

Secret Liens and the Financial Crisis of 2008

by

*Michael Simkovic**

I. INTRODUCTION: SYSTEMIC RISK AND HIDDEN LEVERAGE

This article argues that legal changes over the last eighty years eroded the doctrine of secret liens and thereby led to the financial crisis of 2008. Because of these legal changes, complex and opaque financial products received the highest priority in bankruptcy, and creditors' incentives were therefore to structure transactions using these favored financial products. The opaque credit environment that resulted permitted debtors—particularly investment banks—to hide the extent of their leverage, to the detriment of all creditors.¹ This article argues that Congress can prevent future financial crises either by restoring the doctrine of secret liens, or by adopting a modernized regulatory regime built on the doctrine of secret liens' fundamental insight—that creditors should be compelled to disclose their claims in exchange for payment priority.

In 2008, questions of financial system stability became front page news as bulge bracket investment banks declared bankruptcy, were acquired for fire sale prices, or remained afloat through massive injections of capital from the federal government. To stabilize the financial system, as of November 28, 2008, the federal government committed over \$3.5 trillion in taxpayer money.² To put the scale of this commitment in context, it is roughly 1.5

*Michael Simkovic is a 2007 graduate of Harvard Law School and a former Olin Fellow. He thanks Elizabeth Berney, Janet Hunt, Richard Gluck, Ehren Brav, Jared Gross, and Professor Adam Levitin for their helpful comments. The views expressed in this article are those of Michael Simkovic and do not necessarily reflect the views of Harvard Law School, the Olin Center, or any other person or organization. © Michael Simkovic 2009.

¹The opaque financial environment may also prove to be to the detriment of all taxpayers if government rescue efforts lead the government to absorb losses by overpaying for distressed securitized assets and for equity stakes in insolvent financial institutions.

²According to the Wall Street Journal, as of November 28, 2008, the U.S. government had committed over \$3.5 trillion to rescue programs. The programs include: 1) up to \$350 billion in FDIC guarantees of bank issued debt; 2) \$700 billion for the Troubled Asset Relief Program (used to inject capital into financial institutions including AIG, Citigroup, Bank of America, Wells Fargo, Morgan Stanley and Goldman Sachs; 3) an estimated \$1.3 trillion for the Federal Reserve to buy commercial paper, effectively loaning money to companies such as GE, GMAC, and Ford Motor Credit; 4) \$540 billion for the Federal Reserve to buy short term debt from money market funds; 5) \$200 billion in loans so that private investors can buy securitized loans, initially limited to auto loans, credit card loans, student loans and small business loans;

times the size of the federal government's entire annual tax receipts for 2007.³ Under the circumstances, new regulations seem inevitable, and these regulations will shape the financial services industry—and potentially the global economy—for years to come.⁴ It is therefore imperative that new regulations are crafted in light of the accumulated wisdom of common law systems that have managed insolvency and promoted financial stability for centuries.

Although the current financial crisis involves financial instruments that are new and complex, such as collateralized debt obligations (“CDO”) and credit default swaps (“CDS”), the fundamental causes of the financial crisis are relatively old and simple. This article explains the roots of financial crises in one of the oldest and most fundamental problems of commercial law: hidden leverage.⁵

Financial system stability depends on maintaining a safe level of leverage given the riskiness of underlying assets or cash flows. A highly leveraged financial system is like a powder keg—it can turn a small spark, relatively harmless in most environments, into a large and devastating explosion. In a moderately leveraged business, equity acts as a cushion, absorbing losses and enabling the business to continue. But in a highly leveraged business, the same losses can wipe out equity, rendering the business insolvent and forcing it to reorganize or liquidate. A rapid sell-off of assets—particularly complex, thinly traded assets—pushes down market prices, leading to further losses. If other highly leveraged businesses hold similar assets, declining prices will also wipe out their equity, forcing them to liquidate.

Losses act as a spark; widespread leverage is the powder keg. Leverage

and 6) \$600 billion in government purchases of mortgage backed securities backed by GSEs such as Freddie Mac and Fannie Mae, as well as purchases of GSE debt. See Jon Hilsenrath and Deborah Solomon, *Mortgage Rates Fall as U.S. Expands Rescue*, WALL ST. J., Nov. 26, 2008, at A1. Of course, there is a difference between contingent guarantees or investments and outright expenditures—the full cost of these efforts is not yet known. A more recent estimate by Special Inspector General Neil Barofsky puts the U.S.'s total commitment at just under \$3 trillion, excluding aid to auto companies. See Meena Thiruvengadam, *U.S. Bailouts So Far Total \$2.98 Trillion, Official Says*, WSJ.COM, Mar. 31, 2009, <http://online.wsj.com/article/SB123851108664173877.html>.

³According to the Government Printing Office, total federal government receipts for 2007 were \$2.4 trillion. BUDGET OF THE UNITED STATES GOVERNMENT, Fiscal Year 2007, Historical Tables, Table 1.1: Summary of Receipts, Outlays, and Surpluses or deficits: 1789–2011, available at www.gpoaccess.gov/usbudget/fy07/pdf/hist.pdf.

⁴House Financial Services Chairman Rep. Barney Frank (D., Mass.) predicted that 2009 will be the ‘best year’ for public policy since the New Deal. Speaking before the Consumer Federation of America Thursday, Mr. Frank said Congress would pass a regulatory overhaul comparable to the antitrust laws of the late 19th century and the creation of the Securities and Exchange Commission in 1934.” Jessica Holzer, *Frank Foresees Sweeping Regulatory Overhaul*, WSJ.COM, Dec. 4, 2008, <http://online.wsj.com/article/SB122842202149980375.html>.

⁵Leverage can refer to the ratio of debt (and off-balance sheet obligations) to equity, or to value at risk relative to capital.

can be “regulated” privately by creditors or regulated by government, but only if the extent of leverage is known.

Hidden leverage is a perennial problem because debtors rationally wish to borrow at the lowest price possible. Debtors can borrow at more attractive rates by hiding their existing debts and creating an exaggerated appearance of creditworthiness.⁶ Creditors who lend to such borrowers suffer because the interest rates they charge do not adequately compensate them for the risk of default.

Although it is in the collective interests of creditors to gather information about debtors’ creditworthiness, it may not be in an individual creditor’s interest to share his piece of the puzzle with other creditors who may be competitors. Such mutually harmful competition among creditors is more likely when creditors expect to compete for future business, for example because the debtor is a large repeat-player such as a corporation or financial institution.

Debtors who wish to hide their debts can exploit competition between potential creditors to gain active cooperation from some creditors. These cooperative creditors will work with debtors to hide loans either through simple non-disclosure or through complex structures. Debtors may compensate these cooperative creditors for their assistance with higher fees, a deeper business relationship with the creditors, or liens on the debtors’ property.

The result of this subterfuge is lower financing costs for the debtor and lower profits—or steeper losses—for unsophisticated unsecured creditors. If the debtor remains solvent, the debtor will repay all creditors, and the extent of hidden leverage will remain secret. If the debtor becomes insolvent, the extent of hidden leverage will be exposed too late for creditors to be made whole. Creditors who are not repaid can bring suit, but the debtor’s insolvency will effectively cap any recovery.

This is an ancient problem. Professor Peter Coogan has described the history of commercial law as “the 400 year struggle by debtors and their [sophisticated] secured creditors to create security interests of various sorts in the debtors’ property without affording notice to buyers or other creditors, and the attendant demands by [unsophisticated] unsecured creditors generally for some kind of notice when all or part of the debtors’ assets become subject to security interests.”⁷

Common law courts wrestled with this problem for centuries and devel-

⁶See Franco Modigliani & Merton Miller, *The Cost of Capital, Corporation Finance, and the Theory of Investment*, 48 AM. ECON. REV. 261, 273 (1958) (“Economic theory and market experience both suggest that the yields demanded by lenders tend to increase with the debt-equity ratio of the borrowing firm (or individual).”).

⁷Peter F. Coogan, *Public Notice Under the Uniform Commercial Code and Other Recent Chattel Security Laws, Including “Notice Filing”*, 47 IOWA L. REV. 289, 289 (1962).

oped a time-tested solution: the doctrine of secret liens. A first lien (or security interest) gives the lien-holder a claim on the debtor's property that is superior to claims of other creditors. A lien is "secret" if it is not properly disclosed to other potential creditors.

If the debtor becomes insolvent, the doctrine of secret liens punishes secret lien holders by subordinating their claims to those of other creditors. In other words, by overriding privately negotiated payment priorities, the doctrine of secret liens creates incentives for transparency.

Because secret lien doctrine compels creditors to disclose information, it can reinforce the accuracy of disclosures under regulatory systems that compel debtors to disclose information, such as securities, banking, and insurance regulation.

II. THE COMMON LAW ORIGIN OF SECRET LIEN DOCTRINE

Secret lien doctrine's intellectual and legal underpinnings stretch back to sixteenth century England, to the statute of 13 Eliz., c.5.⁸ Secret lien doctrine was most famously articulated in the early nineteenth century Pennsylvania case, *Clow v. Woods*.⁹

In *Clow*, a tanner conveyed security interests in his hides and tanning equipment to his creditors.¹⁰ The creditors did not take possession of the hides or equipment and did not record their security interests.¹¹ The tanner's former business partner sued the tanner, obtained a judgment, and sent the sheriff to execute the judgment by seizing and selling the tanner's hides and equipment.¹² The secured creditors sued the sheriff to recover the proceeds of the sale. The secured creditors argued that their security interest had priority over the execution lien.

The Supreme Court of Pennsylvania ruled against the secured creditors, finding that an undisclosed security interest constitutes "fraud per se" (in modern parlance, "constructive fraud") even without fraudulent intent, because of the potential harm of secret liens to third party creditors.¹³

Judge Gibson explained in his opinion:

[A] creditor ought not to be suffered to secure himself by means that may ultimately work an injury to third persons Where possession has been retained without any stipulation in the conveyance, the cases have uniformly de-

⁸Jonathan C. Lipson, *Secret Liens: The End of Notice in Commercial Finance Law*, 21 EMORY BANKR. DEV. J. 421, 429-32 (2005).

⁹*Clow v. Woods*, 5 Serg. & Rawle 275, 1819 WL 1895 (Pa. 1819).

¹⁰*Id.* at *1.

¹¹*Id.* at *1-3.

¹²*Id.*

¹³*Id.* at *5.

clared that to be, not only evidence of fraud, but fraud per se. Such a case is not inconsistent with the most perfect honesty; yet a court will not stop to inquire, whether there be actual fraud or not; the law will impute it, at all events, because it would be dangerous to the public to countenance such a transaction under any circumstances. The parties will not be suffered to unravel it, and show, that what seemed fraudulent, was not in fact so.¹⁴

Judge Gibson believed secret liens were too dangerous to permit under any circumstances because of the possibility that debtors would represent themselves as more creditworthy than they actually were and so induce third parties to extend credit:

[It is] against sound policy to suffer a [debtor] to create a secret incumbrance on his personal property, when to the world he appears to be the absolute owner, and gains credit as such. In every case where possession is not given,¹⁵ the [creditors] must leave nothing unperformed, within the compass of their power, to secure third persons from the consequences of the apparent ownership of the [debtor] I do not suppose the parties had, in fact, a fraudulent view, but as such a transaction might be turned to a dishonest use, it was their duty, as far as in their power, to secure the public against it.¹⁶

The decision in *Clow* highlights the adaptability and flexibility of the common law. Although the court nominally decided the case under the statute of 13 Eliz., c.5, which “renders void all conveyances made to the end, purpose, and intent of defrauding creditors,”¹⁷ the principle articulated in *Clow* represents a significant extension of fraudulent conveyance doctrine. Under secret lien doctrine, it is not fraudulent intent that matters, but a lack of notice and meaningful disclosure.

Extending these common law principles, Judge Duncan arrived at a conclusion very similar to the thesis of this article—that a lack of transparency threatens not only individual creditors, but the financial system as a whole:

¹⁴*Id.* at *4-5.

¹⁵The emphasis in *Clow* on physical possession may seem strange to modern readers. At the time, physical possession and recordation were the two primary means of providing notice of ownership of tangible property. As the economy became more complex and intangible property rights proliferated, the importance of physical possession declined. See Lipson, *supra* note 8 at 434-35.

¹⁶*Clow*, 1819 WL 1895, at *5-6.

¹⁷*Id.* at *3.

That a secret mortgage to secure a creditor . . . should be valid and bind the property against creditors . . . would be a reproach to the law. It ought not, it cannot be so. If it were so, it would put an end to all credit. Credit is given on . . . faith I know not any doctrine that would tend to annihilate all credit, more than the establishment of such a principle.¹⁸

III. FROM COMMON LAW TO STATUTE TO FINANCIAL CRISIS

Secret lien doctrine continues today as the “strong-arm power” in § 544(a)(1) of the Bankruptcy Code—the power of bankruptcy trustees to void secret transfers made prior to bankruptcy.¹⁹ The strong-arm power was first incorporated into the bankruptcy laws in 1910²⁰ with the explicit goal of preventing secret liens,²¹ and the prevention of secret liens remains its explicit goal today.²²

However this goal has been undermined by a variety of statutory legal changes that replaced the flexibility and breadth of common law secret lien doctrine with a system that is more formal, more rigid, and less effective. Gaps in this formal system led to an opaque credit environment, excess leverage, and the recent financial crisis.

As secret lien doctrine developed into a formalized statutory system, two key changes took place. First, standards of disclosure were eroded as formal filing systems de-emphasized meaningful disclosure to creditors and focused instead on technical compliance. Second, broad exceptions placed certain favored financial products—asset securitizations and derivatives—beyond the reach of the strong-arm power and related Bankruptcy Code provisions.

¹⁸*Id.* at 10. The dire consequences Judge Duncan warned would result from secret liens sound remarkably like recent descriptions of the financial crisis. Nobel Prize-winning economist Paul Krugman described the financial crisis as “a crisis of faith.” He wrote: “[T]he ever-widening financial crisis has shaken investors’ faith in the whole system. People no longer trust assurances that fancy financial instruments will function the way they’re supposed to [W]ould-be borrowers can’t get credit [A]lthough the Federal Reserve has sharply cut the interest rate it controls over the past few weeks, the borrowing costs facing many companies and households have actually gone up.” Paul Krugman, *A Crisis of Faith*, N.Y. TIMES, Feb. 15, 2008, at A23.

¹⁹See 11 U.S.C. § 544(a)(1).

²⁰See Act of June 25, 1910, ch. 412, § 8, 36 Stat. 838, 840 (amending an act to establish uniform bankruptcy laws throughout the United States).

²¹Congress stated that the strong-arm power was needed “to prevent the evil of secret liens.” 45 CONG. REC. 2275 (1910).

²²The 1973 Report of the Commission on Bankruptcy Laws of the United States noted that “[o]ne of the essential features of any bankruptcy law is the inclusion of provisions designed to invalidate secret transfers made prior to the date of the filing of petition.” REPORT OF THE COMMISSION ON THE BANKRUPTCY LAWS OF THE UNITED STATES, H.R. Doc. No. 93-137, pt. I, at 18 (1973).

These exceptions were created through both amendments to the Bankruptcy Code and through changes to state law provisions related to “property of the estate.”

The financial crisis was proximately caused by credit losses channeled through two of these favored financial products, collateralized debt obligations (a type of asset securitization), and credit default swaps (a type of derivative).

Prior to the financial crisis, the market for these products grew rapidly because they received favored treatment in bankruptcy and were not transparent to third parties.

A. REDUCED STANDARDS OF DISCLOSURE UNDER THE UNIFORM COMMERCIAL CODE

Over the last eighty years, commercial law has seen a general decline in the level of disclosure required to perfect security interests.

To deter or correct the problem of secret liens and the related problem of fraudulent conveyances,²³ common law legal systems developed recordation systems.²⁴ Unless a lien-holding creditor recorded the lien, the law would treat non-possessory liens as fraudulent and therefore voidable. Early recordation systems required extensive disclosures, including the filing of the mortgage document itself, and sometimes affidavits and acknowledgements of good faith.²⁵

These early recordation systems represented the height of mandatory disclosure under secret lien doctrine. The informational content they provided was exceptionally rich.

However, these recording statutes were burdensome for both filers and searchers because their presentation of credit information was idiosyncratic and fragmented. There were several different independent recording systems for different types of security.²⁶ This forced filers to comply with several different notice systems and forced potential creditors wishing to evaluate a debtor’s creditworthiness to search several different systems.²⁷

In the mid twentieth century, recording statutes were replaced with streamlined notice-filing systems. Unfortunately, these streamlined systems reduced the burden of compliance, not by solving the problem of information fragmentation, but by limiting the information content of filings. A precursor

²³A fraudulent conveyance (or fraudulent transfer) includes a transfer for less than reasonably equivalent value while the debtor is insolvent. See 11 U.S.C. § 548(a)(1)(B). Fraudulent transfers are similar to secret liens in that both involve an agreement between the debtor and a third party to the detriment of the debtor’s unsecured creditors.

