The Economic Logic of the Lease/Loan Distinction

In Defense of the Status Quo

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ABSTRACT

The Bankruptcy Code accords much more favorable treatment to lessors than secured lenders, but legal scholars have yet to identify a normative justification for the disparate treatment of the two transaction types. Law-and-economics scholars have written off the lease/loan distinction as "vacuous"; meanwhile, courts and commentators alike have called on Congress to abolish the distinction entirely. This Paper argues that the lease/loan distinction—far from being vacuous—actually forms an integral component of a statutory scheme that maximizes aggregate welfare. Specifically, the status-quo lease/loan distinction compels market actors to internalize depreciation costs into their decisions regarding asset use.

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The Economic Logic of the Lease/Loan Distinction:
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I. Introduction

Over the past few decades, leading law reviews have devoted thousands of pages to articles arguing that the "full priority" treatment of secured credit is economically efficient.[1] Over the same period, perhaps as many pages have been devoted to articles calling the efficiency of secured credit into question.[2] In 1983, Professor R.M. Goode characterized the secured credit

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[1] *See, e.g.*, David Gray Carlson, *On the Efficiency of Secured Lending*, 80 VA. L. REV. 2179 (1994); Steven L. Harris & Charles W. Mooney, Jr., *A Property-Based Theory of Security Interests: Taking Debtors' Choices Seriously*, 80 VA. L. REV. 2021(1994); Thomas H. Jackson & Anthony T. Kronman, *Secured Financing and Priorities Among Creditors*, 88 YALE L.J. 1143 (1979); Homer Kripke, *Law and Economics: Measuring the Economic Efficiency of Commercial Law in a Vacuum of Fact*, 133 U. PA. L. REV. 929 (1985); Saul Levimore, *Monitors and Freeriders in Commercial and Corporate Settings*, 92 YALE L.J. 49 (1982); Minh Van Ngo, *Agency Costs and the Demand and Supply of Secured Debt and Asset Securitization*, 19 YALE J. ON REG. 413 (2002); Robert J. Rosenberg, *Beyond* Yale Express: *Corporate Reorganization and the Secured Creditor's Rights of Reclamation*, 123 U. PA. L. REV. 509 (1975); Steven L. Schwarcz, *The Easy Case for the Priority of Secured Claims in Bankruptcy*, 47 DUKE L.J. 425 (1997); James H. Scott, Jr., *Bankruptcy, Secured Debt, and Optimal Capital Structure*, 32 J. FIN. 1 (1977); Paul M. Shupack, *Solving the Puzzle of Secured Transactions*, 41 RUTGERS L. REV. 1067 (1989); James J. White, *Efficiency Justifications for Personal Property Security*, 37 VAND. L. REV. 473 (1984).

[2] *See, e.g.*, Lucian Arye Bebchuk & Jesse M. Fried*, The Uneasy Case for the Priority of Secured Claims in Bankruptcy*, 105 YALE L.J. 857 (1996); John Hudson, *The Case Against Secured Lending*, 15 INT'L REV. L. & ECON. 47 (1995); Lynn M. LoPucki, *The Unsecured Creditor's Bargain*, 80 VA. L. REV. 1887 (1994), Alan Schwartz, *Security Interests and Bankruptcy Priorities: A Review of Current Theories*, 10 J. LEGAL STUD. 1 (1981) [hereinafter Schwartz, *Current Theories*]; Schwartz, *The Continuing Puzzle of Secured Debt*, 37 VAND. L. REV. 1051 (1984); Robert E. Scott, *The Truth About Secured Financing*, 82 CORNELL L. REV. 1436 (1997); *see also* William J. Woodward, Jr., *The Realist and Secured Credit: Grant Gilmore, Common Law Courts, and the Article 9 Reform Process*, 82 CORNELL L. REV. 1511 (1997) (questioning the distributive fairness of rules that afford full priority to secured creditors).

debate as a "battle";[3] in 1997, Professor Elizabeth Warren analogized it to an all-out war.[4] At the dawn of a new decade, the secured credit conflict rages on.[5]

All the while, relatively few scholars have weighed in on whether the full priority treatment of true leases promotes efficient outcomes.[6] Indeed, it appears that no article in a U.S. law journal has dealt squarely with the question since 1991.[7] But although leasing has been relegated to the peripheries of legal academia, leasing lies near the base of the capital structure of many U.S. firms. By one estimate, leases account for more than one-quarter of all new capital equipment acquisitions by U.S. businesses.[8] Approximately 70% of Fortune 100 firms[9]—and

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[3] *See* R.M. Goode, *Is the Law Too Favourable to Secured Creditors*, 8 CAN BUS. L.J. 53, 57 (1983).
[4] *See* Elizabeth Warren, *Making Policy with Imperfect Information: The Article 9 Full Priority Debates*, 82 CORNELL L. REV. 1373, 1379 (1997).
[5] Recent contributions to the secured credit debate include Brian M. McCall, *It's Just Secured Credit! The Natural Law Case in Defense of Some Forms of Secured Credit*, 43 IND. L. REV. 7 (2010); and Richard Squire, *The Case for Symmetry in Creditors' Rights*, 118 YALE L.J. 806 (2009).
[6] *But see* John D. Ayer, *On the Vacuity of the Sale/Lease Distinction*, 68 IOWA L. REV. 667 (1983) [herinafter Ayer, *Vacuity*]; *Further Thoughts on Lease and Sale*, 1983 ARIZ. ST. L.J. 341; Amelia H. Boss, *Leases and Sales: Ne'er Where Shall the Twain Meet?*, 1983 ARIZ. ST. L.J. 357; Margaret Howard, *Equipment Lessors and Secured Parties in Bankruptcy: An Argument for Coherence*, 48 WASH. & LEE L. REV. 253 (1991). Of these authors, only Professor Howard takes a firm stance on whether lessors should be entitled to priority over other claimants in bankruptcy. *See* Howard, *supra*, at 301 ("[G]iving [lessors] a secured claim in an amount equal to the value of the equipment's residual . . . , plus an unsecured claim for contractual damages, would be fully compensatory."). Professor Ayer is agnostic as to whether leases should be treated like loans in bankruptcy or whether loans should be treated like leases. Similarly, Professor Boss takes no position on whether lessors should receive priority over other creditors in bankruptcy. Although she questions the utility of the lease/loan distinction for Article 9 filing purposes, Boss, *supra*, at 384, and defends the lease/loan distinction for the purposes of determining remedies outside bankruptcy, *id.* at 392, she never states whether bankruptcy is an area in which the "distinction is irrelevant and should be abandoned" or whether bankruptcy is an area in which "similar treatment is inappropriate and distinctions are necessary." *Id.* at 361; *see also id.* at 362 n.26 ("An extensive analysis of the policies behind the Bankruptcy Act and their application to the sale-lease distinction is . . . beyond the scope of this article.").
[7] *See* Howard, *supra* note 6.
[8] SCOTT BESLEY & EUGENE F. BRIGHAM, ESSENTIALS OF MANAGERIAL FINANCE 720 (14th ed. 2008).

approximately 80% of all U.S. companies[10]—lease some of their equipment. A recent study of 4,718 public companies in the U.S. found that the firms' off-balance-sheet lease commitments were equal to 35% of their reported liabilities.[11] And according to one account, leasing is the "largest source of external finance" for small businesses.[12]

Not only does leasing play an important role in the capital structure of individual firms,[13] but personal property leasing is a significant sector of the U.S. economy: in 2007, the most recent year for which data are available, revenues from the rental and leasing of non-real-estate tangible assets summed to $120 billion (up from $95 billion in 2002), and the non-real-estate rental and leasing sector employed approximately 640,000 people in the U.S.[14]

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[9] *Id.*
[10] *See* Alessandro Gavazza, *Asset Liquidity and Financial Contracts: Evidence from Aircraft Leases*, 95 J. FIN. ECON. 62, 62 (2009).
[11] Elizabeth MacDonald, *Debt Hazards Ahead*, FORBES.COM, June 18, 2007, http://www.forbes.com/forbes/2007/0618/080.html. That figure—from research conducted by Professor Matthew Magilke of the University of Utah—includes both real property and personal property leases. Although this Paper focuses on the definition of leases in section 1-203 of the UCC, which only governs personal property leases, courts tend to look to section 1-203 even when evaluating leases of real property. *See, e.g.*, United Airlines, Inc. v. HSBC Bank USA (*In re UAL Corp.*), 416 F.3d 609, 616 (7th Cir. 2005) (stating that California's law of real property leases follows the UCC's "functional approach to separating leases from secured credit with respect to personal property"); Big Buck Brewery & Steakhouse, Inc. v. Eyde (*In re* Big Buck Brewery & Steakhouse, Inc.), 2005 U.S. Dist. LEXIS 10754, at *15, *18 (E.D. Mich. May 25, 2005) (affirming the decision of a bankruptcy judge who "borrow[ed] from the jurisprudence of the Uniform Commercial Code" in determining that a sale and leaseback transaction of real property was a "disguised financing arrangement rather than a true lease" under Michigan law).
[12] Gavazza, *supra* note 10, at 62.
[13] This Paper will focus on commercial leases rather than consumer leases. The latter are governed by a large body of federal and state law in addition to section 1-203 and Article 2A of the UCC. *See, e.g.*, Consumer Leasing Act of 1976, Pub. L. No. 94-249, 90 Stat. 257, codified at 15 U.S.C. § 1667 (2006); Uniform Consumer Leases Act (2001). Thus, to the extent that it discusses bankruptcy restructurings, this Paper will focus on Chapter 11 rather than Chapter 13.
[14] These numbers were calculated from figures for NAICS code 532 in the two most recent Economic Censuses. *See* U.S. Census Bureau, Sector 53: EC0753I2: Real Estate and Rental and Leasing: Industry Series: Preliminary Comparative Statistics for the United States (2002 NAICS Basis): 2007 and 2002, http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-ds_name=EC0753I2&-_lang=en (last visited May 23, 2010).

