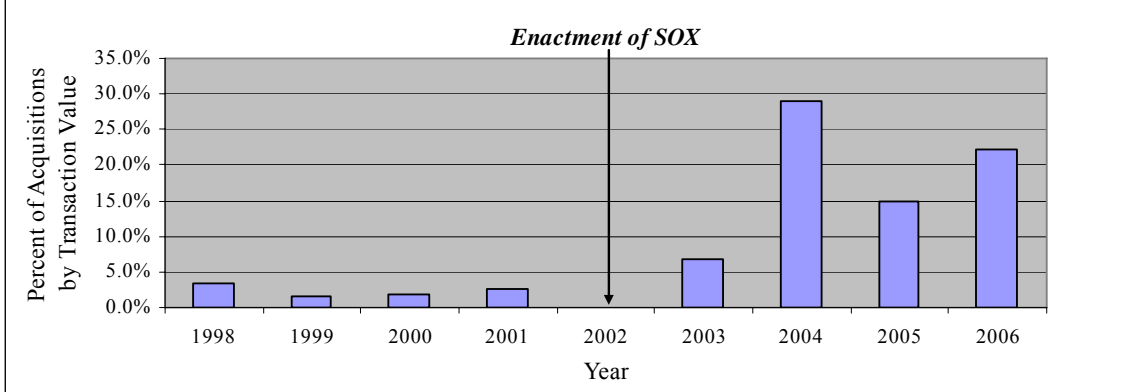


Figure 8: Frequency of Going-Private Transactions That Resulted in Exchange Act Reporting Companies, 1998-2001 & 2003-2006