²⁴See Lipson, *supra* note 8 at 439.

²⁵Coogan, *supra* note 7 at 290-91.

²⁶See Lipson, *supra* note 8 at 441.

²⁷*Id.*

to the modern Uniform Commercial Code, the Uniform Trusts Receipts Act²⁸ promulgated in 1933,

popularized the idea that for certain kinds of transactions [such as those involving inventory and accounts receivable] it is not essential for all of the details of the transaction to be spread upon the public record, so long as the record gives an indication where an interested party might inquire to learn whether or not a particular collateral of the indicated class or type is subject to the perfected security interest.²⁹

The Uniform Commercial Code similarly operates through a simple filing—the UCC-1 financing statement—that puts searchers on “inquiry notice” of the possible existence of a security interest, but does not disclose the details of the transaction. The UCC-1 financing statement need only set forth the debtor’s name, the secured party’s name, and a brief description of the property subject to the security interest. “What is required to be filed is . . . only a simple record providing a limited amount of information Further inquiry from the parties concerned will be necessary to disclose the complete state of affairs.”³⁰

Recent revisions to Article 9 of the U.C.C. mitigated the problem of information fragmentation across geographies but exacerbated the problem of information fragmentation based on type of property. Revised Article 9 reduced the obligation to file financing statements in multiple states or on a county-by-county basis.³¹ However, according to Professor Jonathan Lipson, the revised U.C.C. also created new opportunities for secret liens in certain financial assets by permitting security interests that do not require a filing because they are perfected through “control.”³²

A secured party will have “control” of certain financial assets if the party has the right to dispose of the assets.³³ For example, a bank will often have a “control” security interest in the cash it holds in the deposit account of a customer to whom it has extended credit. Because control arises by agreement or operation of law, no filing is required.

Although control security interests do not require a U.C.C. filing and are therefore presumably less transparent than security interests perfected

²⁸UNIF. TRUST RECEIPTS ACT, 3A U.L.A. App. I, 102-10 (2002).

²⁹Coogan, *supra* note 7 at 314-15.

³⁰U.C.C. § 9-502 cmt. 2.

³¹See Lipson, *supra* note 8 at 485 n.302 (citing U.C.C. § 9-401 (2000)).

³²See Lipson, *supra* note 8 at 462-67.

³³See Lipson, *supra* note 8 at 462 n.173 (citing U.C.C. §§ 9-106, 9-104, 9-105, 9-107, 9-314(a) (2003)). Control security interests can be created in certain types of collateral, including deposit accounts, investment property, electronic chattel paper, and letter of credit rights.

through filing,³⁴ ‘security interests perfected by control . . . take priority over those perfected otherwise’³⁵

It may be difficult for a third party to discover the existence of a control security interest because a bank that has entered into a control security agreement “is not required to confirm the existence of the agreement to another person” unless the bank’s customer (the debtor) instructs it to do so.³⁶ Although other creditors can ask the debtor about the existence of control security interests, other creditors will have limited recourse if the debtor’s answer turns out to be false.³⁷

1. *Focus on technical compliance rather than meaningful disclosure*

Unlike common law secret lien doctrine, which emphasized meaningful disclosure, the strong-arm power under 11 U.S.C. § 544(a)(1) focuses on strict compliance with U.C.C. requirements for perfection of security interests. As a result, the strong-arm power cannot void relatively secret security interests arising through control but can void relatively transparent security interests that suffer from minor procedural errors.³⁸ The result of this emphasis on technical compliance is that the strong-arm power is both over- and under-inclusive.

The strong arm power is arguably a blunter and clumsier tool for creating a transparent financial system than its precursor, the common law doctrine of secret liens. The U.C.C., though less burdensome to secured creditors than precursor recording statutes, provides less information to third party creditors.

2. *Transparency and U.C.C. filings*

Nevertheless, U.C.C. filings are a critical source of information for creditors because they are incorporated into credit reports and ratings by private agencies such as Dun & Bradstreet and Experian.³⁹

The erosion in standards of compulsory creditor-provided disclosure creates opportunities for hidden leverage, particularly in areas where debtor-

³⁴Although there may be general knowledge among banks and broker dealers that other banks and broker dealers will have control security interests in debtors’ accounts, creditors who are not financial institutions may be less knowledgeable. For example, vendors may mistakenly assume that they have a security interest in “proceeds” from the sale goods they supplied. See Lipson, *supra* note 8 at 464–65.

³⁵*Id.* at 465 (quoting U.C.C. § 9-327 cmt. 3).

³⁶U.C.C. § 9-342 (2000).

³⁷See Lipson, *supra* note 8 at 466 n.189.

³⁸*Id.* at 449–50 (“Case law under the strong-arm power is replete with instances of secured parties losing their security interests for reasons that appear, in retrospect, to have been nit-picky, at best, and capricious at worst Even under the [simplified notice requirements of the U.C.C.] . . . [m]istakes in the debtor’s name, descriptions of collateral, or the place of filing have all been used against the secured party.”).

³⁹*Id.* at 452–53.

provided disclosure systems such as financial statements and regulatory filings are inadequate, such as off-balance sheet transactions and derivatives.

B. MINIMAL DISCLOSURE AND HIGHER PRIORITY IN BANKRUPTCY FOR FAVORED FINANCIAL PRODUCTS

An ideal vehicle for hidden leverage will have the following characteristics: (1) priority in bankruptcy for select creditors guaranteeing that the debtor will repay these creditors first; (2) no requirement for creditors to disclose the transaction to other potential creditors; (3) no requirement for the debtor to disclose the transaction on its balance sheet or other financial statements; (4) complexity that limits the usefulness of any disclosures to third parties; and (5) immunity from secret lien doctrine and related provisions of the Bankruptcy Code.

These characteristics roughly describe two types of financial products—asset securitizations and derivatives—which were used by investment banks and insurance companies to hide the extent of their leverage prior to the financial crisis of 2008. This hidden leverage magnified mortgage-related write-downs beyond the ability of banks and insurance companies to absorb losses and thereby led to a financial crisis requiring massive government intervention.

In the recent crisis, asset securitization—including mortgage backed securities and collateralized debt obligations or CDOs—and derivatives—including credit default swaps or CDS—played a critical role. The use of these financial products as vehicles for secret liens is discussed at length below.

1. *Asset securitizations as secret liens*

The discussion of asset securitization that follows relies on a recent article by Professor Kenneth Kettering of New York Law School.⁴⁰

An asset securitization is economically very similar to a secured loan, except that an asset securitization renders the debtor more leveraged and less transparent than the debtor would be if the transaction were structured as a secured loan. As Professor Kettering explains, “[T]he securitization structure that is prototypical of the genre . . . is economically identical to a non-recourse loan [to] the Originator [(the debtor)] secured by the same assets that are used to support the financing under the securitization structure.”⁴¹ Sophisticated lenders prefer to structure their loans as asset securitizations because, if the debtor seeks bankruptcy protection, these lenders theoretically receive a stronger claim on the assets than would be possible under a secured loan. Asset securitization investors are therefore more likely to be repaid in

⁴⁰Kenneth Kettering, *Securitization and its Discontents*, 29 CARDOZO L. REV. 1553 (2008).

⁴¹*Id.* at 1561.

full and on time than traditional secured lenders. As Professor Kettering explains:

The distinctive feature of securitization is that the transaction . . . is structured to isolate the asset pool from the Originator [(the debtor)] in such a way that, if the Originator later becomes subject to an insolvency proceeding, the proceeding will not interrupt the continued receipt by the financiers [(the creditors)] of the payments due to them, as and when due, through realization on the asset pool [T]hat goal may sometimes be referred to as ‘bankruptcy isolation’ of the securitized assets.⁴²

Secured lenders are in a less attractive position if a debtor seeks chapter 11 protection. The Bankruptcy Code attempts to improve the chances that a debtor seeking to reorganize will be able to do so by limiting the rights of secured creditors.⁴³ These limits on the rights of secured creditors benefit unsecured creditors, employees, suppliers, customers, and anyone else who would benefit from a successful reorganization.⁴⁴

Various provisions of the Bankruptcy Code effectively force the secured creditor to continue to extend credit to the debtor-in-possession through the duration of the reorganization. Professor Kettering refers to these limits on secured creditors as a “bankruptcy tax,”⁴⁵ but it may be more illuminating for our purposes to think of these limits as a “mandatory creditor-sponsored bailout”—a bailout that costs taxpayers virtually nothing, but imposes considerable costs on creditors.

The first of these limits, the automatic stay, prevents a secured creditor from seizing and liquidating the underlying collateral to recoup its investment.⁴⁶ Although a secured creditor may seek to have the stay lifted if its interests are not adequately protected, the court may find the secured creditor to be adequately protected and deny this request.⁴⁷ “Adequate protection” is a legal term of art—a secured creditor may be adequately protected even though he is economically worse off.

Post-petition interest accrues (rather than being paid in cash), forcing the secured creditor to bear further delay and the risk of loss from an unsuccessful reorganization.⁴⁸ Secured creditors are not compensated for this delay

⁴²*Id.* at 1556–57.

⁴³*Id.* at 1568; see also Edward J. Janger, *The Death of Secured Lending*, 25 CARDOZO L. REV. 1759, 1759 n.5 (2004), (discussing Grant Gilmore’s “late lamented equity cushion”).

⁴⁴See Kettering, *supra* note 40 at 1568.

⁴⁵*Id.*

⁴⁶See 11 U.S.C. § 362(a).

⁴⁷See 11 U.S.C. § 362(d)(1).

⁴⁸See Kettering, *supra* note 40 at 1567 & n.33 (citing 11 U.S.C. § 506(b)).

with an increased interest rate, even though investors who have a choice between investments of different maturities are typically offered higher interest rates for investments with longer maturities.⁴⁹ If the secured creditor is undersecured he will not be paid any post-petition interest to compensate him for the delay imposed by the stay.⁵⁰

The second limit on secured creditors, cash collateral, permits the debtor-in-possession to use the cash collections received on collateral if the interests of the secured creditor are “adequately protected.”⁵¹ In this context, “adequate protection” may be satisfied if the secured creditor is sufficiently oversecured, or if the debtor-in-possession grants a replacement lien on some illiquid substitute asset.⁵²

The third limit on secured creditors, post-petition financing, permits the debtor-in-possession to use the collateral to secure post-petition financing.⁵³ In some cases, the debtor-in-possession is permitted to “prime” the pre-petition secured lender by granting a security interest to the DIP lender that is superior to the pre-petition secured creditor.⁵⁴ Although the pre-petition secured creditor’s interest in the collateral must be “adequately protected,” as discussed above, the pre-petition secured creditor may be “adequately protected” yet still face greater risk without economically equivalent compensation.

Understandably, secured creditors strongly prefer to avoid these limits imposed by the Bankruptcy Code. Asset securitization promises to exempt creditors from the “mandatory creditor-sponsored bailout”—in effect, to give them a more powerful lien than the Bankruptcy Code permits. In return, creditors will accept a lower yield on securitized debt than they would demand on a traditional secured loan.⁵⁵ Securitization can reportedly lower interest rates by 150 basis points compared to an equivalent secured loan.⁵⁶ Credit rating agencies regularly give securitized debt a higher rating than secured debt because the securitized debt is believed to be bankruptcy-isolated.⁵⁷

⁴⁹The positive correlation between yield and maturity is known as the “upward sloping yield curve.” Although the yield curve is occasionally flat or downward sloping, an upward sloping yield curve is more common.

⁵⁰See Kettering, *supra* note 40 at 1567 & n.33.

⁵¹See 11 U.S.C. §§ 363(c)(2), 363(e).

⁵²*Id.*

⁵³See 11 U.S.C. §364(d) (allowing the bankruptcy estate to use collateral to secure post-petition financing, with priority over a prepetition security interest, if the prepetition secured creditor’s interest is adequately protected).

⁵⁴*Id.*

⁵⁵See Kettering, *supra* note 40 at 1569–70 & n.41.

⁵⁶See Janger, *supra* note 43 at 1769 (citing Lowell Bryan, *The Risks, Potential and Promise of Securitization*, A PRIMER ON SECURITIZATION 171–73 (Leon T. Kendall & Michael J. Fishman eds., 1996)).

⁵⁷See Kettering, *supra* note 40 at 1568–70.

From the creditors' perspective, preferential treatment in bankruptcy compared to secured loans is the primary advantage of asset securitization over secured debt.⁵⁸ This preferential treatment drove the rapid growth of asset securitization.⁵⁹ From 2000 through the first half of 2007, global asset backed securities issuances grew twenty-seven percent per year (Compound Annual Growth Rate), from \$532 billion in 2000, to over \$2.5 trillion in 2006.⁶⁰ Securitization became a leading vehicle of corporate finance, growing from thirty-two percent of US new credit issuance in 1998 to forty-nine percent in 2007.⁶¹

From the debtors' perspective, the primary advantage of asset securitization is that it lowers the cost of borrowing. As just discussed, securitized debt carries a lower interest rate than secured debt. However, this lower interest rate will only benefit the debtor if it is not offset by higher interest rate charges by third party creditors.⁶² These third party creditors should demand a higher interest rate because the debtor is more highly leveraged, securitized creditors have greater priority in bankruptcy than other creditors, and third party creditors therefore face substantially greater risk of non-repayment in case of debtor insolvency.

Asset securitization will create value for the debtor if asset securitization leads some creditors to under-price risk and charge an interest rate that is too low. This will happen either if securitized creditors over-estimate the bene-

⁵⁸Kettering asserts that "[s]ubstantially all of the benefits claimed for securitization are nothing more than consequences of the structure's purported avoidance of the Bankruptcy Tax, and the resulting willingness of the rating agencies to rate securitized debt on the assumption that payments thereon from collections of the securitized assets will not be interrupted by the bankruptcy of the Originator." See Kettering, *supra* note 40 at 1569. Kettering is skeptical of claims that securitization creates benefits through "disintermediation." He notes that banks and other traditional financial intermediaries often extend credit through securitization when the deal is large enough to bear the transactions costs (bankruptcy tax avoidance without disintermediation), and that disintermediation is possible without avoiding the bankruptcy tax. *Id.* at 1570. By contrast, Janger suggests that in addition to bankruptcy remoteness, securitization provides benefits through disintermediation by "making [asset-backed debt] available in smaller denominations to non-specialized investors" and by "allow[ing] smaller investors to enjoy the benefits of risk pooling." See Janger, *supra* note 43 at 1769 & n.53 (citing Steven L. Schwarcz, *The Alchemy of Asset Securitization*, 1 STAN. J.L. BUS. & FIN. 133, 134 (1994)). Of course, selling small quantities of credit risk to investors who have neither the expertise nor the incentive to monitor their investment might benefit debtors more than investors. See Frank Partnoy & David Skeel, Jr., *The Promise and Perils of Credit Derivatives*, 75 U. CIN. L. REV. 1019, 1040-41 (2007); see also AMERICAN SECURITIZATION FORUM, *Restoring Confidence in the Securitization Markets*, Dec. 3, 2008, http://www.sifma.org/capital_markets/docs/survey-restoring-confidence-securitization-markets.pdf at 4-5 ("The market relied too extensively on ratings that in some instances proved overly optimistic. . . . The level of complexity of products developed during the height of the market boom . . . exceeded the analytical and risk management capabilities of even some of the most sophisticated market participants.").

⁵⁹See Kettering, *supra* note 40 at 1563.

⁶⁰See AMERICAN SECURITIZATION FORUM, *supra* note 58 at 24, ex. 8.

⁶¹See *id.* at 38, ex. 18.

⁶²See Steven L. Schwarcz, *The Alchemy of Asset Securitization*, 1 STAN. J.L. BUS. & FIN. 133, 148 (1994).

fits of asset securitization, or if third party creditors underestimate the extent to which the debtor is leveraged through securitization transactions.⁶³

Both mistakes are possible because securitization transactions are less transparent than secured loans. The reasons for this lack of transparency are complex, but may be summarized as follows: secured debt must be disclosed by creditors through U.C.C. filings and by debtors through presentation on their consolidated balance sheets; asset securitizations potentially require neither U.C.C. filings nor disclosure on the debtor's balance sheet.