Although leasing is central to U.S. financial system, lease law occupies an interstitial position in the U.S. legal system. While lease-related issues are largely litigated in the bankruptcy context, the Bankruptcy Code itself never defines the word "lease."[15] Thus, federal bankruptcy courts faced with disputes over leases must turn to state commercial law for guidance.[16] In forty-nine states and the District of Columbia,[17] section 1-203 of the Uniform Commercial Code controls the definition of true leases for personal property.[18] But the UCC's drafters only made passing mention of the bankruptcy implications when they were crafting the lease/loan distinction.[19]

Although the UCC's official comments do not dwell on the bankruptcy implications of the lease/loan distinction, the Bankruptcy Code "accords radically different consequences" to transactions based on whether they fall on the "lease" or "loan" side of the divide.[20] More precisely, the Bankruptcy Code accords radically more favorable treatment to the lessor than to

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[15] *See* E. Carolyn Hochstadter Dicker & John P. Campo, *FF&E and the True Lease Question: Article 2A and the Accompanying Amendments to UCC Section 1-201(37)*, 7 AM. BANKR. INST. L. REV. 517, 519 (1999).
[16] *In re* Powers, 983 F.2d 88, 90 (7th Cir. 1993) ("[W]hether . . . a lease constitutes a security interest under the bankruptcy code will depend on whether it constitutes a security interest under applicable State or local law.") (citation omitted); *see also In re UAL Corp.*, 416 F.3d at 615 ("Leases are state-law instruments, after all, and the norm in bankruptcy law is that . . . leases . . . have the same force they would have in state court, unless the Code overrides the state entitlement."). *But see id.* ("A state law that identified a 'lease' in a formal rather than a functional manner would conflict with the Code . . . .").
[17] Louisiana is the only state that has not adopted Article 2A of the UCC. *See* National Conference of Commissioners on Uniform State Laws, A Few Facts About UCC Article 2A – Leases, http://www.nccusl.org/Update/uniformact_factsheets/uniformacts-fs-ucc2a8790.asp (last visited May 23, 2010).
[18] Although Article 2A governs personal property leases, the definition of true lease has been relocated to section 1-203 of the UCC, under the heading of "General Definitions and Principles of Interpretation," *See* U.C.C. § 1-201 cmt. 35 (2004).
[19] *See* § 1-203 cmt. 2. ("On common law theory, the lessor, since he has not parted with title, is entitled to full protection against the lessee's creditors and trustee in bankruptcy") (quoting 1 GRANT GILMORE, SECURITY INTERESTS IN PERSONAL PROPERTY § 3.6, at 76 (1965)).
[20] *See* Ayer, *Vacuity*, supra note 6, at 667.

the secured lender. While leases and secured loans are both subject to section 362 of the Bankruptcy Code (the "automatic stay")[21] at the outset of the bankruptcy process, the treatment of lessors and secured creditors diverges as the process moves forward. Under section 365 of the Bankruptcy Code, the bankruptcy trustee may decide whether to assume or reject the debtor's leases at any point prior to the confirmation of the bankruptcy plan.[22] However, the trustee may only assume the lease if she "cures, or provides adequate assurance that the trustee will promptly cure," the debtor's default.[23] Moreover, section 365 does *not* give the court any authority to modify the terms of the lease agreement. Thus, if the trustee assumes the lease, the lessor acquires a priority claim for the full amount of all lease obligations (both past and future).

Just as the Bankruptcy Code allows the trustee to reject unwanted leases, the Bankruptcy Code likewise allows the trustee to abandon the collateral that secures any of the debtor's loans if the property "is burdensome . . . or . . . of inconsequential value and benefit to the estate."[24] But there, the similarity between the bankruptcy treatment of leases and loans comes to an end. If the trustee chooses to keep the collateral, the secured lender does not necessarily receive a priority claim to the outstanding principal and interest. Under section 506, the bankruptcy court must "bifurcate" the secured creditor's claim into secured and unsecured components.[25] First, the court assigns a value to the collateral held by the bankruptcy estate. To the extent that her claim is "secured" by the value of the collateral, the creditor enjoys priority over other parties that make

[21] 11 U.S.C. § 362 (2006).
[22] 11 U.S.C. § 365(d)(2). For residential real property leases under Chapter 7, the trustee faces a shorter timeframe (within sixty days unless the court extends the period "for cause"). § 365(d)(1). A court may also, at its discretion, accelerate the trustee's timeframe for assuming or rejecting commercial real and personal property leases.
§ 365(d)(2).
[23] § 365(b)(1)(A).
[24] § 554(a).
[25] § 506(a).

claims on the bankruptcy estate. By contrast, the "unsecured" portion of the creditor's claim—the amount owed to her over and above the value of the asset—is paid out at the same rate as all the debtor's other general unsecured liabilities. Sometimes, this amounts to nothing; more commonly, unsecured creditors receive partial payment—but far less than secured creditors. According to one recent study, the mean recovery rate on unsecured claims in Chapter 11 is 52 cents on the dollar (compared to 92 cents on the dollar for secured claims).[26] Moreover, the "cramdown" provision of the Bankruptcy Code allows the court to restructure the borrower's payment plan as long as secured creditors receive "deferred cash payments . . . of at least the value" of their secured claim.[27] Despite the language in the Bankruptcy *Code*, bankruptcy *courts* often "underestimate the collateral's market value and the appropriate interest rate . . . so that the payment stream falls short of the collateral's full value."[28]

The interactions between section 1-203 of the Uniform Commercial Code and sections 365 and 506 of the Bankruptcy Code frequently generate results that might seem strange to anyone who is not well-versed in lease law. Consider the case of a trucking company that acquires possession of a vehicle worth $20,000 and with a useful economic life of ten years. Imagine that the trucking company finances the purchase with a secured loan that will be paid off over ten years in annual increments of $2,000.[29] If the trucking company files a Chapter 11 petition at any point before the end of the ten years, the transaction would be subject to section 506 of the Bankruptcy Code (allowing the bankruptcy judge to bifurcate the lender's claim into

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[26] Douglas C. Baird, Arturo Bris & Ning Zhu, *The Dynamics of Large & Small Chapter 11 Cases: An Empirical Study* tbl. 1. (Am. Law & Econ. Ass'n Annual Meetings, Paper No. 2, 2007), *available at* http://law.bepress.com/alea/17th/art2.
[27] § 11129(b)(2)(A)(ii).
[28] *In re* Wright, 492 F.3d 829, 830 (7th Cir. 2007) (Easterbrook, J.).
[29] Of course, a lender would only agree to these terms if the time value of money were zero. *See infra* note 128 (extending this Paper's analysis of the lease/loan distinction to account for a positive time value of money).

secured and unsecured components and adjust the trucking company's payment plan). Now imagine that the same trucking company finances the acquisition of the same vehicle through a nine-year lease, with annual rent of $2,000. Under the terms of the agreement, possession of the truck reverts back to the lessor at the end of the nine years. If the trucking company files a Chapter 11 petition at any point before the end of nine years, the transaction will be subject to section 365 of the Bankruptcy Code rather than section 506. If the trustee or debtor-in-possession chooses to assume the lease, the bankruptcy judge will have no authority to bifurcate the lessor's claim or adjust the trucking company's rent payments.[30]

Now imagine that under the terms of the lease described at the end of the previous paragraph, the trucking company has an option to buy the vehicle outright for $1 at the end of the nine-year period. (Ignore, for the time being, the question of why a lessor might agree to such a deal.[31]) If the trucking company files for Chapter 11 and the trustee or debtor-in-possession petitions the bankruptcy court to recharacterize the transaction as a loan, the court will almost certainly agree.[32] But if the trucking company has an option to buy the vehicle for $2,000 at the

[30] *See, e.g.*, *In re* Allied Printing, 344 B.R. 153, 155 (Bankr. M.D. Fla. 2005) (holding that a transaction involving two plate-printing machines was a true lease, not a security interest, when the lease lasted for four years and the lessor testified that the useful economic life of the equipment was at least eight years).

[31] The lessor might be interested in tax benefits, since the lessor—as the owner of the asset—would have the right to deduct depreciation from income for tax purposes. However, the Tax Reform Act of 1986, Pub. L. No. 99-514, 100 Stat. 2085, eliminated many of the tax shelters that had made leasing an especially attractive means of tax avoidance. *See* Steven A. Sharpe & Hien H. Nguyen, *Capital Market Imperfections and the Incentive To Lease*, 39 J. FIN. ECON. 271, 281 (1995).

[32] *Cf.* U.C.C. § 1-203(b)(4) (stating that a transaction qualifies as a security interest—not a true lease—if "the lessee has an option to become the owner of the goods for no additional consideration or for nominal additional consideration upon compliance with the lease agreement"). Indeed, a trustee or debtor-in-possession would probably prevail on this issue at the summary judgment stage. *See, e.g.*, Bankr. Estate of Wing Foods, Inc. v. CCF Leasing Co. (*In re* Wing Foods), 2010 Bankr. LEXIS 114, at *13 (Bankr. D. Idaho Jan. 14, 2010) (holding that an agreement under which plaintiff/debtor Wing Foods, the ostensible "lessee," had the right to

end of the nine-year term, the court will almost certainly hold that the transaction is a true lease.[33] In other words, the debtor's attempt to bifurcate the lessor's claim and extend the payment plan will succeed when the terms of the agreement are *less* favorable to the lessor—but will fail when the terms of the agreement are *more* favorable to the lessor. Instead of protecting unsecured creditors from harsh lease terms, the current law only offers aid to unsecured creditors when the lease terms are already quite generous.

While the distinctions drawn by the UCC may seem counterintuitive, billions of dollars hinge on whether a transaction falls on the lease or loan side of the section 1-203 divide.[34] But legal scholars have yet to identify a normative basis for the preferential treatment of leases in bankruptcy. As Professor Homer Kripke memorably wrote in a 1982 book review, "[t]he man from Mars, with a clear eye undistorted by training in law," would find long-term leases and secured loans to be "precisely the same thing except that that . . . at the end of a [lease], the remaining life of the property belongs . . . to the supplier of funds . . . . The similarities are so great that the differences should fade into insignificance."[35]

In his book review, Professor Kripke only mentioned the bankruptcy implications of the lease/loan distinction in passing.[36] One year later, Professor John Ayer attacked the Bankruptcy Code's lease/loan distinction head-on. Ayer began from the premise that leases and secured loans

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purchase a walk-in refrigerator for $1 at the end of the twenty-four month term was a disguised security interest, and that "Plaintiff is entitled to summary judgment on this issue . . . .").

[33] *See, e.g.*, Cress v. Agristor Leasing, Inc., 1991 U.S. App. LEXIS 29487, at *6-7 (10th Cir. Mar. 1, 1991) (holding that under Kansas law, which incorporates section 1-203 of the UCC, an arrangement allowing the lessee/debtor to acquire farm equipment for fair market value at the end of an eight-year term is a true lease "as a matter of law").

[34] By one estimate, "trillions of dollars" hinge on the lease/loan distinction. *See* Michael J. Abatemarco & Anthony M. Sabino, *"True Lease" Versus Disguised Security Interest: Is the* United *Trilogy Truly the Last Stand?*, 40 U.C.C.L.J. 445, 447 (2008).

[35] Homer Kripke, Book Review, 37 BUS. LAW. 723, 727 (1982) (reviewing B. FRITCH & A. REISMAN, EQUIPMENT LEASING – LEVERAGED LEASING (2d ed. 1980)).