In an asset securitization, the debtor (or "Originator," the term typically used in documentation) transfers financial assets such as credit card receivables or mortgage receivables to a special purpose entity, or SPE, typically a wholly-owned subsidiary of the debtor. The SPE (or another transferee) issues debt to investors. Investors pay the SPE which then pays the debtor.⁶⁴

For the securitization to isolate the underlying assets from the debtor's bankruptcy, the transfer of assets from the debtor to the SPE must qualify as a "true sale."⁶⁵ Most securitizations do not economically resemble "true sales" because the debtor retains the risk of default or non-performance of the underlying assets.⁶⁶ The debtor retains risk because the debtor owns the equity (or "first loss tranche") in the SPE, and because the debtor may be

⁶³There is a third possible explanation—the "non-adjusting" creditor exploitation hypothesis—that should be mentioned because of the widespread attention it has received in commercial law scholarship. According to this hypothesis, a debtor and its "adjusting" creditors (financial investors) may benefit at the expense of "non-adjusting" creditors such as tort-claimants, who cannot charge higher interest rates, through a bilateral agreement between the debtor and its adjusting creditors that adjusting creditors will receive higher priority in bankruptcy than non-adjusting creditors. See Lucian A. Bebchuk & Jesse M. Fried, *The Uneasy Case for the Priority of Secured Claims in Bankruptcy*, 105 YALE L.J. 857, 891-95 (1996); see also Lynn M. LoPucki, *The Death of Liability*, 106 YALE L.J. 1, 14 (1996) (describing debtor's use of secured debt as "the most complex and the most common of judgment-proofing strategies."). The non-adjusting creditor exploitation hypothesis was originally advanced as a possible explanation for secured credit, but works equally well as an explanation for securitized credit because both give investors higher priority than tort claimants.

However, empirical studies suggest that non-adjusting creditor exploitation does not explain the pattern of secured credit, and that other factors such as reducing risk of non-payment play a larger role. See Ronald J. Mann, *Explaining the Pattern of Secured Credit*, 110 HARV. L. REV. 625, 683 (1997) (finding that "secured credit provides borrowers with benefits that are wholly distinguishable from the cost-shifting benefits condemned in the existing scholarship. Specifically, secured credit lowers the costs of lending transactions not only by increasing the strength of the lender's legal right to force the borrower to pay, but also by enhancing the borrower's ability to give a credible commitment to refrain from excessive future borrowing and by limiting the borrower's ability to engage in conduct that lessens the likelihood of repayment."); see also Yair Listokin, *Is Secured Debt Used to Redistribute Value from Tort Claimants in Bankruptcy? An Empirical Analysis*, 57 DUKE L.J. 1037, 1078 (2008) (finding that firms facing high tort claims do not use secured credit more than firms facing low tort claims). The "non-adjusting" creditor exploitation hypothesis is tangential to this article as long as one accepts that the hypothesis does not fully explain the pattern of secured credit and securitization.

⁶⁴See Kettering, *supra* note 40 at 1564-66; see also Lipson, *supra* note 8 at 468.

⁶⁵See Lipson, *supra* note 8 at 468.

⁶⁶See Kettering, *supra* note 40 at 1570-71; see also Lipson, *supra* note 8 at 469-70.

required to repurchase assets from the SPE if losses reach a level exceeding the equity cushion or another pre-set trigger.⁶⁷

Such guarantee provisions played a critical role in the recent financial crisis. Citigroup, virtually on the brink of insolvency and desperately in need of cash, announced a \$17.4 billion repurchase of assets from one of its SPEs and a write-down of \$1 billion in mid-November 2008.⁶⁸ In response, Citigroup stock lost almost one-fourth of its value.⁶⁹ By the end of the week, the federal government agreed to guarantee \$300 billion in risky Citigroup assets and inject \$20 billion new capital into Citigroup, after having injected \$25 billion only one month before.⁷⁰

Because asset securitizations in which the debtor retains substantial risk more closely resemble secured financings than “true sales,” asset securitizations are vulnerable to recharacterization as secured loans in bankruptcy proceedings.⁷¹ In the sole case that adjudicated this issue before the financial crisis, *LTV Steel*, the bankruptcy court declined to vacate an interim cash collateral order, concluding that the underlying securitization receivables were property of the debtor’s estate, effectively treating the securitization as a disguised secured loan.⁷²

In response to the risk that bankruptcy judges would recharacterize securitizations as secured loans, the securitization industry pushed for legal changes to insulate securitization transactions from judicial scrutiny.⁷³ The securitization industry was unsuccessful in its efforts to amend the Bankruptcy Code to exempt securitized assets from the estate⁷⁴ because of the perceived similarity between asset securitization and Enron’s allegedly fraudulent use of SPEs.⁷⁵

However, the securitization industry successfully promoted the passage of laws in Delaware and several other states that, according to Professor Kettering, “attempt to make an end run around the Bankruptcy Code.”⁷⁶ If these laws, in particular Delaware’s Asset-Backed Securities Facilitation Act,

⁶⁷See Kettering, *supra* note 40 at 1570–71; see also Lipson, *supra* note 8 at 469–70.

⁶⁸David Enrich, *Citi’s Slide Deepens as Investors Bail Out*, WALL ST. J., Nov. 20, 2008, at C1.

⁶⁹*Id.*

⁷⁰David Enrich, Damian Paletta, Matthias Rieker & Carrick Mollenkamp, *U.S. Agrees to Rescue Struggling Citigroup*, WALL ST. J., Nov. 24, 2008, at A1.

⁷¹Kettering describes the legal foundations of asset securitization as “shaky.” See Kettering, *supra* note 40 at 1558.

⁷²See Kettering, *supra* note 40 at 1558 n.17, 1582 n.79 (citing *In re LTV Steel Co.*, 274 B.R. 278, 285–86 (Bankr. N.D. Ohio 2001)); see also Lipson, *supra* note 8 at 471 & n.213.

⁷³Janger, *supra* note 43 at 1775–77.

⁷⁴See Lipson, *supra* note 8 at 471–72 (discussing section 912 of the Bankruptcy Reform Act of 2001, which would have excluded assets subject to qualifying transactions from the debtor’s estate).

⁷⁵*Id.* at 472.

⁷⁶See Kettering, *supra* note 40 at 1558; see also Lipson, *supra* note 8 at 467 n.192 (citing DEL. CODE ANN. tit. 6 § 2701A–2703A (2004); ALA. CODE § 35-10A-2(a)(1) (2004); LA. REV. STAT. ANN. § 10:9-

are valid as literally interpreted, they protect securitization from recharacterization based on economic substance.⁷⁷ By protecting securitization's bankruptcy-remote status, facilitation statutes effectively exempt securitizations from disclosure through creditor U.C.C. filings or through the debtor's balance sheet.⁷⁸

Asset securitizations need not be disclosed through U.C.C. filings because, as a general matter, the U.C.C. requires notice to perfect a security interest but does not require notice of a "true sale."⁷⁹ Facilitation statutes give effect to all transfers that are described as a "sale" in securitization documents. In other words, facilitation statutes override the Article 9 filing requirement.⁸⁰

Asset securitizations need not be disclosed on a balance sheet because under Generally Accepted Accounting Principals (GAAP), asset securitizations may qualify for off-balance sheet treatment if the assets in the securitization are beyond the reach of the debtor in bankruptcy.⁸¹ Under GAAP, a transaction can qualify for off-balance sheet treatment even if the debtor retains most of the risk of non-performance of the assets in the securitization.⁸²

109(e) (West 2002); N.C. GEN. STAT. § 25-9A-102 (2002); OHIO REV. CODE ANN. § 1109.75 (Anderson 2002); TX. BUS. & COM. § 9.109(e) (Vernon 2002)).

⁷⁷See Lipson, *supra* note 8 at 472-73. Delaware's Asset-Backed Securitization Facilitation Statute provides that "[n]otwithstanding any other provision of law . . . a bankruptcy trustee . . . shall have no rights, legal or equitable, whatsoever to reacquire, reclaim . . . or recharacterize as property of the transferor any property" transferred in a securitization. See DEL. CODE ANN. tit. 6 § 2703A(a) (2004). Kettering argues that state laws such as Delaware's may not be effective because federal law may govern what constitutes property of the estate. See Kettering, *supra* note 40 at 1581 (citing *Butner v. United States*, 440 U.S. 48, 55).

⁷⁸See Kettering, *supra* note 40 at 1573.

⁷⁹See Janger, *supra* note 43 at 1771-72. There are exceptions. Notice is required for sales of accounts and chattel paper, and real estate sales must be recorded in land records.

⁸⁰*Id.*

⁸¹Since 1996, qualifying for off-balance sheet treatment has required that the assets in the securitization be beyond the reach of the debtor in bankruptcy. See Kettering, *supra* note 40 at 1573 n.50 (citing FIN. ACCOUNTING STANDARDS BD., *Statement of Financial Account Standards No. 125: Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities* (1996)) ("SFAS 125 introduced the concept of requiring bankruptcy isolation of the securitized assets as a condition of off-balance sheet treatment."). Bankruptcy isolation continues to be a requirement for off-balance sheet treatment. See FIN. ACCOUNTING STANDARDS BD., *Statement of Financial Account Standards No. 140: Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities 3* (2008) (as amended), available at http://72.3.243.42/pdf/aop_FAS140.pdf (hereinafter "SFAS 140"). Securitizations are not completely secret so much as opaque—SFAS 140 requires disclosure in footnotes, but these disclosures may be more difficult for creditors to interpret and may allow more discretion by management than a straightforward presentation on the balance sheet.

⁸²See OFFICE OF THE CHIEF ACCOUNTANT ET AL., U.S. SEC. & EXCH. COMM'N, *Report and Recommendations Pursuant to Section 401(c) of the Sarbanes-Oxley Act of 2002 on Arrangements with Off-Balance Sheet Implications, Special Purpose Entities, and Transparency of Filing by Issuers* 102 (2005), available at <http://www.sec.gov/news/studies/soxoffbalancertpt.pdf> (noting with disapproval that "with respect to securitizations, current standards allow issuers to structure transactions to achieve desired

Bankruptcy law would normally prevent off-balance sheet treatment in that case because an asset securitization in which the debtor retained substantial risk would likely be recharacterized as a disguised financing and therefore not be bankruptcy-remote. However, under the facilitation statutes, the economic substance of the transaction is irrelevant; any “securitization” will be bankruptcy-remote.

Professor Kettering refers to off-balance sheet treatment of asset securitizations as “the prize much coveted by [debtors].”⁸³ Off-balance sheet treatment is a prize because it enables debtors to hide the extent of their leverage from unsophisticated creditors and borrow from them at lower cost.

Financial professionals seek to identify asset securitizations in which a debtor retains risk and consolidate them with the debtor’s balance sheet for purposes of evaluating the debtor’s creditworthiness.⁸⁴ However, not all creditors are so sophisticated. Furthermore, because of limited disclosure of asset-securitizations, even professionals can underestimate the extent of debtors’ exposure to losses from securitized assets.

Sophisticated creditors who structure their investments through asset securitizations are at risk of under-pricing credit to the extent that these creditors rely on guarantees from the debtor to shield them from losses by repurchasing securitized assets. If the debtor is more highly leveraged than creditors realize, the debtor is at greater risk of becoming insolvent, and its guarantees to repurchase assets are of limited value.

Rating agencies such as Moody’s may have led investors in securitized debt to under-price risk because the rating agencies generally gave securitized debt a very high rating on the ground that “companies retain the subordinated interest in the transaction known as the equity tranche or “first-loss” piece, which is where all the risks associated with the asset pool resides.”⁸⁵ These high debt ratings mean that “all practical risk of the performance of the assets remains with Originator [(debtor)] and none is shifted to the financiers [(creditors)].”⁸⁶ However, as the many downgrades of CDOs in 2007 show, the experts were overly optimistic and substantial risk remained with securitized debt investors.⁸⁷

Attempts to make securitization meaningfully more transparent, for example by forcing rating agencies to disclose all of the underlying data they use

accounting results—that is, either sale or borrowing treatment for the items being securitized—for what are economically similar transactions”).

⁸³See Kettering, *supra* note 40 at 1573.

⁸⁴See Kettering, *supra* note 40 at 1572 (noting that credit rating agencies such as Moody’s and S&P adjust their analysis to treat securitizations as if they were on-balance sheet debt).

⁸⁵See Kettering, *supra* note 40 at 1572.

⁸⁶*Id.* at 1571.

⁸⁷*Id.* at 1571 n.44.

to rate debt, have met with strong resistance.⁸⁸

In sum, asset securitization constitutes a secret lien because it grants some creditors a very strong claim on specific assets of the debtor while hiding from other creditors the extent to which the debtor is leveraged and retains risk. Extensive use of these secret liens enabled sophisticated debtors such as investment banks to borrow cheaply, while creditors under-priced risk.

Low cost-financing and extensive leverage magnified positive returns, and for many years investment banking was exceptionally lucrative.⁸⁹ For example, in 2007 average securities industry compensation⁹⁰ was roughly eight times median U.S. household income.⁹¹

Many sophisticated creditors supported asset securitization,⁹² believing they were protected by higher payment priority. However, priority is always relative to other creditors; as securitized assets accounted for an ever larger share of credit in the US economy⁹³ and an ever larger share of creditors' claims,⁹⁴ there was relatively less equity and unsecured credit to absorb losses and shield securitized creditors.

The opaque credit environment that resulted from widespread use of asset securitization was ultimately detrimental to all creditors. If not for the

⁸⁸See Kara Scannell & Aaron Lucchetti, *SEC Tightens Rules for Ratings Firms*, WALL ST. J., Dec. 4, 2008, at C3. ("The SEC also didn't implement an earlier proposal that would have required the rating firms to disclose to the public all underlying information about any debt they are rating. . . . New York Sen. Charles Schumer, a senior Democrat on the Senate Banking Committee, said, 'None of the rules adopted today are a substitute for the larger regulatory reform that is coming next year'. . . . The three major rating firms . . . released statements voicing support for the new SEC rules. Others were more critical. The SEC's rules are 'baby steps' that fail to address 'the underlying problem,' said Janet Tavakoli, a structured-finance consultant in Chicago.")

⁸⁹Fees from structuring and managing asset securitizations also contributed to banks' profitability.

⁹⁰See Jason Bram, James Orr, & Rae Rosen, FEDERAL RESERVE BANK OF NEW YORK, EMPLOYMENT IN THE NEW YORK-NEW JERSEY REGION: 2008 REVIEW AND OUTLOOK 5 (2008), available at http://www.newyorkfed.org/research/current_issues/ci14-7.pdf (reporting that average annual salaries in the securities industry in New York was slightly less than \$400,000); see also Joseph A. Giannone, *Goldman success brings unwanted attention*, REUTERS, Dec. 17, 2007, <http://www.reuters.com/article/reutersEdge/idUSN1433734020071217> (reporting that Goldman Sachs paid bonuses averaging \$600,000 per employee, double the average paid at other firms).

⁹¹See U.S. CENSUS BUREAU, INCOME POVERTY AND HEALTH INSURANCE COVERAGE IN THE UNITED STATES: 2007 at 5 (Sept. 16, 2008) available at <http://www.census.gov/prod/2008pubs/p60-235.pdf> (reporting that median household income in 2007 was \$50,233).

⁹²See Partnoy & Skeel, *supra* note 58 at 1041 ("The purchasers of CDO tranches typically are sophisticated.")

⁹³The percentage of home mortgages that were securitized increased from approximately 10% in 1980 to over 55% in 2008. The percent of commercial mortgage and consumer credit loans that were securitized increased from almost nothing to over 20%. See AMERICAN SECURITIZATION FORUM, *supra* note 58 at 37, ex. 17.

⁹⁴Securitization grew from 32% of available US new credit issuances in 1998 to 49% in 2007. See AMERICAN SECURITIZATION FORUM, *supra* note 58 at 38.

massive government bailout of investment banks, these investors would have realized even more significant losses.

If not for legal changes that permitted secret liens in the form of asset securitization, asset securitization probably would not have grown to a multi-trillion dollar market, and the taxpayer-funded bailout probably would not have been necessary.

2. *Derivatives as secret liens*

Prior to the financial crisis, several investment banks sought to modify the extent of their exposure to CDOs through the use of derivative contracts known as credit default swaps.⁹⁵ CDS are largely unregulated, over-the-counter (OTC) derivative contracts that are economically similar to bond insurance.⁹⁶

In a credit default swap transaction, there are two counterparties, a protection buyer and a protection seller.⁹⁷ The two counterparties place opposite bets on whether a third party will default on its debts (the “reference debt”). In case of a “credit event”—the third party defaults on its debt, restructures its debt, or files for bankruptcy—the protection seller agrees to pay the protection buyer an amount that is calculated based on losses that would be experienced by an investor who holds a “notional” amount of a third party’s debt.⁹⁸ In return for this default protection, the protection buyer pays up-front and periodic fees to the protection seller.⁹⁹

Investment banks can reduce their exposure to CDOs by entering into credit default swap contracts as protection buyers. Banks typically buy

⁹⁵See Kate Kelly, *How Goldman Won Big on Mortgage Meltdown*, WALL ST. J., Dec. 14, 2007, at A1 (“[Goldman’s traders] big bet that securities backed by risky home loans would fall in value generated nearly \$4 billion of profits during the year ended Nov. 30 Those gains erased \$1.5 billion to \$2 billion of mortgage-related losses elsewhere in the firm. . . . During a discussion with [mortgage department head Dan] Sparks and others, [CFO David] Viniar noted that Goldman had big exposure to the subprime mortgage market because of CDOs and other complex securities it was holding Emerging signs of weakness in the market meant that Goldman needed to hedge its bets Mr. Swenson and his traders began shorting certain slices of the ABX, or betting against them, by buying credit-default swaps. . . .”).

⁹⁶*Id.*; see also Partnoy & Skeel, *supra* note 58 at 1050 & n.79; Stephen J. Lubben, *Credit Derivatives and the Future of Chapter 11*, 81 AM. BANKR. L.J. 405, 411–12 (2007). Unlike an insurance contract, a credit default swap does not require that the protection buyer have an “insurable interest” or provide proof of actual loss, i.e., own the third party’s debt at the time of default. Credit default swaps can be used to speculate (or place a “naked” bet), as well as to hedge (or place a “covered” bet). *Id.* at 412 & n.49 (citing N.Y. INS. LAW § 3401 (McKinney 2007) (“No contract or policy of insurance on property made or issued in this state, or made or issued upon any property in this state, shall be enforceable except for the benefit of some person having an insurable interest in the property insured. In this article, ‘insurable interest’ shall include any lawful and substantial economic interest in the safety or preservation of property from loss, destruction or pecuniary damage.”)).

⁹⁷See Lubben, *supra* note 96 at 411.

⁹⁸*Id.* at 411–412. It is not necessary that the protection buyer actually own the bonds and experience any loss.

⁹⁹*Id.*

credit default swap protection from well-capitalized counterparties because as protection buyers they bear risk that the protection seller will become insolvent.¹⁰⁰ For example, prior to the corporate crisis of 2001 and 2002, banks that extended credit to Enron and Worldcom protected themselves from roughly \$18 billion in losses by purchasing credit default swap protection from insurance companies and pension funds.¹⁰¹

Prior to the financial crisis of 2008, several investment banks similarly sought to shield themselves from CDO losses by purchasing credit default swaps from the insurance company AIG.¹⁰² As of September 2008, AIG had sold roughly \$440 billion of CDO protection, much of it to investment banks.¹⁰³ Unfortunately for these investment banks—and for taxpayers forced to bail them out—AIG appears to have used credit default swaps as a kind of secret lien, hiding the extent of its leverage and appearing more creditworthy than it actually was.

Credit default swaps, like most OTC derivatives, are an ideal vehicle for hidden leverage and secret liens because of their inherent complexity, limited disclosure, and superior treatment in bankruptcy.

OTC derivatives are complex for numerous reasons. Unlike exchange-traded derivatives, which are standardized, simplified, and priced by the market through frequent trading, OTC derivatives are custom, bilaterally negotiated, relatively illiquid contracts and therefore difficult to price.¹⁰⁴ The value of the derivative depends on three things: (i) the value of the underlying asset; (ii) the contractually negotiated formula that determines the counterparties' obligations to each other based on that value; and (iii) the creditworthiness of the counterparty to the derivative, which determines the likelihood that the obligation will actually be paid.¹⁰⁵

All three of these variables can be a source of tremendous uncertainty

¹⁰⁰See *id.* at 413 (“In a credit default swap transaction, the protection buyer . . . takes on the risk of concurrent default by both the protection seller and the underlying debtor.”).

¹⁰¹See Partnoy & Skeel, *supra* note 58 at 1021 n.1, 1024 n.7 (citing Alan Greenspan, Chairman Fed. Reserve, *Remarks by Chairman Alan Greenspan before the Council on Foreign Relations* (Nov. 19, 2002), available at <http://www.federalreserve.gov/BoardDocs/Speeches/2002/20021119/default.htm> (concluding that credit derivatives “appear to have effectively spread losses from defaults by Enron, Global Crossing, Railtrack, WorldCom [and] Swissair . . . over the past year . . . from banks, which have largely short-term leverage, to insurance firms, pension funds, or others.”)). Banks used credit derivatives to hedge approximately \$8 billion of risk associated with Enron debt and \$10 billion of risk associated with WorldCom debt. See Partnoy & Skeel, *supra* note 58 at 1021 n.2.

¹⁰²Mark Pittman, *Goldman, Merrill Collect Billions After Fed's AIG Bailout Loans*, BLOOMBERG.COM, Sept. 29, 2008, <http://www.bloomberg.com/apps/news?pid=20601087&sid=aTzTYtINHSG8&refer=home> (last visited Apr. 1, 2009) (reporting that AIG paid Goldman Sachs, Merrill Lynch & Co., Morgan Stanley, and Deutsche Bank AG as much as \$37 billion of federal bailout money).

¹⁰³*Id.*

¹⁰⁴See Lubben, *supra* note 96 at 408.

¹⁰⁵*Id.* at 408, 413.

and complexity. In the case of credit default swaps written on CDO tranches held by financial institutions: (i) the value of the underlying assets is difficult to determine because of the mathematically complex structuring that governs loss allocation among tranches¹⁰⁶ and because of limited information about the credit quality of the underlying loans;¹⁰⁷ (ii) the extent of counterparties' obligations to each other is difficult to determine because of

¹⁰⁶Frank Partnoy and David Skeel describe the analysis used by Standard & Poor's and its investment banking clients to rate different CDO tranches as follows:

The rating agency and client evaluate the tranches of a CDO using a mathematical algorithm. First, they calculate the expected cash flows of the underlying assets over time. Then they determine how those cash flows would be paid out to each tranche over time. The equity, or most junior, tranche absorbs losses up to the first "attachment point." Then the most junior mezzanine tranche absorbs losses up to the next attachment point, and so on. The rating agencies then give a credit rating to each of the tranches (but usually not to the junior tranche) based on assumptions about certain key variables, including expected default rates, recovery rates, and correlation rates among assets.

This process employs sophisticated mathematical techniques. For example, a rating agency might run 100,000 computer simulations to determine the number of times a breach would occur, that is, how often a particular tranche would lose value beyond a specified level. The variable in this assessment is the number of breaches out of the 100,000 runs, not the magnitude of the breach or any qualitative analysis of the breach. For example, for a typical five-year synthetic CDO, S&P might establish a confidence interval for the AAA level of 0.284%, meaning that the particular tranche would be "breached" in 284 runs out of 100,000.

See Partnoy & Skeel, *supra* note 58 at 1030; see also *Hedge Funds, Systemic Risk, and the Financial Crisis of 2007–2008: Hearing Before the H. Comm. on Oversight and Government Reform Hedge Funds*, 110th Cong. 26 (2008) (statement of Andrew W. Lo, Harris & Harris Group Professor, MIT Sloan School of Management), available at <http://oversight.house.gov/documents/20081113101922.pdf> ("Pricing [CDOs] is even more complex, involving a blend of mathematical, statistical, and financial models and computations, all of which are typically done under simplistic assumptions that rarely hold in practice, such as constant means, variances, and correlations that are measured without error. . . . Models such as these are central to the current financial crisis, and their mis-calibration is one possible explanation for how so many firms under-estimated the risks of subprime-related securities so significantly. Unless senior management has the technical expertise to evaluate and challenge the calibrations of these models, they cannot manage their risks effectively.") (hereinafter "Lo Statement").

The complexity inherent in CDOs creates opportunities for sophisticated parties to profit at the expense of less sophisticated investors: "[H]edge funds and other sophisticated investors have incentives to manipulate the pricing and structuring of CDOs, and some studies suggest that CDO managers manipulate collateral in order to shift risks among the various tranches." Partnoy & Skeel, *supra* note 58 at 1040 (citing Kedran Rae Garrison, *Manager Incentives in Collateralized Debt Obligations* 6 (Aug. 15, 2005), available at <http://ssrn.com/abstract=720481>).

¹⁰⁷The rating agency Standard and Poor's allegedly sought to accommodate its investment banking clients by rating CDO tranches without access to information about the underlying loans:

In 2001, [S&P analyst Frank] Raiter was asked to rate an early collateralized debt obligation called "Pinstripe." He asked for the "collateral tapes" so he could assess the creditworthiness of the home loans backing the CDO. This is the response he got from Richard Gugliada, the managing director: "Any request for loan level tapes is TOTALLY UNREASONABLE!!! Most investors don't have it and can't provide it. Nevertheless we MUST produce a credit estimate. . . . It is your responsi-

the subjective nature of determining when a “credit event” has occurred and the risk that disagreement will result in litigation;¹⁰⁸ and (iii) the creditworthiness of counterparties is difficult to determine because they too have extensive and hard-to-measure exposures to derivatives such as credit default swaps.¹⁰⁹

These difficulties might be surmounted by talented and sophisticated risk managers equipped with detailed information such as the identity of all counterparties to derivatives transactions, the text of the contracts that govern them, and the financial models that calculate obligations under the contracts.

Unfortunately, however, even basic information about OTC derivatives transactions can be extremely hard to come by. Market participants themselves are often unaware of the extent of their net exposures¹¹⁰ or the iden-

bility to provide those credit estimates and your responsibility to devise some method for doing so.”

Mr. Raiter was stunned. He was being directed to rate Pinstripe without access to essential credit data. He e-mailed back: “This is the most amazing memo I have ever received in my business career.”

Credit Rating Agencies and the Financial Crisis: Hearing before the H. Comm. on Oversight and Government Reform, 110th Cong. (2008) (statement of Rep. Henry A. Waxman), available at <http://oversight.house.gov/story.asp?ID=2255>.

¹⁰⁸See Partnoy & Skeel, *supra* note 58 at 1039 (“In the context of credit derivatives, counterparties also might use ambiguous terms to their advantage. For example, what is the meaning of the term ‘restructuring’? If payment on a credit derivatives contract is to be made upon an event of ‘restructuring,’ a sophisticated counterparty might argue that the event had been triggered with respect to payments counterparties owed to it, but not with respect to payments it owed to counterparties.”).

¹⁰⁹See Peter Breuer, *Measuring Off-Balance Sheet Leverage*, 26 J. BANK. & FIN. 223, 236 (2002) (“It is impossible to precisely measure leverage for institutions active in derivative markets without full knowledge of their positions, including hedges. . . . [D]ata filed by commercial banks and trust companies in the United States with the Office of the Comptroller of the Currency (OCC) allow a rough approximation. . . . In the absence of better data, the best approximation . . . is an approximation to gross leverage, rather than net leverage because it does not take into account netting across positions. . . . [G]ross leverage ratios . . . have to be interpreted as the upper limit to the [net leverage] ratio. . . .”).

In the case of Lehman Brothers (which as an investment bank was regulated by the SEC, not the OCC), the lack of transparency may have led the market to overestimate the extent of Lehman’s downside exposure: “A lack of disclosure on CDS exposures has frequently led the market to overestimate risks: had it been realized that settlement payments on Lehman swaps would be only \$6 billion, rather than the hundreds of billions feared, much of the turmoil in debt markets could have been avoided.” See THE ECONOMIST, *The Great Untangling*, Nov. 6, 2008, at 85–86. The difficulty of evaluating counterparty risk may be even greater when counterparties include unregulated entities with minimal disclosure requirements. See Lo Statement, *supra* note 106 at 3 (“Without more comprehensive data on hedge-fund characteristics such as assets under management, leverage, counterparty relationships, and portfolio holdings, it is virtually impossible to draw conclusive inferences about systemic risk posed by hedge funds.”).

¹¹⁰See Lo Statement, *supra* note 106 at 27 (“Senior management typically has little time to review the research, much less guide it, and in recent years, many quants have been hired from technically sophisticated disciplines . . . but without any formal training in finance or economics . . . [T]he broad-based failure of the financial industry to fully appreciate the magnitude of the risk exposures in the CDO and CDS markets suggests that the problem was . . . too little knowledge.”).

The derivatives market also faces significant challenges from a large backlog of unconfirmed trades. See

tivity of counterparties to their transactions.¹¹¹ Mandatory disclosures to third parties are even more limited,¹¹² and the industry group, the International Swaps and Derivatives Association, has resisted voluntary disclosure.¹¹³

Partnoy & Skeel, *supra* note 58 at 1026 (reporting an agreement among key derivatives firms to work to resolve the issue); see also Stacy-Marie Ishmael, *Banking Staff Face Derivatives Backlog*, FIN. TIMES, Oct. 25, 2007, at 27 (reporting ongoing difficulties due to increased volumes).

In its 2007 Form 10-K, AIG revealed that it did not understand the value of its credit default swap portfolio. See *Causes and Effects of the AIG Bailout: Hearing before the H. Comm. on Oversight and Government Reform*, 110th Cong. (2008) (statement of Lynn E. Turner, former chief accountant, U.S. Sec. & Exch. Comm'n), available at <http://oversight.house.gov/documents/20081007101007.pdf> (“[C]ontrols over the AIGFP super senior credit default swap portfolio valuation process and oversight thereof were not effective. AIG had dedicated insufficient resources to design and carry out effective controls to prevent or detect errors and to determine appropriate disclosures on a timely basis.”) (hereinafter “Turner Statement”).

¹¹¹See Lubben, *supra* note 96 at 416 (“[M]any credit default swaps were assigned to new protection buyers without the prior consent of the seller. Under the terms of the ISDA Master Agreement, the prior written consent of the other party is required when its counterparty in a trade wishes to assign its position in a trade to a third party. However, this non-conforming practice has apparently been tolerated in the community. Thus . . . it may not be clear which creditors are protected.”); see also Liz Rappaport & Serena Ng, *Spotlight Shines on Swap Brokers*, WALL ST. J., Nov. 13, 2008, at C1 (“‘Everything is supposed to be anonymous before the deal is done,’ said Howard Lutnick, chief executive of Cantor Fitzgerald, which owns an interest in interdealer broker BGC. Mr. Lutnick said his brokerage customers want anonymity. If they didn’t want that secrecy, they wouldn’t trade through brokers.”).

¹¹²See Partnoy & Skeel, *supra* note 58 at 1036 (“Because swaps are structured as over-the-counter (OTC) derivatives, they are largely unregulated. Among other things, this means that the details of particular swaps often go undisclosed.”); see also Lo Statement, *supra* note 106 at 24 (“[A] simple fixed/floating interest-rate swap contract . . . has zero value at the start, hence is considered neither an asset nor a liability, but is an ‘off-balance-sheet’ item. We have learned from experience that off-balance-sheet items can have enormous impact on a firm’s bottom line, hence it is remarkable that our accounting practices have yet to incorporate them more directly in valuation There is no natural way to capture risk from the current GAAP accounting perspective. Yet accounting concepts like capital ratios and asset/liability gaps are used to formulate and implement regulatory requirements and constraints.”).

In response to criticism that accounting standards provided inadequate disclosures regarding derivatives, the Financial Accounting Standards Board promulgated FIN. ACCOUNTING STANDARDS BD., *Statement of Financial Account Standards No. 161: Disclosures about Derivative Instruments and Hedging Activities* (2008), available at <http://www.fasb.org/pdf/fas161.pdf>. However, there remain significant gaps in disclosure standards that limit the forward-looking, predictive value of the disclosures unless there are already clear signs of distress. “[Disclosure of] contingent features . . . capture[s] information about only the reporting entity’s credit-risk-related contingent features for derivatives that are in a liability position at the end of the reporting period (for example, a credit downgrade of the reporting entity). . . . The Board may consider in the future a separate project to enhance disclosures about credit-indexed derivatives such as credit default swaps.” See *id.* at 35.

¹¹³See Partnoy & Skeel, *supra* note 58 at 1036 (“ISDA has actively resisted disclosure of credit default swap documentation, insisting that this information is proprietary”). Some industry participants have recently suggested moving credit default swaps to an exchange, which might somewhat improve transparency with respect to credit default swaps, but not any other OTC derivative contracts. See THE ECONOMIST, *supra* note 109 at 85–86 (“Federal regulators . . . are circling [the credit default swaps market]. Dealers are hoping to head them off with a series of initiatives, which have been stepped up recently at the prompting of the Federal Reserve. Chief among them is the creation of a central clearing house for credit derivatives. Several groups, including a dealer-backed venture led by Intercontinental

Derivatives enjoy widespread use in part because they provide large risk exposure with minimal up-front capital required and minimal disclosure.¹¹⁴ In other words, they permit very high leverage without tell-tale signs on the balance sheet that would alert creditors or regulators.¹¹⁵

With high leverage comes heightened volatility,¹¹⁶ and there have been several well-publicized instances of derivatives losses rendering large and well-capitalized institutions suddenly insolvent. In December 1994, Orange County, California, became the wealthiest municipality ever to file for bankruptcy protection after suffering \$1.7 billion in losses from highly leveraged derivatives.¹¹⁷ In 1995, Barings Bank, the oldest investment bank in London, collapsed after “rogue” trader Nick Leeson lost \$1.3 billion in the futures market.¹¹⁸ In 1998, widely-respected hedge fund Long Term Capital Management (LTCM), whose advisory board included Nobel-prize winning economists Myron Scholes and Robert C. Merton, lost fifty percent of its equity due to derivatives related losses.¹¹⁹ LTCM was on the verge of collapse when the Federal Reserve organized a consortium of fourteen banks and securities firms—LTCM’s largest counterparties—to bail out LTCM by injecting \$3.6 billion in new capital.¹²⁰ In late 2007 and early 2008, leading insurance company AIG’s derivatives trading subsidiary (AIG Financial

Exchange and a tie-up between CME Group, another exchange operator, and Citadel, a hedge fund, are vying for licenses. One or more is likely to be awarded in the next few weeks.”)