[36] *Id.* at 723.

represent "different ways of allocating the risks and rewards attendant on certain economic assets."[37] But "because the risks and rewards in question can be the subject of an infinite variety of allocations,"[38] Ayer argued, "[i]t is an exercise in false concreteness to try to reduce them to two categories."[39] Thus, Professor Ayer concluded that the Bankruptcy Code's drafters should "abolish this pointless and distracting distinction."[40]

In the past twenty-seven years, Professor Ayer's article has elicited approval—but little critical consideration—from other legal academics. In one influential *Yale Law Journal* article, Professor Lynn LoPucki described Ayer's argument as "persuasive[]."[41] Professors Lucian Bebchuk and Jesse Fried cited Ayer approvingly in their seminal 1996 contribution to the secured credit debate.[42] Meanwhile, most scholars who have written about the lease/loan distinction after Ayer have simply sidestepped his argument.[43] Indeed, perhaps the only

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[37] Ayer, *Vacuity*, supra note 6, at 670.
[38] *Id.* at 670.
[39] *Id.* at 681.
[40] *Id.* at 668. A handful of bankruptcy courts have taken note of Professor Ayer's critique. *See, e.g.*, *In re* Puckett, 60 B.R. 223, 233 (Bankr. M.D. Tenn. 1986) (describing Ayer's article as a "highly provocative analysis"). *But see also In re* Steffen, 181 B.R. 981, 987 (Bankr. W.D. Wash. 1995) (citing Ayer but concluding that "[w]hether the policy of treating secured sales differently from leases is wise, logical, or philosophically elegant, that is the policy Congress enacted").
[41] Lynn M. LoPucki, *The Death of Liability*, 106 YALE L.J. 1, 64 n.270 (1996).
[42] Bebchuk & Fried, *supra* note 2, at 928 ("[T]o the extent that leases are similar to secured loans, there would appear to be no economic or other reason for treating the arrangements differently in bankruptcy.").
[43] *See, e.g.*, Corinne Cooper, *Identifying a Personal Property Lease Under the UCC*, 49 OHIO ST. L.J. 195, 197 (1988) (acknowledging that "[a]s a matter of legal scholarship, the analytical basis for distinguishing [leases from security interests] may be minimal, to some even nonexistent," but stating that "[t]his Article does not take sides in this controversy"); Robert W. Ihne, *Seeking a Meaning for "Meaningful Residual Value" and the Reality of "Economic Realities"—An Alternative Roadmap for Distinguishing True Leases from Security Interests*, 62 BUS. LAW. 1439, 1439 (2007) ("This article makes the . . . assumption[that] . . . notwithstanding some scholarly thought, a distinction between leases and secured transactions is a tenable and useful distinction within corporate law"). Prior to Professor Ayer's critique, Peter Coogan argued that leases and security interests ought to be distinguished for the purpose of determining whether the

academic to take up Ayer's challenge and defend the lease/loan distinction under the UCC and the Bankruptcy Code is Frank Easterbrook, who did so in his judicial—rather than his professorial—capacity.[44]

In a 2005 case arising out of United Airlines' $23 billion bankruptcy,[45] Judge Easterbrook cautioned that judges should not seek to serve the role of "oracles."[46] But Judge Easterbrook nonetheless sought to divine an as-yet-undiscovered economic logic from the Bankruptcy Code, the UCC, and California common law[47] on leases. Judge Easterbrook reasoned that "[i]n order to distinguish financial from economic distress, the [Bankruptcy] Code effectively treats the date on which the bankruptcy begins as the creation of a new firm, unburdened by the debts of its predecessor."[48] According to Judge Easterbrook, "rent" under a true lease is an expense of the "new firm," whereas debt under a secured loan is a burden of the "old firm." If the new firm cannot pay its rent, it should be liquidated; thus, there is little reason to write down the debtor's lease obligations or to impose a cramdown interest rate on lessors. By

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lessor/creditor has an obligation to dispose of the collateral according to UCC Article 9's requirements: "It makes no sense to tell the lessor to sell his own property in order to collect the lessee's obligation to him." Peter F. Coogan, *Is There a Difference Between a Long-Term Lease and an Installment Sale of Personal Property?*, 56 N.Y.U. L. Rev. 1036, 1048 (1981). However, the "radical[] . . . consequences" of the distinction between leases and security interests under the Bankruptcy Code arise when the lessee/debtor does *not* reject or abandon. *Cf.* Ayer, *supra* note 6, at 692 ("If the estate is willing to relinquish the property . . . the lessor and secured creditor are likely to wind up in the same position, although by different routes. . . . Interesting anomalies begin to appear, however, if the transferor wants to get the property back . . . and the trustee does not want to give it to him.").

[44] United Airlines, Inc. v. HSBC Bank USA (*In re* UAL Corp.), 416 F.3d 609 (7th Cir. 2005).

[45] In its Chapter 11 filing in 2002, United listed $22.7 billion in assets, making it the largest bankruptcy filing by a U.S. airline up to that point. Edward Wong, *Airline Shock Waves: The Overview; Bankruptcy Case Is Filed by United*, N.Y. TIMES, Dec. 10, 2002, at C1.

[46] *In re UAL Corp.*, 416 F.3d at 616.

[47] Since the transaction at issue was a real property lease at the San Francisco International Airport, California common law rather than the UCC was controlling. However, Judge Easterbrook concluded that the California common law approach to the lease/loan distinction is "similar" to section 1-203 of the UCC and focused his analysis on the latter. *See id.*

[48] *Id.* at 613.

contrast, if a firm can meet its rent obligations but not its old debt, then its operating cash flow is positive: the firm is worth saving, and its debt service should "be adjusted to deal with financial distress."[49]

Already, two commentators have concluded that Judge Easterbrook's effort—along with the Seventh Circuit's rulings in a pair of companion cases[50]—has "vanquished"[51] the lease/loan debate. As Professors Michael Abatemarco and Anthony Sabino wrote recently, "[T]he 'true lease' versus disguised security interest controversy is now over. Truly, the *United* trilogy is the last stand."[52] But given the importance of leasing to U.S. capital markets, and given that Judge Easterbrook's opinion leaves many questions about the lease/loan distinction unanswered,[53] it would be a shame if *United* ended a debate that—unlike its secured credit counterpart—has barely begun.

This Paper juxtaposes Professor Ayer's argument alongside Judge Easterbrook's to determine whether the lease/loan distinction is indeed a "vacuous" one, as Professor Ayer claims, or whether the distinction fits into the Bankruptcy Code's overall scheme of distinguishing the "'old' firm" from the new one, as Judge Easterbrook maintains. I conclude that the lease/loan distinction is *not* vacuous, but nor can it be justified based on the theory that Judge Easterbrook articulates. Rather, I will argue that the distinction between a true lease, on the one hand, and a secured loan, on the other, hinges on whether the provider of funds (the lessor/lender) bears the cost of depreciation to the underlying asset. If the answer is no, economic

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[49] *Id.*
[50] United Air Lines, Inc. v. HSBC Bank USA (*In re* United Air Lines, Inc.), 453 F.3d 463 (7th Cir. 2006) (Manion, J.); United Airlines, Inc. v. U.S. Nat'l Bank Ass'n (*In re* United Airlines, Inc.), 447 F.3d 504 (7th Cir. 2006) (Manion, J.).
[51] Abatemarco & Sabino, *supra* note 34, at 499.
[52] *Id.*
[53] *See infra* Section II.B.

efficiency considerations may weigh in favor of characterizing the transaction as a loan, which will shift deprecation costs back to the provider of funds through the section 506 bifurcation process. If the answer is yes, then the efficiency argument for characterizing the transaction as a loan is much weaker. Valuation litigation under section 506 is a messy process: it is costly for both sides (as well as for bankruptcy courts), and outcomes are "notoriously unpredictable."[54] Since the lessor *already* internalizes the cost of depreciation in a true lease (and thus *already* has an incentive to facilitate efficient asset use), then there is little reason—or, at least, little *efficiency*-related reason—to engage in the expensive section 506 bifurcation process for true leases.[55]

This Paper finds support for the "depreciation externalities" argument not only in economic theory—but also in the letter of the law. If there is one guiding principle of UCC section 1-203, it is that a "true lease" transaction *must* leave the lessor with a "meaningful residual interest" in the underlying asset. I am not the first commentator to draw attention to the concept of "meaningful residual interest." More than twenty years ago, Professor Corinne Cooper wrote that the *sine qua non* of a "true lease" is that "there is a meaningful residual

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[54] *See* Keith Sharfman, *Judicial Valuation Behavior: Some Evidence From Bankruptcy*, 32 FLA. ST. U. L. REV. 387, 387 (2005).

[55] This analysis assumes that the underlying asset is depreciable. Of course, a loan can be secured by accounts receivable or by real property that may *appreciate* in value over the life of the loan. However, a loan secured by accounts receivable is unlikely to be mistaken for a lease, as a "lease of accounts receivable" is, as far as this author is aware, a nonexistent concept. (A search for "lease of accounts receivable" in LexisNexis's database of federal and state cases yields zero hits.) Moreover, the treatment of lessors is not necessarily more favorable than the treatment of lenders in real property transactions. Section 502 of the Bankruptcy Code caps lessors' claims for damages under unexpired leases of real property. The cap allows the lessor to recover "the rent . . . for the greater of one year, or 15 percent, not to exceed three years, of the remaining term of the lease." 11 U.S.C. § 502(b)(6). Thus, this Paper's focus on durable goods transactions can be justified based on the fact that significant conflicts over the characterization of a transaction as a lease or a loan are only likely to arise in the durable goods context.

returning to the lessor."[56] However, this Paper's original contribution is that it explains *why* the law should care about the allocation of the residual. By contrast, Professor Cooper disclaimed any attempt to attach section 1-203 to a normative foundation: "[T]he job of lawyers is not to continue to question whether any distinction exists," Cooper wrote. Others who have sought to shed light on section 1-203 have simply "assum[ed] . . . a distinction between leases and secured transactions is . . . tenable and useful."[57] This Paper explains explicitly *why* the lease/loan distinction may be tenable and useful. The distinction encourages the allocation of capital to the most productive uses because it forces parties to factor depreciation costs into their decisions regarding asset utilization and asset maintenance.

Part II of this Paper analyzes existing explanations for the lease/loan distinction. First, it considers the "risk-opportunity" approach, which distinguishes leases from loans based on whether the "the 'risk' associated with an item" remains with the lessor (a "true lease") or whether it shifts from the creditor to the borrower (a loan).[58] The rationale for this approach is that it (ostensibly) protects a firm's unsecured creditors from expropriation. Assuming that (some of) a firm's unsecured creditors lack the ability to protect themselves against rent-seeking behavior on the part of the borrower, a firm should not be allowed to use lease law in order to shift wealth from its unsecured creditors to more sophisticated lessors. The problem with the "risk-opportunity" approach is that its initial assumption—that loans shift more "risk" to the borrower than leases shift to the lessee—does not stand up to scrutiny. Rather, in a short-term rental arrangement, the lessee assumes (most of) the risk that the price of the asset will rise, and in a secured loan, the borrower assumes (most of) the risk that the price of the asset will fall. If

[56] Cooper, *supra* note 43, at 218.
[57] Ihne, *supra* note 43, at 1439 n.1.
[58] *See* Boss, *supra* note 6 at 363.

our goal is to prevent firms from shifting risk onto their unsecured creditors, then it is still not clear which transaction—a lease or a loan—should cause us more concern.

Moreover, I argue that the UCC and the Bankruptcy Code do not follow Judge Easterbrook's distinction between "old" and "new" lease/loan expenses. Indeed, section 365 of the Bankruptcy Code makes clear that a debtor is liable for "old" lease expenses if it assumes a lease in reorganization. Although a strong normative argument might be made for Judge Easterbrook's distinction between the "old" and "new" firms, the Bankruptcy Code expressly disclaims that distinction. The treatment of leases under current bankruptcy law must be justified—if at all—on other grounds.

Part III of this Paper argues that, under current law, the distinction between a lease and a loan hinges on whether the transaction shifts depreciation costs to the lessee/debtor's unsecured creditors; if so, the transaction creates a security interest, not a true lease. I present a rudimentary formal model to show that if the parties to a durable goods transaction do not bear the full cost of depreciation, then depreciation may occur at a faster rate than if the asset were put to its most economically efficient use. But as long as the lessor's residual interest in the asset at the end of the lease term is more than nominal, the lessor has an incentive to monitor the lessee's use of the asset (including the lessee's investment in maintenance) and to intervene if the lessee's use of the asset amounts to economic waste. To the extent that the Bankruptcy Code adopts the UCC's distinction between true leases and security interests, bankruptcy courts can prevent a lessor/lender and a lessee/debtor from imposing the cost of depreciation on the debtor's unsecured creditors.

Part IV concludes by considering the distributive implications of the lease/loan distinction. Professor Margaret Howard has argued that, from an equity perspective, lessors

ought not receive “full compensation . . . when other parties are expected to absorb their pro rata share of losses flowing from the insolvency . . . of their common debtor.”[59] Indeed, the case law in this area would seem to suggest that “true lease” status benefits lessors at the expense of unsecured creditors—since it is usually lessors and unsecured creditors who are adversaries in litigation, and it is almost always the lessor who argues for true lease status. But Part IV explores this argument in further detail and finds that unsecured creditors—in the aggregate—may be better off under the status quo than under an alternate scenario in which leases are treated like secured loans under section 506 of the Bankruptcy Code. Thus this Paper concludes that the calls for an end to the lease/loan distinction remain premature.

II. A Critical Review of Current Theories

Part II of this Paper reviews two of the most important contributions to the leases-in-bankruptcy debate: Professor Ayer’s argument that the lease/loan distinction is “vacuous,” and Judge Easterbrook’s defense of the distinction. Section II.A begins by setting forth the “risk-opportunity” approach to the lease/loan distinction—the approach that Professor Ayer assailed as “arbitrary.” I will argue that the risk-opportunity approach is indeed untenable, but not for the reasons that Professor Ayer identified. Section II.B compares Judge Easterbrook’s explanation for the lease/loan distinction with the actual text of section 365 of the Bankruptcy Code, which governs leases. I conclude that section 365 does *not* conform to Judge Easterbrook’s “‘old’ firm”/“‘new’ firm” theory. Whatever the merits of Judge Easterbrook’s approach as a matter of economic theory, it does not explain the actual content of current lease law. In sum, while

[59] *See* Howard, *supra* note 6, at 272 n.90.

Professor Ayer has not proven the vacuity of the lease/loan distinction, Judge Easterbrook has not shown the value of the lease/loan distinction as it stands. If the differential treatment of leases and loans under the Bankruptcy Code is to be justified, that justification must come from somewhere else.

A. Shifting Risks and Drawing Lines

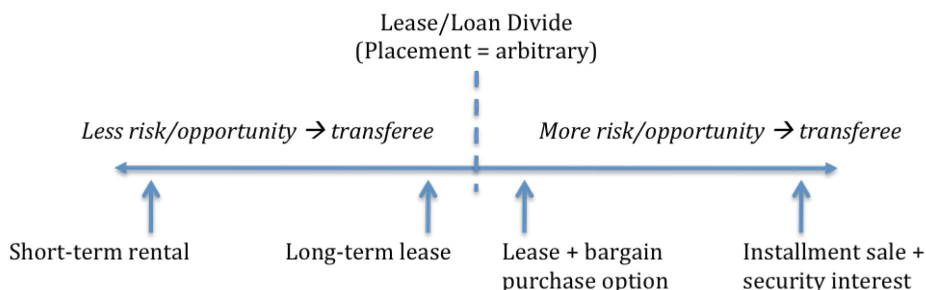
In his 1983 article, Professor Ayer argued that if a buyer acquires an asset and grants a security interest in the asset to a creditor, then under Article 9 of the UCC, the buyer/borrower still "has the upside opportunity and downside risk."[60] If the buyer/borrower defaults on the secured loan and the creditor repossesses the collateral, the buyer/borrower retains the right to any surplus if the resale price of the collateral is greater than the outstanding balance on the loan. Likewise, if the resale price of the collateral is less than the outstanding balance on the loan, the buyer/borrower is generally liable for the deficiency.[61]

In a lease agreement, as Professor Ayer points out, the allocation of risks and opportunities is less clear-cut. In one sense, *every* lease involves *some* transfer of risk and opportunity from the lessor to the lessee. What if a lessee rents a widget for $1 a year, and the next day, the fair market rental value of the widget rises to $1.50 a year? "Presumably, according to Ayer, the lessee "has a gain." Likewise, if the next day, the fair market rental value of the widget falls to 50 cents, "[s]urely [the lessee] suffered a loss."[62] One can construct an endless

[60] Ayer, *Vacuity*, supra note 6, at 672.
[61] *See* U.C.C. § 9-504(2) (2004) ("If the security interest secures an indebtedness, the secured party must account to the debtor for any surplus, and, unless otherwise agreed, the debtor is liable for any deficiency.").
[62] Ayer, *Vacuity*, supra note 6, at 680.

number of permutations on the standard lease agreement, all of which allocate risks and opportunities in unique ways. What if "[t]he transferee agree[s] to pay the agreed value of the widget in installments over time" and "may elect to retain the widget after the end of the term for a dollar," but also "may return the item at any time to the transferor with no liability"?[63] In that case, "the transferee has acquired the upside opportunity . . . while leaving the downside risk . . . with the transferor."[64] Alternately, the lessor and lessee may agree to adjust the rental price to reflect changes in the value of the asset over the term of the lease. As Professor Ayer notes, this arrangement is "widely used in shopping centers."[65]

Figure 1: Risk-Opportunity Continuum



But even if we accept Professor Ayer's premise that leases and security interests lie on a risk-opportunity continuum,[66] his conclusion—that the "dichotomy"[67] between leases and security interests should be abolished—does not logically follow. Indeed, the law often

[63] *Id.* at 677.
[64] *Id.*
[65] *Id.* at 681; *see generally* B. Peter Pashigan & Eric D. Gould, *Internalizing Externalities: The Pricing of Space in Shopping Malls*, 41 J.L. & ECON. 115 (1998) (analyzing the use of percentage leases in U.S. retail malls).
[66] Ayer, *Vacuity*, supra note 6, at 670.
[67] *Id.* at 684.

establishes a "dichotomy" when the practices at issue actually fall on a continuum with an infinite number of points. Motor vehicle velocities lie on a continuum between "safe" and "unsafe"—and, arguably, "any speed limit involves arbitrary compromise among fuel economy, safety and economics"[68]—but this arbitrariness "does not imply that we could do without a speed limit entirely."[69] Indeed, as Professor Amelia Boss points out, Ayer's argument might easily lead to the *opposite* conclusion from the one Ayer himself draws:

> The presence of a risk-opportunity continuum may demonstrate that there are some sales and leases which closely resemble one another, but . . . it also demonstrates that some sales and leases (which are at opposite ends of the spectrum) are indeed quite different. Although it may be hard to draw a distinction between transactions in the middle of the continuum, a distinction nonetheless may be necessary.[70]

Although Professor Boss does not explain why this distinction *is* necessary in the bankruptcy context,[71] the next step in the logic seems relatively apparent: to the extent that a transaction transfers risks to unconsenting[72] third parties (i.e. the lessee/debtor's unsecured creditors), bankruptcy courts should have the power to alter the terms of the risk transfer. Imagine that AIG (which once owned the world's largest aircraft leasing operation)[73] acquires a Boeing 737 for $50 million.[74] Assume that a 737 has a service life of twenty years, that the parties expect straight-line depreciation, and (for simplicity's sake) that AIG's opportunity cost

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[68] Editorial, *The Problem With Speed Limits Is That They Are Too Low*, THE GAZETTE (Montreal), Dec. 4, 2007, at __.
[69] R.L. Crouch, *A Framework for the Analysis of Optimal Maximum Highway Speed Limits and Their Optimal Enforcement*, 8 ACCIDENT ANAL. & PREVENTION 187, 198 (1976).
[70] Boss, *supra* note 6, at 360.
[71] *Id.* at 362 n.26; see also *supra* note 6.
[72] *See infra* text accompanying notes 78-82.
[73] Sarah McDonald & James Gunsalus, *AIG's ILFC Sells Planes to Macquarie for $2 Billion*, BLOOMBERG NEWS, Apr. 14, 2010, *available at* http://www.businessweek.com/news/2010-04-14/aig-s-ilfc-sells-planes-to-macquarie-for-2-billion-update1-.html.
[74] *Cf.* Boeing, Commercial Airplanes – Jet Prices, http://www.boeing.com/commercial/prices (last visited May 23, 2010) (stating that the starting price for Boeing 737s in 2008was $51.5 million).

of capital is zero.[75] Thus, the fair market rent would be $2.5 million per year, which would cover the cost of depreciation.[76] Imagine that in 2010, United and AIG write a contract under which United will rent the jet for ten years at $2.5 million per year, and United also writes a put option allowing AIG to sell the plane to United for $25 million in 2020. In effect, United is insuring AIG against a future decline in the market price of second-hand 737s. But United's current owners are not the only parties obligated under the put option. Let π be the probability that United will go bankrupt between now and 2020, and let α equal the probability, conditional on United's bankruptcy, that the trustee or debtor-in-possession will assume the 737 lease.[77] Let v_p be the value of the put option to sell a 737 for $25 million in 2020 if the writer honors the option 100% of the time. The value of the option to AIG is $v_p(1-\pi+\pi\alpha)$; in other words, $1-\pi+\pi\alpha$ represents the probability that United's owners or United's estate will honor the put option. However, the cost of the put option to United's owners is only $v_p(1-\pi)$; in other words, $1-\pi$ represents the probability that United's owners will be the ones on the hook in 2020. Thus, the put option transaction generates a surplus of $\pi\alpha v_p$ to be split between AIG and United's current

[75] Although this assumption is unrealistic for most periods of history, it may have been close to correct in some ultra-low interest-rate environments in the past decade.
[76] *See* Merton H. Miller & Charles W. Upton, *Leasing, Buying, and the Cost of Capital Services*, 31 J. FIN. 761, 771 (1976) (stating that in a perfectly competitive market, the fair market rent for an asset will be the expected depreciation plus the opportunity cost of capital over the life of the lease).
[77] One might wonder why the trustee or debtor-in-possession would *ever* assume a lease that requires payments above fair market rent. One possibility is that the firm cannot change its asset composition without causing a major disruption to day-to-day operations (a consideration that might weigh especially heavily for an airline). A second possibility is that the firm has made modifications to the asset (e.g., in the airline context, by installing wider seats or specialized cockpit gear), and switching to lower-rent planes would not be worth the additional installation costs. Third, the firm may find that—due to its shaky capital position—few leasing companies are willing to transact with it. Thus the best available option might be to assume current leases, even if those leases bind the firm to pay above-market rates.

owners. In other words, $\pi a v_p$ represents the transfer of wealth from United's unsecured creditors to United's current owners and AIG as a result of the put option.