¹¹⁴[D]erivative positions (such as futures and options) allow the investor to earn the return on the notional amount underlying the contract by committing a small portion of equity in the form of initial margin or option premium payments.” See Breuer, *supra* note 109 at 225. Derivatives enhance “the ability of highly leveraged institutions to accumulate leverage off the balance sheet and thus their ability to elude the scrutiny of supervisors and . . . counterparty due diligence . . .” *Id.* at 224. “The most striking feature . . . is that total gross off-balance-sheet leverage of the top 25 U.S. commercial banks exceeds total on-balance-sheet leverage by a wide margin . . . a factor as large as 16, with total gross leverage reaching a level as high as 97.” *Id.* at 237–38.

¹¹⁵*Id.* at 224 & n.1 (“[Failed hedge fund] LTCM’s on-balance sheet leverage may have conveyed a misleading picture: News reports indicate that its on-balance sheet leverage ratio moved from a factor of 25 to 167 at the height of the collapse while its (undefined) off-balance sheet leverage ratio moved from a factor of 270 to 2100.”).

¹¹⁶*Id.* at 225–26.

¹¹⁷See John M. Halstead, Shantaram Hegde & Linda Schmid Klein, *Orange County Bankruptcy: Financial Contagion in the Municipal Bond and Bank Equity Markets*, 39 FIN. REV. 293, 294 (2004) (“On December 6, 1994, Orange County, California became the largest municipality in U.S. history to declare bankruptcy. This bankruptcy is prominent not only because of its unprecedented loss of \$1.7 billion, but also because it was caused by a highly leveraged derivatives strategy rather than by fundamental cash flow problems of tax revenue shortages and excess spending.”).

¹¹⁸See Shmuel Vasser, *Derivatives in Bankruptcy*, 60 BUS. LAW. 1507, 1508 (2005) (citing Philip McBride Johnson, DERIVATIVES: A MANAGER’S GUIDE TO THE WORLD’S MOST POWERFUL FINANCIAL INSTRUMENTS ix (1999)); see also Howard Chua-Eoan, *Crimes of the Century: The Collapse of Barings Bank, 1995*, TIME.COM, <http://www.time.com/time/2007/crimes/18.html> (last visited Mar. 30, 2009).

¹¹⁹See Franklin R. Edwards & Edward R. Morrison, *Derivatives and the Bankruptcy Code: Why the Special Treatment?*, 22 YALE J. ON REG. 91, 99–100 (2005).

¹²⁰*Id.*

Products, or AIGFP) lost over \$18 billion on its credit default swap portfolio.¹²¹ AIG, which guaranteed AIGFP's obligations,¹²² was in danger of being unable to meet collateral calls when the Federal Reserve bailed it out by loaning AIG \$85 billion.¹²³

Derivatives may be associated with massive losses in part because it is in the interest of investment managers to use derivatives to take on a moderate probability of extremely high losses.¹²⁴ Investment managers with minimal skill can employ derivative strategies that feature a low probability of very high losses in any given year but have a high probability of generating returns that will attract investors and reward investment managers with large management and performance fees.¹²⁵ Absent detailed disclosure of derivatives positions, it is virtually impossible for investors or regulators to tell such high risk, low-skill strategies from true investment management skill (i.e., generating alpha, or excess returns given the riskiness of the investment strategy)¹²⁶

¹²¹James B. Kelleher, *Buffett's "time bomb" goes off on Wall Street*, REUTERS, Sept. 18, 2008, <http://www.reuters.com/article/newsOne/idUSN1837154020080918?pageNumber=1&virtualBrandChannel=0> (last visited Mar. 30, 2009).

¹²²AIG, FORM 10-K at 179 (2007), http://media.corporate-ir.net/media_files/irol/76/76115/pdf/10K_pdf.pdf ("AIG has issued unconditional guarantees with respect to the prompt payment, when due of all present and future payment obligations and liabilities of AIGFP arising from transactions entered into by AIGFP:").

¹²³See Kelleher, *supra* note 121.

¹²⁴See Dean Foster & H. Peyton Young, *The Not-So-Real McCoy*, INSTITUTIONAL INVESTOR, Dec. 15, 2008, available at http://www.iimagazine.com/alpha/Alpha/Articles/2073776/FEATURES/The_Not-So-Real_McCoy.html ("Let's say you want to deliver a performance record . . . [that will] attract large amounts of money [to your fund]. In fact, it is surprisingly easy to duplicate this performance using the piggybacking strategy as long as investors can't see your positions, and as long as you are willing to accept a small annual probability that your fund could go bust.").

¹²⁵*Id.* ("Here's how to do it: At the start of the year, invest all your funds in the S&P 500. Once a year take a short position in a bundle of asset-or-nothing puts on the S&P 500 that have a nearby expiration date. (An asset-or-nothing put pays out one share of the index if and only if the closing price is less than the strike price on the expiration date. You can create such a derivative by combining a plain-vanilla European put with a cash-or-nothing put, both of which are routinely traded on exchanges.) Let α be the target amount by which you plan to inflate your total return over the next 12 months—the amount of fake alpha. For example . . . you would take $\alpha = 0.07$, which will generate an annual return that is 7 percent higher than the return on the S&P 500. Once you have established the target value of α , choose the strike price so that the options are exercised with probability $\alpha/(1 + \alpha)$. In our present example, the strike price would be chosen so that the probability of exercise is approximately $0.07/1.07 = 0.065$, or 6.5 percent. Now go short the maximum number of puts you can cover. The idea is to go for broke: If the puts are exercised, the fund will be cleaned out; but if they are not exercised, you will increase the number of shares in the fund by the factor $(1 + \alpha)$. In the latter case you just sit back and wait until the end of the year (or any 12-month period), at which time you report that the fund grew by a factor of $(1 + \alpha)$ times the total return on the S&P 500 in that year. (During the entire time you have been fully invested in the S&P 500, which you used as collateral on your options position.) To the investors it looks as if you generated excess returns, and you collect a substantial performance fee. In reality you took a gamble and got lucky.").

¹²⁶*Id.* ("[S]teady growth might look a bit suspicious, but you could dress it up by targeting a value of alpha that varies from one year to the next . . .").

until massive losses result, probably after several years of seemingly strong performance.¹²⁷

It may be in the interest of derivatives dealers such as investment banks to sell such strategies to investment managers because dealers collect substantial transaction fees. Assuming dealers have many customers (preferably with offsetting positions) and a reasonably long time horizon (to minimize “noise” and produce an outcome consistent with statistical predictions), dealers bear minimal investment risk.¹²⁸ As in gambling, the house almost always wins in the long run.¹²⁹ However, derivatives dealers, like casinos that allow customers to place bets on credit, remain vulnerable to counterparty risk—the risk

¹²⁷*Id.* (“A mimic can set up shop and pad the returns on the S&P 500 by an extra 7 percentage points a year. After five years he will collect his performance fee with a probability of more than 70 percent. If the fee is postponed for ten years, he will collect it with a probability of more than 50 percent. . . . In five years such a fund will more than double; in ten years it will more than quadruple.”).

¹²⁸See Jonathan Keath Hance, *Derivatives at Bankruptcy: Lifesaving Knowledge for the Small Firm*, 65 WASH. & LEE L. REV. 711, 721–22 (2008) (“Dealers primarily include large commercial investment banks whose goal is to make money by collecting premiums and other up-front fees while end-users typically include entities seeking to shift certain market risk associated with the company’s assets or liabilities to the dealer.”) (internal quotations omitted). See also *id.* at 722 n.62 (“As a result of acquiring additional risk from an end-user in the derivative transaction, the dealer will, in turn, hedge that market risk by entering into additional agreements with third parties.”) (citing Mark A. Guinn & William L. Harvey, *Taking OTC Derivative Contracts as Collateral*, 57 BUS. LAW. 1127, 1129, n.7 (2000)).

¹²⁹The comparison between derivatives dealers and casinos is not completely accurate because regulations generally prohibit the use of gambling as a hedge, whereas derivatives can be used to hedge (or offload) existing risks. See Thomas Lee Hazen, *Disparate Regulatory Schemes for Parallel Activities: Securities Regulation, Derivatives Regulation, Gambling, and Insurance*, 24 ANN. REV. BANKING & FIN. L. 375, 408 (2005) (“[F]utures, options, and other derivatives contracts are treated as bona fide investment vehicles rather than being regulated as differences contracts or other types of gambling. This is in part because derivatives, unlike gambling, are viewed as providing a useful hedging device for at least some market participants.”).

Regulators permit speculation in derivatives markets because speculation facilitates hedging. *Id.* at 436. (“[O]ne answer to the charge that derivatives are nothing more than legalized gambling is that they provide legitimate hedging opportunities for investors and, more importantly, for commercial participants in the underlying commodities markets. It also is often pointed out that speculators help make markets more efficient by providing additional liquidity, which in turn performs a price discovery function. Commercial participants in the public commodities and derivatives markets (designated contract markets) may thus be relying on speculators to provide them with efficient markets for their hedging activities.”).

However, under a more consistent regulatory regime, gambling could also serve as a hedge for at least some market participants. *Id.* at 434–36 (“Consider, for example, merchants in a city hosting major league baseball who have recently enjoyed great success in the fall as a result of the home team making it through divisional playoffs and into the World Series. The merchants clearly have a legitimate interest in hedging against lost sales due to the absence of a post season event. . . . [T]o the extent that attendance will increase even during the regular season according to the team’s success, there could be an interest in hedging against losses on a daily basis. . . . Presumably, these hedging contracts against a loss in revenues occasioned by losing a game would constitute illegal gambling.”).

Entrepreneurs have recently closed the gap between permissible derivatives and illegal gambling, creating a “futures market” for tickets to championship sporting events. Because the contracts are tradable, they permit risk exposures essentially identical to wagers on the outcomes of individual games. See Alan B. Krueger, *Wait Till Next Year, but Lock In the Ticket Price Now*, N.Y. TIMES, Feb. 2, 2006, at C3, available at <http://www.nytimes.com/2006/02/02/business/02scene.html?ex=1296536400&en=1dad>

that the customer will lose more than he can repay.¹³⁰

Because derivatives users may suddenly and unexpectedly become insolvent—and because the value of leveraged derivatives depends critically on the solvency of counterparties—the derivatives industry has sought to protect itself by persuading Congress to amend the Bankruptcy Code to ensure that derivatives dealers are paid before any other creditors.¹³¹ The original purpose of the bankruptcy exceptions for derivatives was to prevent investment bank failures.¹³² However, the exceptions were subsequently broadened to protect other market participants. The widening of the bankruptcy exceptions for derivatives helped drive growth in the derivatives market—and therefore growth in investment banks' revenue—but it degraded the value of those exceptions as protection against investment bank failures.

As discussed above, the Bankruptcy Code contains several provisions designed to increase the likelihood that a debtor will be able to reorganize.¹³³ These provisions, which may be thought of as either a “mandatory creditor-sponsored bail-out” or as a “tax” on leverage, facilitate reorganization by limiting creditors' rights. Derivatives enjoy unique exceptions from these provisions.¹³⁴

087aa14ece8&ei=5088&partner=rssnyt&emc=rss (last visited Apr. 2, 2009) (“[T]he weekly gambling odds from SportingbetUSA explained 96 percent of the variability in [sports] futures prices.”).

¹³⁰See Hance, *supra* note 128 at 722 (“OTC derivatives place the risk of default not on the exchange but on the individual actions of the OTC counterparty. Performance risk, therefore, remains a paramount concern to parties entering into OTC derivatives.”).

¹³¹See Rhett G. Campbell, *Financial Markets Contracts and BAPCPA*, 79 AM. BANKR. L.J. 697, 712 (2005) (“A cynic might argue that the financial safe harbors are indeed a “bankruptcy opt-out clause” for a certain class of capitalists because their money is more important than everyone else’s. Does that mean that Chapter 11 reorganization rules apply to the average company but not to those who deal in sophisticated financial instruments? At what point does a class of financial instruments or market group become so important that the threat of being mired in bankruptcy sufficiently threatens world financial markets and, as a result, traditional Chapter 11 rules ought not apply?”); see also Edwards & Morrison, *supra* note 119 at 122 (“Our analysis, however, should worry members of Congress and legislators in other countries. They have been lobbied heavily by special interest groups (such as ISDA) to expand the special treatment of derivatives on grounds that such legislation is necessary to prevent a systemic meltdown in OTC derivatives markets should a derivatives counterparty suffer financial distress. Our analysis casts serious doubt on this proposition. Systemic risk may be a real threat, but bankruptcy law has no role to play in minimizing it.”).

¹³²See H.R. REP. NO. 97-420, at 2 (1982) as reprinted in 1982 U.S.C.A.N. 583, 584 (“[T]he Bankruptcy Code (92 Stat. 2549; Public Law 95-598), as enacted in 1978, expressly provides certain protections to the commodities market to insure the stability of the market. These protections are intended to prevent the insolvency of one commodity firm from spreading to other brokers or clearing agencies and possibly threatening the collapse of the market.”). Subsequent amendments contained similar language about mitigating systemic risk by protecting the solvency of derivatives dealers. See Edward R. Morrison & Joerg Riegel, *Financial Contracts and the New Bankruptcy Code: Insulating Markets from Bankrupt Debtors and Bankruptcy Judges*, 13 AM. BANKR. INST. L. REV. 641, 642 n.14 (2005) (citing H.R. REP. NO. 109-31 at 3 (2005) (justifying amendments to Code as “provisions designed to reduce systemic risk.”)).

¹³³See *supra* notes 43–54 and accompanying text.

¹³⁴See Edwards & Morrison, *supra* note 119 at 91 (“[T]he Bankruptcy Code . . . contains numerous

Debtor-friendly provisions from which derivatives are exempt include the prohibition on ipso facto clauses (clauses that terminate a contract upon the debtor filing for bankruptcy);¹³⁵ the automatic stay (which prohibits creditors from seizing and liquidating collateral without permission from the Bankruptcy Court);¹³⁶ the provisions granting debtors-in-possession the right to selectively assume profitable contracts while rejecting unprofitable contracts;¹³⁷ and the provisions granting debtors-in-possession the right to void pre-petition transfers of property that were “not for-value” (i.e., to recover

provisions affording special treatment to financial derivatives contracts, the most important of which exempts these contracts from the ‘automatic stay’ and permits counterparties to terminate derivatives contracts with a debtor in bankruptcy and seize underlying collateral. No other counterparty or creditor of the debtor has such freedom; to the contrary, the automatic stay prohibits them from undertaking any act that threatens the debtor’s assets.”)

¹³⁵See Vasser, *supra* note 118 at 1525 & nn. 110–16 (citing 11 U.S.C. §§ 365(e)(1), 541(c)(1) (prohibiting ipso facto clauses). Derivatives are exempt under the following provisions: 11 U.S.C. § 555 (exception for securities contracts); 11 U.S.C. § 556 (exceptions for forward and commodities contracts); 11 U.S.C. § 559 (exceptions for repos); 11 U.S.C. § 560 (exceptions for swaps); and 11 U.S.C. § 561 (exception for master netting agreements). Contracts for extension of credit enjoy a similar exception. See Edwards & Morrison, *supra* note 119 at 111 n.83 (citing 11 U.S.C. § 365(c)(2)).

¹³⁶See Campbell, *supra* note 131 at 697 n.3 (citing 11 U.S.C. §§ 362(b)(6)–(7), 546(e)–(g), 555, 556), 705–709. There are also exceptions for derivatives. See 11 U.S.C. §§ 362(b)(17), (27).