This transfer of wealth from United's unsecured creditors might not raise many concerns if unsecured creditors could adjust the interest rates on their claims in response to the put option. But as Professors Bebchuk and Fried note, "[i]n the real world . . . [a] firm will have many . . . 'nonadjusting' creditors."[78] These include tort creditors, public entities with tax and regulatory claims, and creditors whose claims are simply so small that they remain "rationally uninformed" (i.e. the cost of monitoring the debtor's behavior exceeds any potential benefits).[79] Moreover, the class of nonadjusting creditors will include creditors who lent funds to United on fixed terms before the put option was created.[80] Employees[81] and consumers with outstanding warranties (or, in the case of an airline, passengers with accumulated frequent flier miles[82]) may also be nonadjusting creditors.

Section 1-203 of the UCC and section 506 of the Bankruptcy Code, in combination, make it more difficult for the consenting parties in a commercial transaction to transfer wealth from nonadjusting creditors. A transaction automatically creates a security interest rather than a true lease if the putative lessee "is bound to become the owner of the goods."[83] Thus, in the put option example above, a bankruptcy court could rewrite the terms of the transaction so that if

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[78] *See* Bebchuk & Fried, *supra* note 2, at 864.
[79] *See id.*
[80] *See id.*
[81] *See* Scott, *supra* note 2, at 1463. *But see* Schwartz, *Current Theories*, *supra* note 2, at 36 (noting that if employees are represented by unions, they are more likely to adjust their wage demands based on the firm's risk profile).
[82] *See Funny Money: Frequent-Flyer Miles*, THE ECONOMIST, Dec. 20, 2005, at __ (noting that frequent fliers have retained their miles when larger airlines filed for bankruptcy, but loyalty program members lost miles in the bankruptcies of Midway, Braniff, Ansett Australia, and National).
[83] U.C.C. § 1-203(b)(2).

United chooses to keep the 737, and if the market price of a ten-year-old 737 is less than $25 million in 2020, AIG will *not* have a secured claim for the full $25 million.

There are two normative justifications for limiting United's ability to write a put option that is enforceable against its unsecured creditors. First, the transaction would trigger distributive justice concerns if it allowed a sophisticated leasing firm to take priority status over employees, consumers, and tort victims, whose claims are unsecured in part or in whole. Second, granting priority status to AIG's put option claim might lead to inefficient allocations of capital. To see why this is the case, consider the effect of the put option on the rental price. Let b represent the share of the contractual surplus that United would capture in the bargain, $0 \leq b \leq 1$. Since the cost of the put option to United's owners would be $v_p(1\text{-}\pi)$ and the contractual surplus would be $\pi\alpha v_p$, the price of the put option to AIG would be $v_p(1\text{-}\pi+\pi\alpha b)$. The cost to United of renting the jet from 2010 until 2020 would be $25 million *minus* $b\pi\alpha v_p$. But assuming that there are no negative externalities to United's use of the jet,[84] then the transfer of the jet from AIG to United would increase social surplus if—and only if—the use of the jet for ten years is worth more than $25 million to United. Thus if the value of the jet to United were greater than $25 million *minus* $b\pi\alpha v_p$ but less than $25 million, then AIG would transfer the jet to United for the ten-year term even though the transfer would reduce aggregate welfare.

Interestingly, and logically, section 1-203 of the UCC *would* allow *AIG* to write a call option giving United the right to acquire the 737 in 2020 for $25 million. Under section 1-203(c), "[a] transaction in the form of a lease does not create a security interest merely because . . . the lessee has an option to become the owner of the goods for a fixed price that is equal to . . . the

[84] *But see* Youdi Schipper, Piet Rietveld & Peter Nijkamp, *Environmental Externalities in Air Transport Markets*, 7 J. AIR TRANSPORT MGMT. 169 (2001).

reasonably predictable fair market value of the goods . . . ."[85] The UCC recognizes a categorical difference between, on the one hand, put options that foist *risks* upon unconsenting unsecured creditors and, on the other hand, call options that foist *opportunities* upon unconsenting unsecured creditors.[86]

From this analysis, it seems that *if* leases and security interests lie on a "risk-opportunity continuum," with the short-term rental arrangement on the left side and the classic installment sale on the right, then it may make sense to draw a dividing line *somewhere* on the continuum such that bankruptcy courts can alter the terms of any transaction that falls to the right of the divide. Admittedly, the exact location of the line inevitably will be arbitrary, but it seems that *some* effort should be made to limit the lessee's ability to write put options that her unsecured creditors could be obligated to honor.[87]

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[85] U.C.C. § 1-203(c).

[86] Given the financial problems at large-volume lessors (e.g. AIG, CIT Group, and GMAC), we may be worried about transfer of risk to the less*or*'s unsecured creditors as well. Importantly, the Bankruptcy Code addresses this worry by allowing the bankrupt lessor-firm's managers to back out of unwanted, unexpired leases: just as section 365 allows the lessee's trustee to reject a personal property lease, it also allows the lessor's trustee to reject a personal property lease. *See* Thomas R. Suher, *Protecting the Equipment Lessee from the Potential Consequences of the Lessor's Bankruptcy*, 4 U. DAYTON L. REV. 361, 368 (1979) (noting that although section 365(h) limits the ability of a landlord's trustee to reject a lease, "subsection (h) clearly applies only to real property leases and, in light of the fact that equipment leasing was a widely used form of transacting business during the consideration of the [1978 Bankruptcy Reform Act], the argument that subsection (h) applies equally to personal property leases is unpersuasive").

[87] An advocate for Professor Ayer's position might retort that *every* transaction on the continuum should be treated as a security interest. Professor Ayer himself has noted that his argument might lead to the opposite conclusion: that every transaction on the continuum should be treated as a lease. *See* Ayer, *Vacuity*, *supra* note 6, at 698 ("We can either include leases in the category of secured credit, or we can include secured credit in the category of leases. . . . I have no intuitions at all on the subject."). Professor Howard has argued that Section 506 should cover all leases *except* for short-term leases, real property leases, and leases for "unique goods," Howard, *supra* note 6, at 301-05, but even Howard's "argument for coherence" draws arbitrary lines between short and long lease terms, real and personal property, and unique and nonunique goods.

Thus, Professor Ayer's *attack* on the lease/loan distinction could just as easily be read as a *justification* for that distinction. But the justification breaks down at two points. First, the argument against nonconsensual risk transfers does *not* apply to nonconsensual *opportunity* transfers. Although a transaction does not create a security interest merely because the lessee (or the lessee's creditors) acquire a call option with a strike price equal to or greater than the "reasonably predictable fair market value of the goods," a transaction may create a security interest if it gives the lessee (or the lessee's creditors) a call option with a strike price substantially *less* than the reasonably predictable fair market value. In the latter case, the call option could be characterized as "an option to become the owner of the goods for . . . nominal additional consideration,"[88] thus converting the lease into a security interest. If section 1-203 of the UCC and section 506 of the Bankruptcy Code are designed to protect unsecured creditors from nonconsensual risk transfers, then it seems strange to reclassify a lease as a security interest because it gives the unsecured creditors *too good of a deal*!

Second, it is not at all obvious that the lessee assumes *less* risk in a short-term rental arrangement than in a long-term lease or a secured loan. If, in the above example, United leases the 737 from AIG for ten years at $2.5 million a year, and the fair market rent for second-hand 737s rises to $3 million in 2011, then the transaction constitutes a gain for United. (Even if United only needs the jet for one year, it can assign the lease to another airline for $3 million in 2011 and book a $500,000 profit.) If the fair market rent falls to $2 million in 2011, then surely United has suffered a loss.[89] But by the same token, if United instead opts for a one-year lease agreement even though it needs the jet for the next decade, and if the fair-market rent for second-

[88] *See, e.g.*, Crest Inv. Trust v. Atlantic Mobile Corp., 250 A.2d 246, 248 (Md. 1969) (stating that an option to purchase the asset for 25% of the list price "show[s] the intent of the parties" to create a security interest).
[89] *See* Ayer, *Vacuity*, supra note 6, at 680.

hand 737s rises to $3 million in 2011, then surely United has suffered a loss (at least relative to the position that it would have been in if it had agreed to the ten-year arrangement). Likewise, if United opts for a one-year lease and the fair market rent falls to $2 million in 2011, then presumably United has a gain (at least relative to the position that it would have been in under the decade-long deal). In sum, in a secured loan, the borrower assumes the risk that the price of the asset will fall, but she also acquires the opportunity for gain if the price of the asset rises. In a short-term lease, the lessee assumes the risk that the price of the asset will rise, but she also acquires the opportunity for gain if the price of the asset falls. In this sense, short-term leases and secured loans distribute risks symmetrically: in a short-term lease, the lessee goes "short"; in a secured loan, the borrower goes "long." Risk-opportunity analysis alone cannot explain why the Bankruptcy Code treats the transactions differently.

B. "'Old' Firm/'New' Firm": The Easterbrook Argument

Whereas Professor Ayer's analysis takes the UCC as its "beginning point,"[90] Judge Easterbrook's analysis begins by considering the basic objectives of the Bankruptcy Code; from there, Easterbrook attempts to deduce the reasons why the Bankruptcy Code's drafters might have chosen to distinguish leases from secured loans.[91] Judge Easterbrook's argument in *United Airlines* springs from his analysis of the Bankruptcy Code in *Boston & Maine Corp. v. Chicago*

[90] *Id.* at 669.
[91] United Airlines, Inc. v. HSBC Bank USA (*In re* UAL Corp.), 416 F.3d 609, 612-14 (7th Cir. 2005).