¹³⁷See Edwards & Morrison, *supra* note 119 at 95–96 (“Generally, when a debtor firm enters bankruptcy, it is party to many ongoing (‘executory’) contracts, in which the debtor and its counterparties have continuing obligations to each other. Some of these contracts will be profitable to the debtor (they are ‘in the money’); others will not be (they are ‘out of the money’). The automatic stay prevents counterparties from taking any step to terminate these ongoing contracts. Instead the debtor has an exclusive right to ‘assume’ profitable contracts and ‘reject’ (i.e., breach) unprofitable ones, the consequence being that the counterparty to the ‘rejected’ contract will receive an unsecured claim for damages, which will usually be paid a few cents on the dollar. In other words, the Bankruptcy Code generally allows debtors to ‘cherry pick’ profitable from unprofitable contracts.”).

The extensive rights of derivatives dealers to setoff through cross-product netting and to terminate contracts upon the debtor’s bankruptcy prevent this sort of “cherry-picking.” See *id.* at 96 (“This cherry-picking power comes to an end, however, when the underlying contracts are derivatives contracts. Thanks to an exemption from the automatic stay, derivatives counterparties typically may terminate ongoing contracts when a debtor enters bankruptcy. Moreover, if a counterparty has entered multiple derivatives contracts with the debtor, the counterparty can set-off in-the-money contracts against out-of-the-money contracts. (The process of terminating and setting-off contracts is often termed ‘close-out netting.’) Finally, if a debtor posted margin or other collateral to support its obligations under these contracts, the counterparty is free to seize it to the extent that the debtor is a net obligor to the counterparty. In other words, thanks to an exemption from the automatic stay, derivatives counterparties can minimize their exposure to losses arising from the insolvency of a debtor. If the debtor has posted collateral sufficient to cover its obligations, the exemptions from the automatic stay effectively eliminate a counterparty’s exposure to loss.”).

However, critics contend that extensive rights to netting and termination for derivatives have created a reverse situation in which non-debtor counterparties can cherry-pick contracts to net, terminate other contracts, and drain cash from the bankrupt debtor. See Campbell, *supra* note 131 at 706 & n.56 (citing *Bankruptcy Reform Act of 1999* (Part III) *Hearing on H.R. 833 Before the Subcomm. on Commercial and Admin. Law of the H. Comm. on the Judiciary*, 106th Cong. 369 (1999) (statement of Prof. Randal Picker, University of Chicago Law School, on behalf of the National Bankruptcy Conference), available at http://commdocs.house.gov/committees/judiciary/hju63847.000/hju63847_of.htm).

payments made before bankruptcy on bad deals) as fraudulent conveyances.¹³⁸

Derivatives counterparties who are eligible for these exceptions enjoy far better treatment under the Bankruptcy Code than even secured creditors.¹³⁹ Unlike secured creditors, derivatives counterparties effectively bear no risk of loss to the extent that the debtor posts collateral to cover its obligations.¹⁴⁰

Derivatives receive treatment in bankruptcy superior even to asset securitization. Whereas asset securitization transactions remain vulnerable to recharacterization as secured financings,¹⁴¹ 2005 amendments to the Bankruptcy Code under the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005¹⁴² (“BAPCPA”), effectively rendered derivatives immune from recharacterization based on economic substance, even if the transactions transparently resemble loans,¹⁴³ as one court recently confirmed.¹⁴⁴

¹³⁸See Morrison & Riegel, *supra* note 132 at 646 & n.32. (citing 11 U.S.C. § 546(e) (declaring that, unless payment is fraudulent transfer under § 548(a)(1)(A), trustee cannot use his powers under §§ 544, 545, 547, 548(a)(1)(B), and 548(b) to avoid margin or settlement payments by or to protected parties to commodity, forward, and securities contracts prior to case commencement); 11 U.S.C. § 546(f) (offering same safe harbor for margin or settlement payments in connection with repurchase agreements); 11 U.S.C. § 546(g) (offering same safe harbor for transfers under or in connection with swap agreements)); *see also* Vasser, *supra* note 118 at 1534 & n.184 (“Protection is supplemented by Bankruptcy Code sections 548(d)(2)(B), (C), (D) and (E) providing that protected parties that receive margin or settlement payments are deemed to have provided value.”).

¹³⁹See *supra* notes 46–54 and accompanying text. Although lenders with executory contracts to extend credit may terminate those agreements upon bankruptcy, ordinary lenders who have already extended credit enjoy relatively limited rights of setoff. Prepetition payments to secured creditors on the eve of bankruptcy are voidable as preferences to the extent that these payments place creditors in a better position than they would have been in bankruptcy. The automatic stay prevents secured creditors from seizing and liquidating collateral.

¹⁴⁰See Edwards & Morrison, *supra* note 119 at 96 (“If the debtor has posted collateral sufficient to cover its obligations, the exemptions from the automatic stay effectively eliminate a counterparty’s exposure to loss.”).

¹⁴¹See *supra* notes 71–77 and accompanying text.

¹⁴²PUB. L. NO. 109-8, 119 STAT. 23.

¹⁴³See Morrison & Riegel, *supra* note 132 at 641 (“The reforms of 2005 direct judges to apply a formalistic inquiry based on industry custom: a financial transaction is a ‘swap,’ ‘repurchase transaction,’ or other protected transaction if it is treated as such in the relevant financial market. The transaction’s loan-like features or its effect on outstanding obligations of the debtor are irrelevant, unless they affect the transaction’s characterization in financial markets. Absent fraud, form trumps substance.”), 656–57 (“Absent badges of fraud . . . [a] combination of financial contracts, even one that mimics a loan, merits protection if the underlying contracts fall within formal categories explicitly protected by the Code. This follows directly from the text of the new Code. It protects not only any transaction that a market participant would call a ‘swap,’ ‘repo,’ ‘forward,’ ‘commodity contract,’ or ‘securities contract,’ but also any combination of such transactions. No exception is made for combinations that, in effect, resemble a loan. Additional support for this conclusion can be found in the new definition of ‘securities contract,’ in section 741(7). It extends protection to ‘any other agreement or transaction that is similar to’ those mentioned elsewhere in the definition, including ‘repurchase or reverse repurchase transactions.’ Thus, a combination of agreements that resembles a repo would seem to merit protection, even if it exhibits loan-like features. The new Code, in other words, places *form over substance* in characterizing protected transactions. A combination of contracts merits protection—regardless of its underlying economics—if the contracts are

Prior to BAPCPA, the prospect that even a subset of exempt derivatives might be recharacterized based on economic substance, raised by a judicial decision which suggested that repos might be recharacterized as secured loans, “sent shockwaves through the financial industry . . . [because it placed] billions of dollars in notional amounts of outstanding repos . . . in danger of being labeled as security interests.”¹⁴⁵ This suggests that a significant portion of the value proposition of derivatives is their superior treatment in bankruptcy relative to secured loans. Legal rules that threaten derivatives’ superior treatment are a threat to the derivatives market and therefore to derivatives dealers.¹⁴⁶

The market for derivatives has grown along with the bankruptcy exceptions that favor them.¹⁴⁷ When the first bankruptcy exceptions for derivatives were introduced in 1978, they applied only to a narrow range of products.¹⁴⁸ The range of products eligible for superior treatment in bankruptcy has since grown dramatically.¹⁴⁹ In 2005, BAPCPA changed the definition of “swaps” such that the exception will automatically encompass virtually any derivative that dealers begin trading as “swaps,” however they may choose to define that term, without any further legislative action.¹⁵⁰

commonly recognized in the marketplace as swaps, forwards, or another type of contract protected by the Code. Indeed, margin loans—loans secured by the debtor’s securities portfolio—are now explicitly protected even though they are, in form and in substance, simply loans.”) (emphases in original).

¹⁴⁴See *Calyon New York Branch v. American Home Mortgage Corp.* (*In re American Home Mortgage, Inc.*), 379 B.R. 503, 516–17 (Bankr. D. Del. 2008) (“The reference to ‘repurchase and reverse repurchase transactions’ is intended to eliminate any inquiry under section 555 and related provisions as to whether a repurchase or reverse repurchase transaction is a purchase and sale transaction or a secured financing. . . . Succinctly stated, if the definition of ‘repurchase agreement’ is met, the section 559 safe harbor provisions apply, period.”).

¹⁴⁵See Jeanne L. Schroeder, *A Repo Opera: How Criimi Mae Got Repos Backwards*, 76 AM. BANKR. L.J. 565, 567 (2002) (discussing *In re Criimi Mae, Inc.*, 251 B.R. 796 (Bankr. D. Md. 2000)). Although repos are sometimes referred to as “financial market contracts” rather than “derivatives,” repos are referred to as “derivatives” throughout this article because they receive essentially the same treatment in bankruptcy as derivative contracts such as forwards, futures, and swaps. See Morrison & Riegel, *supra* note 132 at 641. Repos are equivalent to a forward contract combined with a cash transaction.

¹⁴⁶See THE ECONOMIST, *supra* note 109 (“[For the] big dealers, such as Goldman Sachs and JPMorgan . . . estimates of . . . total revenue related to CDSs run as high as \$30 billion a year.”); see also Carrick Mollenkamp & Charles Fleming, *Why Students Of Prof. El Karoui Are In Demand*, WALL ST. J., Mar. 9, 2006, at A1 (“On average, revenue from derivatives based on stocks now accounts for about 30% of an investment bank’s total revenue from stock-related businesses, according to a Citigroup Inc. report issued in January.”).

¹⁴⁷For a brief history of the growing exceptions for derivatives, see Hance, *supra* note 128 at 737–759.

¹⁴⁸*Id.* at 737–38.

¹⁴⁹*Id.* at 753–55; see also Kettering, *supra* note 40 at 1710 (“Congress has provided broad exceptions from most of the ordinary consequences of bankruptcy for various classes of financial markets contracts, and has seen fit to add to those favored classes from time to time. The Bankruptcy Code of 1978 gave that privileged treatment to ‘commodity contracts’ and ‘forward contracts’; to these favored classes were added ‘security contracts’ in 1982, ‘repurchase agreements’ in 1984, and finally ‘swap agreements’ in 1990.”).

¹⁵⁰See Morrison & Riegel, *supra* note 132 at 651 (“[BAPCPA included] massive changes to the defini-

The derivatives market has also grown dramatically over this time period, from less than \$1 trillion in notional value outstanding globally in the 1980s to over \$280 trillion in 2006.¹⁵¹

The range of market participants eligible to take advantage of the bankruptcy exceptions for derivatives has also grown from a small group of derivatives dealers before BAPCPA to almost any derivatives end-user.¹⁵² This change may have dramatically altered the mix of participants in the derivatives market, as hedge funds rushed in to take advantage of exceptions previously only available to more established players such as banks.¹⁵³

As more creditors extended credit through derivatives,¹⁵⁴ expecting to

tion of 'swap agreement.' Old section 101(53B) defined it as a swap involving currencies, interest rates, commodities, or 'any other similar agreement,' including 'any combination of or 'master agreement for' such agreements. The newly amended definition covers these transactions as well as options, forwards, and futures involving the same subject matter. Additionally, a 'swap agreement' now includes swaps, options, forwards, and futures on debt or equity and various other derivative products, such as credit swaps, total return swaps, and weather options. And there is the familiar opening clause, making clear that nearly all 'similar' agreements are covered as well. These amendments do much more than simply expand the list of protected swaps. They expand it to include virtually every contract traded in derivatives markets. . . . It is difficult to imagine a derivative that would not be encompassed by section 101(53B)."; see also Hance, *supra* note 128 at 754-55 ("Congress determined that the term 'swap agreement' was too limited to address the evolving nature of derivatives agreements. . . . Protected 'swap agreements' now include 'any agreement or transaction that is similar to any other agreement or transaction referred to in [§ 101(53B) of the Bankruptcy Code] and that is of a type that has been, is presently, or in the future becomes the subject of recurrent dealings in the swap markets.'" (citing 11 U.S.C. §§ 101(53B)).

¹⁵¹See Hance, *supra* note 128 at 715 & nn. 17-18 (citing INTERNATIONAL SWAPS AND DERIVATIVES ASSOCIATION, *Summaries of Market Survey Results*, 2006, available at <http://www.isda.org/statistics/recent.html>; Emil E. Henry Jr., Assistant Sec. of the Treasury, *Remarks Before the Fixed Income Forum: Hedge Funds and Derivatives Markets: History, Issues, and Current Initiatives* (Mar. 9, 2006)).

¹⁵²See Morrison & Riegel, *supra* note 132 at 650-52 ("With respect to forward, commodity, and securities contracts, the original Code singled out particular parties for protection—a 'commodity broker, forward contract merchant, stockbroker, financial institution, or securities clearing agency.' . . . [However amendments under BAPCPA] expand the list of protected swaps . . . to include virtually every contract traded in derivatives markets [T]hese amendments also extend the Code's protections to every counterparty to a derivatives contract because the definition of 'swap participant' . . . encompass[es] any entity that 'at any time before the filing of the petition, has an outstanding swap agreement with the debtor.' As a result, the amendments to 'swap agreement,' move the Code from protecting particular parties (to forwards and commodity contracts) to protecting entire derivatives markets."); but see Kettering, *supra* note 40 at 1711 ("[T]he Bankruptcy Code limits the availability of these benefits to particular kinds of counterparties. In the case of securities contracts, commodity contracts, and forward contracts that limitation has some bite, as the Bankruptcy Code generally limits the full range of benefits to narrowly-circumscribed classes of financial professionals (though the 2005 amendments expanded the class of protected counterparties to include any sufficiently large and active participant in financial market contracts of the protected types).").

¹⁵³See INTERNATIONAL MONETARY FUND (IMF), *Global Financial Stability Report: Containing Systemic Risks and Restoring Financial Soundness*, Apr. 2008, at 79 Table 2.3, available at <http://www.imf.org/external/pubs/ft/gfsr/2008/01/pdf/text.pdf> (showing a sharp increase in participation by hedge funds in the credit default swap market relative to banks between 2004 and 2006. Hedge funds increased from 16% of protection buyers to 28%, while banks declined from 67% to 59%. Similarly, Hedge Funds increased from 15% of protection sellers to 31%, while banks declined from 54% to 43%).

¹⁵⁴Virtually all derivatives combine extensions of credit with directional bets. For example, if an

have first priority in bankruptcy, it became harder for those creditors to communicate with one another and monitor debtors' leverage. It became correspondingly easier for debtors to increase the extent of their off-balance sheet leverage, and less likely that debtors would maintain sufficient liquid assets to meet margin calls. In other words, a widening opportunity to use derivatives as secret liens led to a collective action problem among creditors—a collective action problem that shrewd debtors sought to exploit.

This appears to be what happened with AIG. AIG sold roughly \$440 billion in protection on CDOs through credit default swaps.¹⁵⁵ As a protection seller, AIG resembled a borrower who accepts a relatively small amount of money now in return for a promise to pay a larger amount of money in the future.¹⁵⁶ Because AIG had many anonymous creditors,¹⁵⁷ none of its credi-

investor wants to place a leveraged bet that stock X will increase in value, he can either borrow money and buy stock X or he can sell put options and buy call options on stock X. Either series of transactions combines a directional bet with leverage to produce a range of potential gains or losses that is much greater than the size of the initial investment. However, it is possible to structure a series of derivatives contracts in which the directional bets cancel each other out, leaving only an extension of credit. The simplest example is a cash sale combined with a futures contract (i.e., a repo). For additional examples of such derivatives-as-loans structures, see Morrison & Riegel, *supra* note 132 at 658 n.109, 660 n.119. To the extent that an investment bank acts as a pure market-maker in the derivatives market rather than a directional player—in other words, the bank enters back-to-back transactions that cancel each other out—the investment bank can reduce its own financing costs by requiring counterparties to both transactions to post collateral. From the perspective of the investment bank, the collateral is an interest-free short-term callable loan, similar to a checking account (or demand deposit) for a retail bank. The investment bank bears no market risk. Unfortunately for the bank, however, it aggregates counterparty risk. See *supra* notes 128–130 and accompanying text.

¹⁵⁵See *supra* note 102 and accompanying text.

¹⁵⁶A protection seller receives small upfront payments, and possibly periodic fees, in return for taking on the risk that at some future time, the protection seller may have to make a relatively large payment to protection buyers. The difference between a credit default swap and a loan is that the repayment amount and date are contingent on a credit event. Put differently, AIG mixed borrowing with a directional bet. See Morrison & Riegel, *supra* note 132 at 653 (“Many financial contracts have a credit component; one party temporarily extends credit to the other.”), 641 (“[F]orm trumps substance—a desirable outcome, we argue, in light of the impossibility of drawing coherent lines between combinations of ordinary financial contracts and loans, dividends, or debt repurchases.”).

¹⁵⁷AIG did not disclose the identities of its credit default swap counterparties until March 15, 2009, roughly six months after the government's initial \$85 billion aid package (later expanded to over \$170 billion). The disclosures came amid intense criticism of a lack of transparency regarding the use of bailout funds and of executive pay at AIG. See Liam Pleven, Serena Ng & Sudeep Reddy, *AIG Faces Growing Wrath Over Payouts*, WALL ST. J., Mar. 16, 2009, at A1. Even so, AIG emphasized that “disclosure of the counterparties does not change AIG's commitment to maintaining the confidentiality of its business transactions. Our decision to disclose these transactions was made following conversations with the counterparties and the recognition of the extraordinary nature of these transactions.” See AIG NEWS RELEASE, *AIG Discloses Counterparties To CDS, GIA and Securities Lending Transactions*, Mar. 15, 2008, at 2 (internal quotations omitted) available at http://www.aig.com/aigweb/internet/en/files/Counterparties150309RELOnly_tcm385-155648.pdf. The disclosures revealed that roughly \$50 billion in federal aid was paid to credit default swap counterparties from September to December 2008. Roughly \$22.4 billion was paid from AIGFP and \$27.1 billion was paid from Maiden Lane III, an entity created by AIG and the Federal Reserve in November 2008 to assist in winding down AIGFP's CDS contracts.

tors were aware of the full extent of AIG's CDS exposure. Although AIG disclosed the notional amount of its CDS contracts,¹⁵⁸ this information was not sufficient to evaluate its exposure for three reasons. First, some of the CDS contracts could have offset one another if AIG were a protection buyer as well as a protection seller.¹⁵⁹ Second, because the specific debts on which AIG had written protection were not disclosed, it was difficult to know to what extent the CDS contracts were correlated with one another.¹⁶⁰ And third, AIG's disclosures were misleading with respect to the value of its CDS portfolio and the amount of collateral that it would need to post.¹⁶¹

Without detailed communication among creditors (protection buyers),

There were over twenty CDS counterparties, including U.S., U.K., Canadian, Dutch, German, Spanish, Swiss, Danish, and French banks. See AIG NEWS RELEASE, *AIG Discloses Counterparties To CDS, GIA and Securities Lending Transactions, List of Counterparties*, Mar. 15, 2009, available at http://www.aig.com/aigweb/internet/en/files/CounterpartyAttachments031809_tcm385-155645.pdf; Prior to these disclosures, the identities of AIG's credit default swap counterparties were allegedly secret even from founder, former CEO, and large shareholder Maurice "Hank" Greenberg. See Lilla Zuill, *Greenberg Wants More Info from AIG on U.S. Deal*, REUTERS, Dec. 2, 2008, <http://www.reuters.com/article/banking/Financial/idUSN0212774520081203>. There were however, several press reports that correctly identified counterparties prior to the official disclosures. See Mark Pittman, *Goldman, Merrill Collect Billions After Fed's AIG Bailout Loans*, BLOOMBERG.COM, Sept. 29, 2008, <http://www.bloomberg.com/apps/news?pid=20601087&sid=atzTYtlnHSG8&refer=home>; Rick Mollenkamp & Michael Siconolfi, *AIG Faces \$10 Billion in Losses on Bad Bets*, WALL ST. J., Dec. 10, 2008, at C1.

¹⁵⁸See AIG, Form 10-K (2007) *supra* note 122 at 33 ("Approximately \$379 billion of the \$527 billion in notional exposure on AIGFP's super senior credit default swap portfolio as of December 31, 2007 . . .").

¹⁵⁹See Robert Pickel, *Net exposure is the best guide to derivatives' market impact*, FIN. TIMES, Jan. 29, 2008, at 22, available at http://www.ft.com/cms/s/0/80f0e842-ce0c-11dc-9e4e-000077b07658.html?nclck_check=1 (last visited Apr. 2, 2009) ("[C]onventional market use of economically offsetting positions [in credit default swap contracts] . . . reduces the amounts at stake sharply. . . . [T]he \$50,000bn 'notional' or nominal amount [of CDS outstanding] is just that; a nominal figure that references the 'underlying' bonds and loans being protected by use of credit derivatives. Focus on the net exposure of these transactions, many of which hedge or offset one another. A recent Fitch Ratings survey estimates net exposure at less than \$1,000bn."). Robert Pickel is the CEO of ISDA.

¹⁶⁰See *id.* at 22 ("[N]ot all defaults occur suddenly. A market participant that has written net protection will probably have an opportunity to manage its position in response to what is usually a gradual decline in creditworthiness by the reference entity. While this does not alter the net amount of protection written, it clearly reduces the financial impact on that individual participant of the entity's default.").

¹⁶¹See Turner Statement, *supra* note 110 at 3-6 ("[T]ime and time again AIG has failed to provide the requisite transparency to its investors If one follows the disclosures made by the company, they . . . raise questions. For example, in AIG's June 30, 2007 quarterly filing, the company disclosed: ' . . . a downgrade of AIG's long-term senior debt ratings to 'Aa3' by Moody's or 'AA-' by S&P would permit counterparties to call for approximately \$847 million of collateral.' . . . But just six months later in its annual report, the company [made disclosures that seriously called into question the earlier disclosures] as the company disclose[d] (1) that counter parties have questioned the company's valuations and (2) required \$5.3 billion in collateral, as opposed to the \$847 million amount disclosed earlier. . . . Six months later, AIG disclosed in its June 30, 2008 quarterly report that 'AIGFP had posted collateral . . . in an aggregate net amount of \$16.5 billion [and faced] unrealized market valuation losses of \$26.1 billion' In one year, the disclosures from the company had gone from not losing a dollar to over \$26 billion in valuation losses and counter parties that to this day have not been disclosed demanding over \$16 billion in collateral. And on October 3, 2008 the Company disclosed that at the end of September it had borrowed \$61 billion from the federal government due to the liquidity crisis such calls on collateral had placed on

AIG was able to deceive its creditors until a rush of margin calls made its collapse imminent.¹⁶² If the Federal Reserve and Treasury had not stepped in with \$170 billion in emergency loans, capital injections, and distressed asset purchases,¹⁶³ AIG's credit default swap counterparties would have faced one of two unpleasant outcomes. AIG could have rushed to meet margin calls through a value-destroying fire sale of its subsidiaries,¹⁶⁴ potentially failing to make its credit default swap counterparties whole and disrupting global financial markets.¹⁶⁵ Or AIG could have filed bankruptcy to maximize

AIG. Clearly it would seem that in light of this, the company had failed to provide investors with a clear view of the magnitude of the potential demands for collateral.”).

¹⁶²*Id.*

¹⁶³See Mollenkamp & Siconolfi, *supra* note 157 (“The Fed first stepped in to rescue AIG in mid-September with an \$85 billion loan when the collateral demands from banks and losses from other investments threatened to send the firm into bankruptcy court. A bankruptcy filing would have created losses and problems for financial institutions . . . that were relying AIG to insure them. . . . By November, AIG had used up a large chunk of the government money it had borrowed to meet counterparties’ collateral calls and began to look like it would have difficulty repaying the loan. On Nov. 10 the government stepped in again with a revised bailout package. This time, the Treasury said it would pump \$40 billion of capital into AIG in exchange for interest payments and proceeds of any asset sales, while the Fed agreed to lend as much as \$30 billion to finance the purchases of AIG-insured CDOs at market prices.”). Total government aid to AIG has since increased to over \$170 billion. See Liam Pleven, Serena Ng & Sudeep Reddy, *AIG Faces Growing Wrath Over Payouts*, WALL ST. J., Mar. 16, 2009, at A1.

¹⁶⁴See Lynn M. LoPucki & Joseph W. Doherty, *Bankruptcy Fire Sales*, 106 MICH. L. REV. 1, 3–4 (2007) (“We compared the prices for which thirty large public companies were sold with the values of thirty similar companies that were reorganized in the period 2000 through 2004. We found that companies sold for an average of 35% of book value but reorganized for an average fresh-start value of 80% of book value and an average market capitalization value—based on post-reorganization stock trading—of 91% of book value. Even controlling for the differences in the prefilings earnings of the two sets of companies, sale yielded less than half as much value as reorganization. These results suggest that creditors and shareholders can more than double their recoveries by reorganizing large public companies instead of selling them.”).

¹⁶⁵See Ben S. Bernanke, *Stabilizing the Financial Markets and the Economy*, Speech at the Economic Club of New York (Oct. 15, 2008), <http://www.federalreserve.gov/newsevents/speech/bernanke20081015a.htm> (last visited Apr. 13, 2009) (“In the case of AIG, the Federal Reserve and the Treasury judged that a disorderly failure would have severely threatened global financial stability and the performance of the U.S. economy. We also judged that emergency Federal Reserve credit to AIG would be adequately secured by AIG’s assets. To protect U.S. taxpayers and to mitigate the possibility that lending to AIG would encourage inappropriate risk-taking by financial firms in the future, the Federal Reserve ensured that the terms of the credit extended to AIG imposed significant costs and constraints on the firm’s owners, managers, and creditors.”).

Several critics, including former AIG Chairman and CEO Maurice “Hank” Greenberg, have suggested that AIG shareholders and taxpayers would have been better off if AIG had declared bankruptcy, and that the primary beneficiaries of the bailout are AIG’s credit default swap counterparties. See *Causes and Effects of the AIG Bailout: Hearing before the H. Comm. on Oversight and Government Reform*, 110th Cong. 8 (2008) (statement of Maurice R. Greenberg), available at <http://oversight.house.gov/documents/20081007101332.pdf> (“It was not necessary to wipe out virtually all of the shareholder value held by AIG’s millions of shareholders, including tens of thousands of employees and many more pensioners and other Americans on fixed incomes. Those millions of Americans could have fared better if AIG had filed for bankruptcy protection, since they would at least have had the chance of recouping value on their investments in AIG over the longer term. Bankruptcy would not have had to affect AIG’s sound operat-

overall creditor recovery,¹⁶⁶ in which case its credit default swap counterparties would have been general unsecured creditors to the extent that AIG did not post collateral to cover its obligations.¹⁶⁷

If the bankruptcy exception for derivatives had worked as intended, the Federal Reserve's intervention at AIG would not have been necessary to protect AIG's credit default swap counterparties, and taxpayers would not be risking billions in losses.¹⁶⁸ As explained above, the ostensible purpose of the bankruptcy exceptions for derivatives is to protect investment banks

ing companies because the bankruptcy could have been limited to the parent company and impaired subsidiaries. Although AIG stockholders could have fared better if the company had filed for bankruptcy protection, other stakeholders—like AIG's Wall Street counterparties in swaps and other transactions—would have fared worse. Those transactions would have been frozen in a bankruptcy rather than gradually unwound. Although that result could have posed systemic risk absent a broader federal bailout, it's not clear that dismantling AIG was a better solution. Nor is it clear why, in designing a federal response to AIG's short-term liquidity problem, some AIG stakeholders were prioritized over others.”; see also Carol D. Leonnig, *Effectiveness of AIG's \$143 Billion Rescue Questioned*, WASH. POST, Nov. 3, 2008, at A18, available at <http://www.washingtonpost.com/wp-dyn/content/article/2008/11/02/AR2008110202150.html>.

¹⁶⁶See *supra* notes 164–165.

¹⁶⁷Although derivatives have many advantages over secured loans, obligations under derivatives contracts remain vulnerable to losses in bankruptcy to the extent that the debtor has not posted collateral and the non-bankrupt counterparty does not have an obligation to the debtor that it can setoff. See 11 USC § 544 (b)(1) (“[T]he trustee may avoid any transfer of an interest of the debtor in property or any obligation incurred by the debtor that is voidable under applicable law by a creditor holding an unsecured claim that is allowable under section 502 of this title”); 11 USC § 502(c)(2) (“A claim for damages calculated in accordance with section 562 shall be allowed under subsection (a), (b), or (c), or disallowed under subsection (d) or (e), as if such claim had arisen before the date of the filing of the petition.”); 11 USC § 502(h) (“A claim arising from the recovery of property under section 522, 550, or 553 of this title shall be determined, and shall be allowed under subsection (a), (b), or (c) of this section, or disallowed under subsection (d) or (e) of this section, the same as if such claim had arisen before the date of the filing of the petition.”); 11 USC § 553(b)(1) (“Except with respect to a setoff of a kind described in sections 362(b)(6), 362(b)(7), 362(b)(17), 555, 556, 559, 560, 561, 365(h), 546(h), or 365(i)(2) of this title, if a creditor offsets a mutual debt owing to the debtor against a claim against the debtor on or within 90 days before the date of the filing of the petition, then the trustee may recover from such creditor the amount so offset to [a certain specified] extent.”).

¹⁶⁸See Leonnig, *supra* note 165 (“Another concern is that in this depressed market, AIG, and the taxpayers that now own 80 percent of the company, will lose coming and going. The company may be forced to borrow additional federal funds for rising payouts to counterparties. . . . The company also may be forced to sell many more assets at low, fire-sale prices. As part of its loan deal, AIG was to sell some assets—valued at \$1 trillion before the crisis—to raise cash to pay off the loan.”); but see Bernanke, *supra* note 165 (“I would like to stress once again that the taxpayers' interests were very much in our minds and those of the Congress when these programs were designed. . . . In the case of the TARP program, the funds allocated are not simple expenditures, but rather acquisitions of assets or equity positions, which the Treasury will be able to sell or redeem down the road. Indeed, it is possible that taxpayers could turn a profit from the program, although, given the great uncertainties, no assurances can be provided. . . . The larger point, though, is that the economic benefit of these programs to taxpayers will not be determined primarily by the financial return to TARP funds, but rather by the impact of the program on the financial markets and the economy. If the TARP, together with the other measures that have been taken, is successful in promoting financial stability and, consequently, in supporting stronger economic growth and job creation, it will have proved itself a very good investment indeed, to everyone's benefit.”).

from the liquidity problems of derivatives counterparties.¹⁶⁹ Derivatives problems at AIG—a large derivatives counterparty to many investment banks—led to the bailout of AIG. The bankruptcy exception did not work as intended because the complexity, opacity, and superior treatment in bankruptcy of derivatives made them ideal vehicles for secret liens. Although derivatives exposures can make a debtor's financial state virtually impenetrable to creditors,¹⁷⁰ derivatives are not vulnerable to challenge as secret liens under the strong-arm power of § 544.¹⁷¹

As long as this situation persists, unregulated OTC derivatives will continue to be popular. As derivatives become more common, the benefits to sophisticated creditors will shrink even further and the danger to the financial system will grow. When exempt instruments represent a small portion of a debtor's capital structure, exempt instruments offer a significant advantage to sophisticated creditors, because unsophisticated creditors using less favored instruments provide a cushion for losses. However, as more creditors learn to use exempt instruments to lend, the relative size of the cushion offered by less sophisticated creditors shrinks. As a result, debtors' capital structure becomes both more highly leveraged and less transparent.

Although all creditors would be better off if debtor finances were fully transparent, each individual creditor will try to gain an advantage by lending through derivatives, and all will suffer as a result. The dynamic is similar to the prisoner's dilemma,¹⁷² or a positive feedback loop,¹⁷³ or the tragedy of the

¹⁶⁹See *supra* footnote 132 and accompanying text.

¹⁷⁰See *supra* notes 109–115 and accompanying text.

¹⁷¹See *supra* note 138.

¹⁷²The prisoner's dilemma is a game theory framework in which two players make independent decisions without the ability to communicate with one another. The framework's name derives from a situation in which two suspects are held and interrogated separately by the police. See ANATOL RAPOPORT ET AL., PRISONER'S DILEMMA 24 (1965). The outcome for each player depends on his own actions and those of the other player, specifically whether each player chooses to defect (to confess) or to cooperate (to remain silent). If both players cooperate, they will both receive short sentences. If one defects and the other cooperates, the one who defects will go free and the other will receive a very long sentence. If both defect, both will receive sentences of intermediate length. If each is purely self-interested and there are no reputational effects, then both will defect and both will receive intermediate sentences, even though each would have been better off if both cooperated. One "solution" to the dilemma is to enable the players to communicate with one another and coordinate their activities through credible commitments. In the context of secret liens, this means enabling creditors to coordinate with one another by forcing disclosure through a recordation or notice system.

¹⁷³A positive feedback loop is a system that responds to a stimulus by producing additional stimuli in the same direction. In contrast, a system that responds to a stimulus in the opposite direction is called a negative feedback system. Positive feedback loops lead to exponential growth and dramatic movement away from the point of origin, often with explosive and destabilizing results. Negative feedback loops are self-correcting and self-stabilizing. A common example of a positive feedback system is an ecosystem without predators, in which a species will grow exponentially until it exhausts its food source and the population crashes. See DAVID GEOFFREY GREEN ET AL., COMPLEXITY IN LANDSCAPE ECOLOGY 69–71, 111–13 (2006). In the context of secret liens, the ability to borrow cheaply by hiding leverage creates an artificial

commons.¹⁷⁴

IV. CONCLUSION: REVIVING RECORDATION

If not for changes to bankruptcy law over the last thirty years (and commercial law over the last eighty years), creditors seeking priority in bankruptcy would be forced to publicly disclose their claims in full. AIG's CDS counterparties would have had sufficient information to ascertain the full extent of AIG's CDS exposure, and AIG probably could not have sold as much CDS protection as it did. Investment banks with solid risk management practices would either have purchased protection from other more creditworthy issuers or would have curtailed their participation in the CDO market.