Pacific Corp.,[92] one of his first opinions after joining the Seventh Circuit. In *Boston & Maine Corp*. Judge Easterbrook explained his view of the Chapter 11 process:

> Bankruptcy draws a line between the existing claims to a firm's assets and newly-arising claims. . . . If there are not enough assets to go around, some [existing] claims may be written down or extinguished. The ongoing operations of the business are treated entirely differently; new claims are paid in full as they arise. It is as if the bankruptcy process creates two separate firms—the pre-bankruptcy firm that pays off old claims against pre-bankruptcy assets, and the post-bankruptcy firm that acts as a brand new venture.[93]

According to Judge Easterbrook, rental payments under a true lease are expenses of the brand new venture and are paid in full, whereas debt service on a secured loan is an existing claim and is subject to writedown. In the *United* case, the airline had "leased" twenty acres at San Francisco International Airport from a California state agency, but after the term of the lease, United would retain access to the twenty acres without making any additional payment to the agency.[94] Judge Easterbrook observed that "[t]he 'rent' is measured not by the market value of 20 acres within the maintenance base but by the amount United borrowed."[95] Thus, United's obligations should be treated as debt service owed by the "old" United rather than post-bankruptcy expenses of the "brand new venture." That, in itself, does not seem like a controversial conclusion: as Judge Easterbrook noted, "[r]eversion without additional payment is the UCC's *per se* rule for identifying secured credit."[96] The Seventh Circuit panel's decision was a straightforward application of blackletter lease law. The more pertinent question—at least for

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[92] Boston & Maine Corp. v. Chicago Pacific Corp., 785 F.2d 562 (7th Cir. 1986). *Boston & Maine Corp.* was argued on October 29, 1985. Judge Easterbrook was confirmed by the Senate in April 1985. *See* Federal Judicial Center, History of the Federal Judiciary: Easterbrook, Frank Hoover, http://www.fjc.gov/servlet/nGetInfo?jid=678 (last visited May 24, 2010).
[93] *Boston & Maine Corp.*, 785 F.2d at 585; *see also In re UAL Corp.*, 416 F.3d at 613 (citing *Boston & Maine Corp.*).
[94] *In re UAL Corp.*, 416 F.3d at 617.
[95] *Id.*
[96] *Id. Cf.* U.C.C. § 1-203(b)(3)-(4).

the purposes of this Paper—is not whether Judge Easterbrook's conclusion in the case was correct, but whether his old firm/new firm analysis was the right way of getting there.

There might be a strong normative argument for the old firm/new firm distinction. If United had been liquidated, the California state agency could have re-leased the twenty acres to another tenant. If the leased asset had been personal property, the lessor also could have sued for "accrued and unpaid rent . . . as of the date the lessor repossesses the goods" *plus* expectation damages *plus* incidental damages, "less expenses saved in consequence of the lessee's default."[97] The lessor's claim would have been paid *pro rata* along with the claims of all of United's other unsecured creditors.[98] Anything above the amount that the lessor would have received in liquidation is "going-concern surplus."[99] As Judge Easterbrook has argued elsewhere, anything above the amount that the claimant would have received in liquidation should "go[] into the pot with other unsecured claims."[100]

But although a strong normative case might be made for limiting the lessor's claim to the fair market value of future rents, the drafters of the Bankruptcy Code clearly contemplated something else. Section 365 of the Bankruptcy Code does *not* draw a line between existing claims under lease agreements and "newly-arising" ones. According to the text of the statute: "If there has been a default in an . . . unexpired lease of the debtor, the trustee may not assume . . . [the] lease unless . . . the trustee . . . cures, or provides adequate assurance that the trustee will

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[97] § 2A-528(1).

[98] The formula would be different for real property because real property leases are not covered by UCC Article 2A, and section 502 of the Bankruptcy Code caps lessors' claims for damages under unexpired leases of real property. *See supra* note 55.

[99] *Cf.* Douglas G. Baird & Robert K. Rasmussen, *The End of Bankruptcy*, 55 STAN. L. REV. 751, 754 (2002) (defining "going-concern surplus" as "the value of a firm . . . above and beyond the liquidation value of its discrete assets").

[100] *In re* Hoskins, 102 F.3d 311, 320 (7th Cir. 1996) (Easterbrook, J., dissenting). Although *Hoskins* was a Chapter 13 case, Judge Easterbrook argued in his dissent that "[v]aluation rules . . . should be identical across chapters." *Id.*

promptly cure, such default . . . ."[101] In other words, the supposedly "brand-new venture"—if it wants to assume its predecessor's leases—is still burdened by any unpaid lease obligations of the "pre-bankruptcy firm."

Indeed, the Supreme Court has rejected the "'old' firm/'new' firm" analogy for the purposes of section 365. Although the dispute in *NLRB v. Bildisco & Bildisco*[102] concerned a collective bargaining agreement, the agreement was an executory contract within the scope of section 365, and the circuit courts have affirmed that *Bildisco* applies to leases.[103] The question in *Bildisco* was whether the respondent, a distributor of construction supplies that had filed for Chapter 11 protection, remained bound by a collective bargaining agreement that predated the bankruptcy petition. The NLRB said yes, but the Third Circuit reversed and adopted an "'old' firm/'new' firm" distinction akin to Judge Easterbrook's. "As a matter of law, a debtor-in-possession is a new entity created with its own rights and duties, subject to the supervision of the bankruptcy court," Judge Aldisert of the Third Circuit opined.[104] The case ultimately reached the Supreme Court, which upheld Judge Aldisert's ruling but took issue with his "'old' firm/'new' firm" reasoning. Justice Rehnquist made clear that although the debtor-in-possession did have the right to reject a collective-bargaining agreement, it *would* have been bound by the entire agreement *if* it had assumed the contract. Thus the five-justice majority "s[aw] no profit" in attempting to analogize the debtor-in-possession to a "new entity."[105] "[I]t is sensible to view the

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[101] 11 U.S.C. § 365(b).
[102] NLRB v. Bildisco & Bildisco, 465 U.S. 513 (1984).
[103] *See, e.g.*, Adelphia Bus. Solutions, Inc. v. Abnos, 482 F.3d 602, 606 (2d Cir. 2007) (applying *Bildisco* to a dispute regarding the debtor's rejection of a commercial lease); Eagle Ins. Co. v. Bankvest Capital Corp. (*In re* Bankvest Capital Corp.), 360 F.3d 291, 295 (1st Cir. 2004) (applying *Bildisco* to a dispute regarding the debtor-in-possession's attempt to assume unexpired equipment leases).
[104] *In re* Bildisco, 682 F.2d 72, 82 (3d Cir. 1982) (citation omitted).
[105] *Bildisco & Bildisco*, 465 U.S. at 528.

debtor-in-possession as the same 'entity' which existed before the filing of the bankruptcy petition," albeit "empowered by virtue of the Bankruptcy Code" with a *limited* authority to reject (but not to alter) executory contracts.[106] "Should the debtor-in-possession elect to assume the . . . contract, however, it assumes the contract *cum onere* [i.e. subject to a burden]."[107] The "onus" is that that the debtor must make all overdue payments under the contract and fulfill all additional obligations as they come due.

Courts that have applied *Bildisco* to leases have sometimes lamented the results. "An assumption [of a lease] not only cures all defaults . . . but it transforms all liability on the pre-petition claim from unsecured to administrative status at the expense of other unsecured creditors should the case fail," Bankruptcy Judge Dennis O'Brien of the District of Minnesota has observed.[108] Judge O'Brien considered this rule to be "unreasonable" and "misguided": "Unfortunately, the effect of . . . [section 365] is to improve post-petition (by substantial measure) the pre-petition position of a creditor lessor . . . at the expense of other creditors."[109] But Judge O'Brien concluded that bankruptcy courts are bound by the language of section 365 "[u]nless the Congress addresses the situation."[110] Until then, the "'old' firm/'new' firm" distinction drawn by Judge Aldisert in *Bildisco* and by Judge Easterbrook in *United* offers an attractive *alternative* to the status quo, but it is quite clearly *not* the law of the land.[111]

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[106] *Id.* at 529.
[107] *Id.* at 531.
[108] *In re* Monica Scott, Inc., 123 B.R. 990, 993 (Bankr. D. Minn. 1991)
[109] *Id.*
[110] *Id.*
[111] Judge Easterbrook's longtime Seventh Circuit colleague, the late Judge Jesse Eshbach, described the language of section 365 to be "unequivocal" on this matter. "In drafting [section 365 of the Bankruptcy Code] Congress went further than requiring that the trustee guarantee payment for future performance under the contract," Judge Eshbach wrote. "It required that the trustee guarantee payment of all amounts owed prior to assumption." *In re* Superior Toy & Mfg. Co., 78 F.3d 1169, 1174 (7th Cir. 1996). Several courts have questioned the rationale behind the

To see just how far Judge Easterbrook's "'old' firm/'new' firm" analysis strays from the status quo, reconsider the hypothetical contract in Section II.A in which United leases a jet from AIG. Imagine that the lease term (ten years) amounts to the entire service life of the jet, with annual payments pegged to an index of the fair market rent for similar planes. Under this arrangement, United would never be paying more than the cost of its inputs, but the transaction would still be a security interest under the UCC because "the original term of the lease is equal to . . . the remaining economic life of the goods."[112] The post-bankruptcy United would not necessarily have to make its payments "in full as they arise";[113] instead, a court could substitute its own valuation of the collateral, adjust the payment schedule, and impose a cramdown interest rate on AIG. Now imagine that instead of a ten-year lease at fair market value, United and AIG agreed to a five-year lease under which United would pay $2 million for the first four years and $4.5 million at the beginning of year five. This fifth year payment is, in part, an "old claim" against the pre-bankruptcy firm. Assuming (as above) that the fair market rent for the jet is $2.5 million a year, then the additional $2 million in year five compensates AIG for the fact that United has been paying less than the fair market rate for the first four years. Even so, under the black letter of the Bankruptcy Code, a court would have no power to adjust the terms of this fifth-year obligation. United would either have to pay the full $4.5 million or reject the lease and

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Bankruptcy Code's unequivocal position on past-due lease liabilities. *See, e.g.*, *In re* Wright, 256 B.R. 858, 861 (Bankr. W.D.N.C. 2001) (noting that the treatment of past-due rent on equipment and vehicle leases "seems at odds with the general premise in bankruptcy that one creditor should not enjoy a windfall at the expense of other creditors," but concluding that "this is the intent of [section 365] as enacted by Congress and interpreted by previous courts"); *see also In re* Masek, 301 B.R. 336, 342 (Bankr. D. Neb. 2003) (noting that debtors may be better off "rejecting the lease, and dealing with the lessor's general unsecured claim," rather than assuming a lease under the harsh terms of section 365).

[112] U.C.C. § 1-203(b)(1).

[113] *Cf.* Boston & Maine Corp. v. Chicago Pacific Corp., 785 F.2d 562, 586 (7th Cir. 1986); *supra* text accompanying note 93.

surrender the plane. There may be a strong argument for treating the first transaction (which locks the debtor into the fair market rate) as a lease, while treating the second transaction (which imposes an above-fair-market rent on the debtor) as a loan. But the Bankruptcy Code would decide each case the opposite way.

In sum, this Part has considered two frameworks for analyzing the lease/loan distinction: Professor Ayer's "risk-opportunity" approach and Judge Easterbrook's "'old' firm"/"'new' firm" theory. Professor Ayer begins from the premise that leases and security interests lie on a risk-opportunity continuum, and he proceeds to the conclusion that any dichotomous distinction between leases and security interests is therefore arbitrary and untenable. I have argued (a) that even if Professor Ayer's premise is true, his conclusion does not follow, and (b) that neither a short-term rental arrangement nor an installment sale necessarily imposes more (or less) risk on the lessee/buyer. Meanwhile, Judge Easterbrook begins from the premise that the Bankruptcy Code distinguishes between old expenses, which are dischargeable in bankruptcy, and new expenses, which are paid as they come due. However, the Bankruptcy Code does *not* distinguish past-due lease payments from present and future ones; the trustee must make *all* payments in full in order to assume the lease. Thus, if the Bankruptcy Code's lease/loan distinction has any merit, it must arise from some as-yet-unarticulated rationale.

III. The "Depreciation Externalities" Approach.

In Part III, this Paper presents a new analytical approach to the lease/loan distinction that focuses on the allocation of depreciation costs under different contractual frameworks. Section III.A shows that if secured claims were not subject to bifurcation and cramdown, a firm's present

owners could externalize depreciation costs to the firm's unsecured creditors—provided that those creditors are nonadjusting. If the firm's present owners fail to internalize depreciation costs, then they may use their assets in value-destroying ways. Alternately, or additionally, they may fail to invest in maintenance even when the increase in the present value of the asset as a result of additional maintenance expenditures is greater than the cost. Section III.B shows how the Bankruptcy Code's rules regarding the bifurcation address the problem of depreciation externalities in the context of secured loans. Section III.C argues that the UCC separates transactions into two categories—"lease" and "secured loan"—based on whether the transaction creates an opportunity for the consenting parties to externalize deprecation costs. If a transaction falls on the "secured loan" side of the divide, then the Bankruptcy Code's bifurcation provisions become necessary in order to mitigate depreciation externalities. However, for true leases, the lessor already bears the cost of depreciation, so bifurcation becomes unnecessary.

A. Deadweight Loss from Depreciation in a World Without Bifurcation

Imagine that a widget-maker acquires a widget-making machine to churn out its product. How many widgets will it produce? Begin from the uncontroversial assumption that in a competitive market, the profit-maximizing firm will continue to make widgets until the marginal cost of an additional widget (*C'*) exceeds the market price (*P*).[114] One of the costs incurred by the firm is depreciation, "the reduction in the valuation of fixed equipment" over time.[115] Economist Joe Bain has drawn a much-followed distinction among three types of depreciation costs: (1)

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[114] *See, e.g.*, N. GREGORY MANKIW, PRINCIPLES OF ECONOMICS 296 (2d ed. 2001).
[115] Joe S. Bain, *Depression Pricing and the Depreciation Function*, 51 Q.J. ECON. 705, 708-09 (1937).

obsolescence, (2) "deterioration by the elements," and (3) the rate of use.[116] In other words, the value of the widget-making machine may decline (1) because other market actors have invented more technologically advanced widget makers; (2) because of factors (e.g. rust) that will affect the machine regardless of whether it is regularly used; and (3) because of the wear and tear of widget-making.

The first and second factors are fixed costs and, as such, will not necessarily affect the firm's decision to make or refrain from making more widgets (at least in the short and medium terms).[117] This Paper focuses on the third factor—"use-depreciation"[118]—and its effect on marginal cost. If a firm has a nonzero probability of bankruptcy, and if bankruptcy means that the firm's creditors—rather than its present owners—will come into possession of the firm's assets, then the firm's present owners do not internalize the marginal costs of use-depreciation.

Imagine what would happen if section 506 did *not* allow for bifurcation (i.e., if secured loans were treated like leases). If the firm acquired its widget-making machine via a secured loan, and if the trustee or debtor-in-possession wanted to keep the widget-making machine, the bankruptcy estate would have to make all principal and interest payments due under the loan agreement, and the bankruptcy court could not adjust the payment schedule or impose a cramdown interest rate on the lender. Let π be the probability of bankruptcy and D' be the marginal cost of use-depreciation. Assume that the "absolute priority" rule will be respected and that the firm's owners will receive no stake in the firm post-bankruptcy.[119] Let α equal the

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[116] *Id.* at 709.
[117] *See* MANKIW, *supra* note 114, at 277-78.
[118] *See, e.g.*, A. D. Scott, *Notes on User Costs*, 63 ECON. J. 368, 381 n.1 (1953).
[119] I use the term "absolute priority" to refer to the priority of creditors above equity-holders (as opposed to "full priority" for secured creditors above unsecured creditors). This terminology is standard in the scholarly literature on bankruptcy law. *See, e.g.*, Alan Schwartz, *The Absolute Priority Rule and the Firm's Investment Policy*, 72 WASH. U. L. Q. 1213, 1214 (1994) ("[S]trict

probability, conditional on bankruptcy, that the trustee or debtor-in-possession will choose to keep the collateral.

The marginal cost of the additional widget to the firm's present owners is equal to $C' - \pi D'$. In other words, the firm's present owners do not bear the marginal cost of use-depreciation if the firm files for bankruptcy, which happens with probability π. Meanwhile, in a world without bifurcation, each additional widget imposes a marginal cost on the secured creditor equal to $\pi(1-\alpha)D'$.[120] In other words, the secured creditor only bears the marginal cost of use-depreciation if the firm goes bankrupt *and* the trustee or debtor-in-possession chooses *not* to keep the collateral. Thus the marginal cost of the additional widget to the firm's present owners *and* the secured creditor is $C' - \pi D' + \pi(1-\alpha)D'$, or, more simply, $C' - \alpha\pi D'$.

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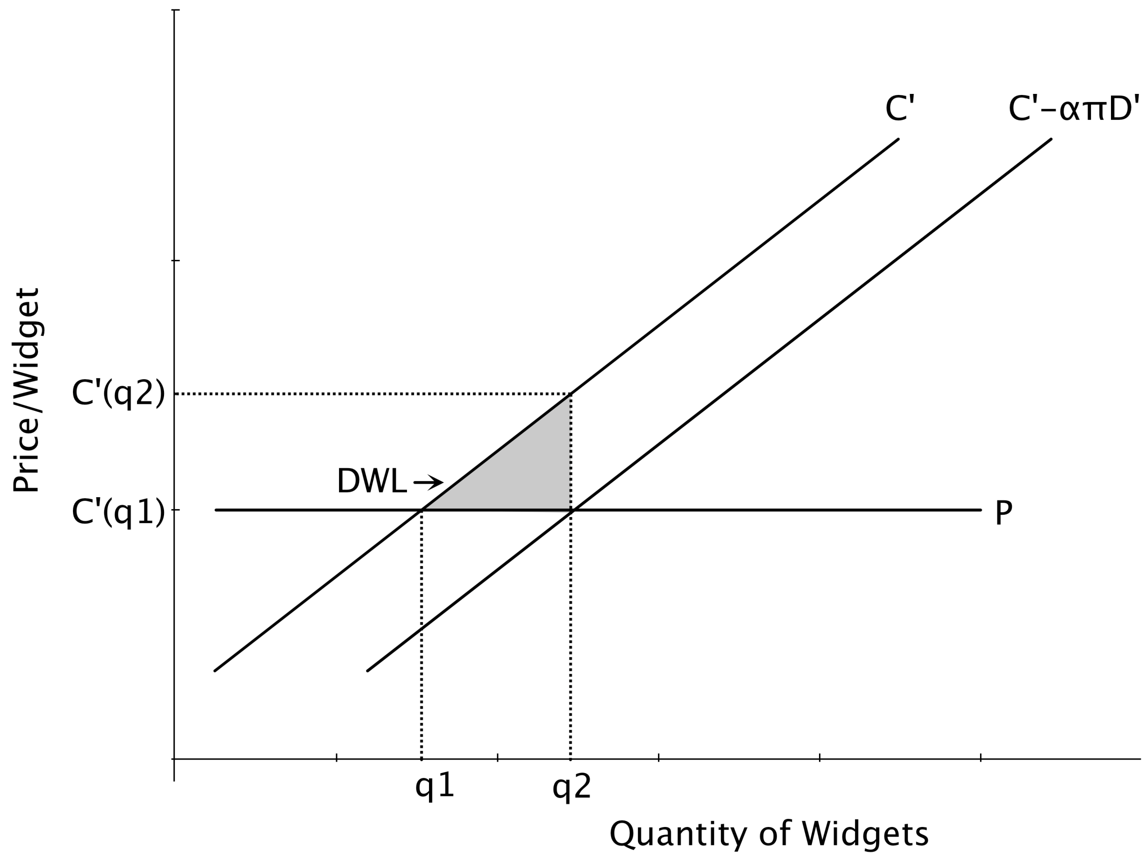
adherence to absolute priority eliminates the equity claim because it is the most junior."). Although adherence to absolute priority became less common after the 1978 Bankruptcy Reform Act, it remains the case that in the vast majority of the Chapter 11 bankruptcies, the amount paid to creditors far exceeds the amount paid to shareholders. *See* Allan C. Eberhart, William T. Moore, Rodney L. Roenfeldt, *Security Pricing and Deviations from the Absolute Priority Rule in Bankruptcy Proceedings*, 45 J. FIN. 1456, 1463 (1990). Although the models in this Paper assume absolute priority for the sake of simplicity, deviation from absolute priority would not alter any of the substantive results as long as the present owners' interest in firm's assets post-bankruptcy is less than their interest in the firm's assets pre-bankruptcy.

[120] For simplicity's sake, I am assuming that the secured creditor is *undersecured*—i.e. the outstanding balance on the loan is greater than the value of the collateral. If the opposite is the case, use-depreciation will not impose a cost on the secured creditor; to the extent that the value of the collateral exceeds the borrower's debt, the remainder will go to the borrower, not the creditor.