Furthermore, investors would have realized that even as investment banks sold them CDOs as safe, highly rated investments, those same investment banks were reducing their own exposure to CDOs through credit default swaps. Investors would have realized that CDOs were riskier than acknowledged by rating agencies and investment banks, and the CDO bubble would probably have burst earlier, when it was smaller and could do less damage.

The CDO market might also have been smaller—and the economic damage less—if creditors who were financing investment banks through secret liens such as CDOs and derivatives had been forced to disclose those relationships. If the full extent of investment bank leverage had been apparent to all, creditors might have demanded higher interest rates or capital reserves, thereby reducing investment banks' leverage and shrinking their balance sheets. Again, the result would have been a smaller and less damaging market crash, possibly not requiring government intervention and taxpayer money.

Almost 200 years ago, common law judges warned of the dangers of secret liens. Legal acceptance of secret liens, they warned, threatened to “put

appearance of superior performance (higher profits with lower risk), which enhances the ability to borrow additional funds cheaply and further inflate financial performance, until losses lead to a dramatic crash. In contrast, a system in which leverage is disclosed is a negative feedback loop system because higher leverage increases the cost of borrowing and limits the extent to which additional leverage may be obtained.

¹⁷⁴The tragedy of the commons is similar to the prisoner's dilemma but with multiple players. The tragedy of the commons is a dilemma in which multiple individuals acting independently in their own self-interest will eventually destroy a shared limited resource through over-exploitation, even when it is clear that it is not in their long term interest to do so. The solution to the tragedy of the commons is either to divide the commons into enclosures by assigning property rights, or to regulate and limit the use of the shared resource. See *id.* at 185. In the context of secret liens, the commons or shared resources are the cash flows and assets of the debtor that back up its obligations to creditors. Assigning property rights is analogous to introducing payment priority through a notice or recordation system for liens, while regulating use of the shared resource is analogous to establishing minimal capital requirements.

an end to all credit.” States responded with recordation systems requiring detailed disclosure of liens.

Congress should incorporate this wisdom into federal law by establishing a universal recordation system for any instrument that gives a creditor priority greater than a general unsecured creditor. The recordation system should apply whether that instrument is a security interest, a derivative, an asset securitization, or anything else financial engineers may invent in the future. As in traditional recordation systems, the instrument should be given legal effect upon recordation. If the instrument is not properly recorded and material mistakes or omissions deprive third parties of important information, the instrument should be subordinate to general unsecured debt.

Recordation should require that creditors post sufficient information for other creditors to assess the impact of the instrument on the creditworthiness of the debtor. For complex instruments such as derivatives, this would presumably include the contract, the financial model used to calculate obligations under the contract, a description of any collateral that is or may need to be posted under the contract, and a sensitivity analysis showing the range of possible obligations under the contract including “best-case” and “worst-case” scenarios for the debtor.

Recordation would also place certain obligations on the debtor to ensure that filings do not present the debtor as more leveraged than the debtor actually is. To prevent fraud, confirmation from the debtor should be required before a creditor can record an instrument. To keep filings up to date and relevant, debtors should be required to post updates whenever a contract is modified or rescinded.

With such detailed and reliable information, creditors could rationally decide for themselves whether to extend credit, on what terms and at what price. Creditors would not need to rely on rating agencies or auditors who might be conflicted or mistaken. They would not need to rely on government or private regulators such as exchanges who might also be conflicted or mistaken. They would not need to rely on disclosures from debtors, who are by definition conflicted and might also be mistaken.

Under the recordation system described above, it would be in the interest of each individual creditor to disclose his relationship with the debtor. The collective action problems that plague creditors would largely disappear.

Unlike previous recordation systems, the system should be universal. It should incorporate all liens, in any form of property. The recordation system should be federal, thereby reducing the redundancy and cost of state-based systems. Although optimal presentation should be worked out in consultation with creditors, the recordation database should at least have the following features. The database should be easily searchable by name of the debtor or the creditor; it should be sortable by counterparty, type of instrument,

type of collateral, size of obligation, date of obligation, and duration of obligation. The database should include hyperlinks between counterparties and include a hyperlinked organizational structure of corporate debtors that maps out the relationships between different legal entities. Costs should be kept to a minimum through electronic filing and low filing fees for creditors, while the database itself should be publicly searchable at no cost.

Broad public access will reduce the likelihood of future credit bubbles or credit crunches because it will make rumors easy to verify or discredit. And with free access for academics and journalists, as well as financial service companies and regulators, problems can be identified sooner, when they are smaller and less likely to lead to systemic risk.

One potential criticism of a more regulated and transparent financial system is that it will be less profitable, will not attract the brightest minds, and will therefore be less innovative. As Chairman of the Federal Reserve Board, Alan Greenspan made this argument—albeit in more subtle form—in testifying against derivatives regulation.¹⁷⁵ Shortly before the financial crisis, a variation of this argument was also used by some U.S. political leaders with strong ties to the financial services industry to urge deregulation through reduced mandatory disclosure and reduced liability.¹⁷⁶

¹⁷⁵*Financial Derivatives Supervisory Improvement Act of 1998: Hearing before the H. Comm. on Banking and Financial Services, 105th Cong. (1998) (statement of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System), available at <http://www.federalreserve.gov/BOARDDOCS/TESTIMONY/1998/19980724.htm> (last visited Apr. 4, 2009) (“Professional counterparties to privately negotiated contracts . . . have demonstrated their ability to protect themselves from losses from fraud and counterparty insolvencies. . . . The huge increase in the volume of OTC transactions reflects the judgments of counterparties that these instruments . . . add significant value to our financial structure, both here in the United States and internationally. . . . Inappropriate regulation distorts the efficiency of our market system and as a consequence impedes growth and improvement in standards of living.”). After the financial crisis of 2008, Greenspan admitted that he may have been “partially” wrong in opposing derivatives regulation. See Edmund L. Andrews, *Greenspan Concedes Error on Regulation*, N.Y. TIMES, Oct. 23, 2008, at B1.*

¹⁷⁶See Charles Schumer & Michael Bloomberg, *Sustaining New York’s and the US’ Global Financial Services Leadership* (Jan. 22, 2007), available at http://www.abanet.org/buslaw/committees/CL116000pub/materials/library/NY_Schumer-Bloomberg_REPORT_FINAL.pdf (last visited Apr. 14, 2009). The report was commissioned by Mayor Bloomberg and Senator Schumer, who jointly signed the preface and endorsed the findings, and was prepared by the consulting firm McKinsey & Company. The report’s recommendations include the following: “[N]ew guidance should enable auditors and management to exercise more judgment rather than rely on specific rules. It should also emphasize materiality—i.e., what really important to investors and management—rather than comprehensiveness” *Id.* at 98. “[B]usiness professionals believe that the pendulum has swung toward excessive litigiousness, imposing unreasonable costs on market participants. . . . [T]he legal environment is detrimental to America’s spirit of entrepreneurialism and innovation. . . . [U]nless significant changes are made to America’s litigation system, financial services businesses will likely continue to shift an increasing share of their activities to less litigious jurisdictions.” *Id.* at 101. The report praised the UK’s less burdensome regulatory regime. *Id.* at 17 (“Business leaders increasingly perceive the UK’s single, principles-based financial sector regulator—the Financial Services Authority (FSA)—as superior to what they see as a less responsive, complex US system of multiple holding company and Industry segment regulators at the federal and state

Under the circumstances, this criticism is overly cynical. It assumes that even after the worst financial crisis since the Great Depression, the most talented investment professionals, like cartoon villains, are motivated purely by mercenary considerations. In fact, investment banks have foregone bonuses for top-ranked executives and accepted pay limits to secure government assistance.¹⁷⁷ Furthermore, many investment professionals have acknowledged the importance of greater transparency,¹⁷⁸ even if it reduces profitability. For example, industry participants have supported standardizing credit default swaps and trading them on an exchange, a move that would increase transparency and is expected to reduce profit margins on each trade (but perhaps increase trading volume).¹⁷⁹

A recordation system furthers the goal of transparency by preventing exchanges and other private data collection agencies from withholding important information from creditors.¹⁸⁰ A recordation system will also increase transparency of derivatives that continue to be traded OTC (i.e., OTC derivatives other than credit default swaps). Although these other OTC derivatives may not have played a role in the financial crisis of 2008, without mandatory disclosure they will likely contribute to future financial crises. Financial products that were not involved in the financial crisis nevertheless have the potential to serve as vehicles for secret liens and hidden leverage to

levels. Regulatory enforcement style also matters, with the UK's measured approach to enforcement seen as more results-oriented and effective than a US approach sometimes described as punitive and overly public."'). Ironically, a report commissioned by the Mayor of London on the UK's financial competitiveness suggested that, in the wake of the financial crisis, more stringent regulation would make the UK more competitive. See Review of Competitiveness of London's Financial Centre, *London: Winning in A Changing World* 7 (June 2008), available at <http://www.london.gov.uk/mayor/economy/docs/london-winning-changing-world.pdf> (last visited Mar. 29, 2009) ("In the wake of the financial crisis, the industry and regulatory authorities must act together to rebuild the UK's reputation. The industry must support the Financial Services Authority's planned move from risk-based supervision to a more intense supervisory model and do all it can to support the creation of a new global regulatory framework. The Government must urgently review the UK's administration laws to restore trust in London-based financial services subsidiaries of overseas firms. Statutory immunity must be granted to whistleblowers as one step to establishing 'credible deterrence' to insider dealing."').

¹⁷⁷See David Enrich, *At Citigroup, Bonuses Are Cut as Part of Bailout Agreement*, WALL ST. J., Jan. 2, 2009, at C3; see also Erich Dash & Louise Story, *Citigroup's Top Executives to Forgo '08 Bonuses*, N.Y. TIMES, Dec. 31, 2008, at B1.

¹⁷⁸Industry-led drives toward greater transparency include the American Securitization Forum's Project RESTART for mortgage backed securities. See American Securitization Forum, *Overview of ASF Project RESTART*, <http://www.americansecuritization.com/story.aspx?id=2655>.

¹⁷⁹See John Glover & Hamish Risk, *Exchange-Traded Credit Derivatives Poised to Curb Bank Monopoly*, BLOOMBERG.COM, Dec. 11, 2008, <http://www.bloomberg.com/apps/news?pid=20601100&sid=AUKjpHV5t9FA&refer=Germany> (last visited Apr. 1, 2009).

¹⁸⁰If public disclosures are content-rich but wanting in terms of presentation or ease of use, private fee-based services will likely reorganize the data into a more user-friendly format. For example, Dun & Bradstreet gathers information for its credit reports in part from state-based filing systems.

the extent that they are opaque and receive superior treatment in bankruptcy.

Another flaw in the critique is that it implicitly assumes the profitability of financial institutions will always depend on information asymmetries that create opportunities to exploit investors. Mandatory disclosure and new regulation may shift investment banks' efforts away from hiding leverage and beautifying balance sheets and toward value-creating innovation, such as developing more reliable, lower cost, and more data-rich trading platforms. Such operational improvements are protectable by patent, copyright and trade secret, and would not be endangered by a recordation system.

This critique is also flawed because it ignores the fact that, absent government assistance, financial institutions cannot be profitable unless they attract private investors. Investors experienced severe losses because they placed their faith in the assurances of bankers, rating agencies, and regulators. Next time around, they will demand facts—the kind of cold, hard, unfiltered facts that only a recordation system—armed with the threat that improperly recorded claims will be subordinate—can provide.

The beauty of a recordation system is that it relies on self-interested creditors to put their own interests ahead of debtors by making a full and complete disclosure in return for payment priority. It relies on creditors to use the disclosed information to price and distribute capital appropriately. It frees creditors from reliance on intermediaries who can profit by misleading them. It lays the ground work for a truly transparent, efficient capital market with minimal government intervention.

Another possible criticism of recordation is that it will be too expensive, but this seems unlikely. Costs of preparing filings will likely be minimal. Market participants already have all of the required materials on hand. Market participants will have a copy of the contract and at least one financial model on hand. If each party has a different financial model, recordation will force them to agree up-front on which model reflects the terms of the contract, thereby avoiding litigation down the road. Market participants with good risk management practices will also have run scenario analyses to evaluate possible outcomes under the contract. Publicly filing these analyses will reassure investors that a company has strong internal controls.

Costs of maintaining the database will likely also be reasonable. For comparison purposes, TRACE, the Trade Reporting and Compliance Engine for corporate bonds, charges a trade reporting fee of \$20-\$80 per month plus at most \$2.375 per trade.¹⁸¹ Unlimited data access is free for individuals and

¹⁸¹FINANCIAL INDUSTRY REG. AUTH. MANUAL 7730 *Trade Reporting and Compliance Engine* (a), (b), http://finra.complinet.com/en/display/display_main.html?rbid=2403&element_id=4480 (last visited Apr. 1, 2009).

non-professionals and \$400 per-month for non-profits.¹⁸² Professional investors pay anywhere from \$60 per month to \$7,500 per month, depending on the level of access and number of display terminals they require.¹⁸³

Costs are also likely to be lower now than at any point in the near future because of reduced labor costs. Many financial professionals with intimate knowledge of asset securitization and derivatives are currently unemployed. Those who are willing to accept modest compensation could help the government develop the new recordation system and assist creditors who wish to record their claims. Given the weakened state of many financial service firms following the financial crisis, the government may wish to subsidize creditors' efforts, at least in the short-run.¹⁸⁴ This would simultaneously boost investor and consumer confidence, and yield lasting benefits of greater financial stability.

The SEC reports spending a total of \$124 million in 2007 on disclosure efforts.¹⁸⁵ This comes to approximately 0.003% of the government's commitment under the bailout.¹⁸⁶ If the costs of a recordation system are similar to the costs of disclosures under the securities laws, recordation will pay for itself 29,000 times over in any year in which it prevents the need for a government bailout of financial institutions comparable to the bailout of 2008.¹⁸⁷

The appropriate question is not how much disclosure costs but how much less it costs than the alternative.

Another possible criticism of recordation is that disclosure by creditors is redundant. According to this critique, improved disclosure from debtors under GAAP, or improved monitoring from intermediaries such as derivatives exchanges, credit rating agencies, or regulators, will make disclosure of individual transactions by creditors unnecessary.

The problem with this reasoning is that disclosures under GAAP come from debtors and are audited by professionals whom they select and compensate. Intermediaries can be similarly conflicted, or can make mistakes. One of the best ways to ensure the reliability of information is to have multiple

¹⁸²*Id.* at 7730 *Trade Reporting and Compliance Engine* (c).

¹⁸³*Id.*

¹⁸⁴President Obama has called his stimulus plan "the largest new investment in national infrastructure since the creation of the federal highway system in the 1950s." See Beth Fouhy, *Cas- Poor States Eager for a Piece of Obama Plan*, ABCNEWS.COM, Jan. 2, 2009, <http://abcnews.go.com/Politics/wireStory?id=6566448> (last visited Apr. 14, 2009). Although the Obama plan emphasizes physical infrastructure projects such as roads, bridges, and broadband internet access, given the origins of the economic downturn in financial services, the administration may wish to extend the stimulus to financial infrastructure as well.

¹⁸⁵U.S. SEC. & EXCH. COMM'N, *FY 2009 Congressional Justification* 23, Feb. 2008, available at <http://www.sec.gov/about/secfy09congbudgjust.pdf>.

¹⁸⁶ $\$124 \text{ million} / \$3.6 \text{ trillion} = 0.003\%$

¹⁸⁷ $1 / 0.003\% = 29,032$. This treats the full \$3.6 trillion government outlay as an expense. If one assumes instead that only 1/3 of the bailout commitment is an expense, disclosure still pays for itself almost 10,000 times over in any year that it prevents a bailout.

sources and minimal filters—i.e., to require disclosure by both debtors and creditors. Creditors should have the opportunity to trust but verify.

The last criticism of recordation is that such a system deprives creditors and debtors of their basic privacy by mandating disclosure.

This criticism is misleading. Recordation only mandates disclosure of *liens*. Creditors who are content with a subordinate claim—and debtors who are willing to compensate them for the additional risk by paying a higher interest rate—do not need to disclose their dealings. Recordation simply imposes greater transparency as a cost of priority. It forces sophisticated parties to internalize risks that secret liens enable them to offload onto unsophisticated investors and taxpayers. The result will likely be a financial system that is more stable, more efficient, and more just.