Figure 2: Deadweight Loss in a World Without Bifurcation



If the firm's present owners bore *all* the use-depreciation costs, then the profit-maximizing firm's output would be equal to q_1 (i.e. the point at which *C'* intersects with *P*). But if the firm's present owners and its secured creditor can bargain over the terms of the widget-making machine's use, then the firm's output will be equal to q_2 (i.e. the point at which $C' - \alpha\pi D'$ intersects with *P*). Importantly, this is true *regardless* of the allocation of use rights in the initial loan agreement: if the loan agreement contains a term that caps the number of widgets that the lessee can churn out at some $q < q_2$, then the firm will pay the creditor to loosen the loan restriction because the benefit of additional widget-making to the firm's present owners exceeds the cost to the secured creditor. Likewise, if the loan agreement contains no use restriction and

the firm's present owners produce $q > q_2$, then the secured creditor will pay the firm's present owners to reduce their use of the machine because the cost of additional widget-making to the secured creditor exceeds the benefit to the firm's owners.

Even though the cost of $\alpha\pi D'$ is borne by neither the firm's present owners nor its secured creditor, it does not disappear from the social welfare calculus. To the contrary, this cost is borne by the firm's unsecured creditors. Thus, the marginal cost to *society* of each additional widget is still C'. Moreover, for all $q > q_1$, the social cost of the additional widget (i.e. the cost to the firm's present owners plus the cost to the secured creditor plus the cost to the unsecured creditors) more than offsets the benefits. Without the bifurcation rule, overuse of the widget-making machine would generate a deadweight loss of $(½)(q_2-q_1)(C'(q_2)-C'(q_1))$.

B. The Section 506 Solution to Deadweight Losses from Depreciation

How does bifurcation reduce deadweight loss? If the trustee or debtor-in-possession chooses to keep the collateral, then—assuming that the secured creditor is undersecured and that the bankruptcy court correctly values the collateral—the secured creditor's claim is reduced to reflect the depreciation of the asset. Thus in a world with bifurcation, the marginal cost of widget-making to the secured creditor is $\pi D'$ and the marginal cost to the firm's present owners is $C' - \pi D'$. Use-depreciation generates no negative externalities and overuse of the widget-making machine generates no deadweight losses.

Admittedly, this story overstates the efficiency of the section 506 scheme in two respects. First, it is unrealistic to assume that transaction costs between the firm's present owners and the secured creditor will be zero. The firm's present owners and the secured creditor incur positive

transaction costs at the bargaining stage, at the monitoring stage, and at the enforcement stage. However, it *is* realistic to assume that transaction costs will be *lower* for *secured* creditors who negotiate use restrictions and monitor debtor behavior than for *un*secured creditors who seek to do the same. If the widget-making machine is a small portion of the firm's total assets, then no single unsecured creditor may have an incentive to monitor the firm's use of the machine, and coordination among unsecured creditors may be prohibitively expensive.[121] Secured credit addresses this coordination problem through a division of monitoring labor among the firm's various creditors.[122] Moreover, secured credit transactions may allocate monitoring tasks to creditors with asset- or industry-specific expertise, further reducing the sum of monitoring costs.[123] While it is an exaggeration to say that section 506 *eliminates* deadweight losses from overuse, it may *reduce* such losses by forcing secured creditors to internalize use-depreciation costs.

Second, and perhaps more damningly, section 506 still allows a firm's present owners and the secured creditor to externalize some portion of use-depreciation costs to unsecured creditors. Depreciation to the collateral does not reduce the secured creditor's claim dollar-for-dollar. The secured creditor still has an unsecured deficiency claim against the bankruptcy estate, which will be paid *pro rata* with all other unsecured claims.[124] Let μ represent the rate at which unsecured

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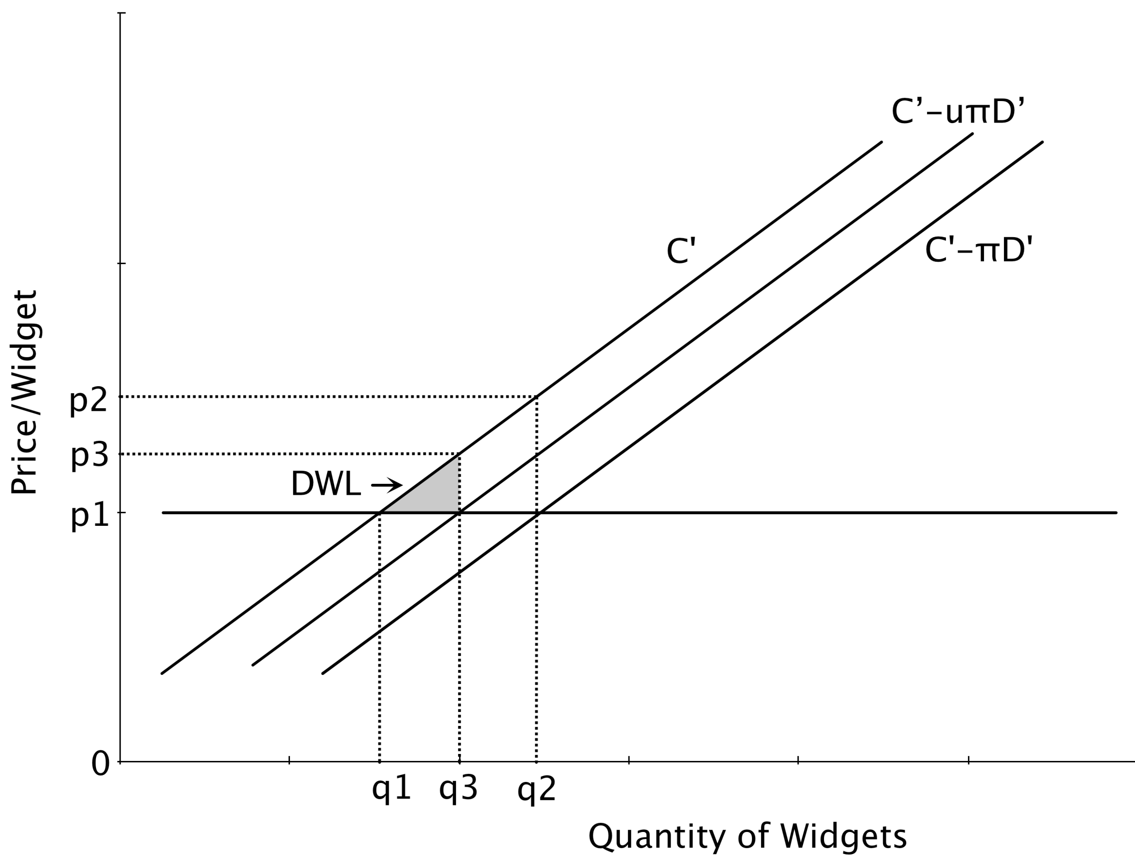
[121] *See, e.g.*, Levimore, *supra* note 1.
[122] *See, e.g.*, Jackson & Kronman, *supra* note 1, at 1154 n.45 ("Two creditors with the same general monitoring abilities may be able to achieve a reduction in their total monitoring costs . . . through a simple division of labor.").
[123] *See, e.g.*, Van Ngo, *supra* note 1.
[124] *See* 11 U.S.C. §§ 506(a), 726(a)-(b) (2006); *see generally* Squire, *supra* note 5 (arguing that the secured creditor's deficiency claim should be subordinated to all other unsecured claims in bankruptcy).

Figure 3: Deadweight Loss Under § 506[125]



[125] Note that once we factor in the creditor's deficiency claim, the rightmost curve (representing a world without bifurcation) shifts outward/downward by $\mu(1-\alpha)\pi D'$. The marginal cost of depreciation incurred by the secured creditor is now $\mu(1-\alpha)\pi D' + (1-\mu)\alpha\pi D'$, or zero. The cumulative cost of depreciation to the borrower and the secured creditor in a world without bifurcation—factoring in the secured creditor's deficiency claim—is $C - \pi D'$.

claims are paid out, $0 \leq \mu \leq 1$. Assuming that the "secured" creditor is undersecured,[126] the marginal cost of the additional widget to the secured creditor is not $\pi D'$ but $(1-\mu)\pi D'$. Consequently, the marginal cost of the additional widget to the firm's present owner and the secured creditor is $C' - \pi D' + (1-\mu)\pi D'$, or, more simply, $C' - \mu\pi D'$. Assuming again that secured creditor can negotiate, monitor, and enforce use restrictions without incurring transaction costs, widget output will shift to q_3, where $q_1 < q_3 < q_2$. The cost to unsecured creditors and the deadweight loss to society under the Bankruptcy Code as it stands are still less than in a world without bifurcation—but greater than a world in which the secured creditor's deficiency claim were eliminated or subordinated to other unsecured claims.[127]

C. How the UCC and the Bankruptcy Code Limit Depreciation-Related Deadweight Losses in Leasing

The cross-cutting statutory scheme for leases—section 1-203 of the Uniform Commercial Code and section 365 of the Bankruptcy Code—achieves the same objective as the bifurcation of

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[126] If the secured creditor is oversecured, then the marginal cost of the additional widget to the creditor is zero. Yet the firm's owners do not internalize all of the depreciation costs, as the cost of the additional widget to unsecured creditors is $\pi D'$. Similarly, if the firm's owners acquire the widget-making machine unencumbered by any security interest, they still do not internalize $\pi D'$. Thus unsecured creditors still bear a share of depreciation costs to the extent that depreciable assets exceed secured loan liabilities. To put the point algebraically, if A_D represents a firm's depreciable assets and L_S represents a firm's secured loan liabilities, then the effectiveness of section 506 in regulating inefficient asset use decreases over the term A_D-L_S.

However, as long as A_D is positively correlated with the firm's total assets, and L_S is positively correlated with the firm's total liabilities, then π also decreases over A_D-L_S. Recall that the probability of bankruptcy raises the risk that a firm's owners will not internalize the full cost of depreciation and may put assets to inefficient uses. Section 506 serves to deter such inefficient uses; and section 506 is less effective when the probability of bankruptcy is low. But when the probability of bankruptcy is low, the behavior that section 506 seems designed to deter is less likely in the first place.

[127] As to whether the efficiency-maximizing outcome would best be achieved by *eliminating* the secured creditor's deficiency claim or *subordinating* it to all other unsecured claims, see Squire, *supra* note 5, at 861-62.

secured claims: making it more difficult for a firm's present owners and their equipment financing counterparties to externalize use-depreciation costs to unsecured creditors. Indeed, the treatment of leases under the Bankruptcy Code may deter depreciation externalities more effectively than section 506, since the latter section—for the reasons stated in the preceding paragraph—still allows the firm and the secured creditor to externalize some depreciation costs to unsecured creditors. By contrast, in a lease agreement, as long as the asset reverts to the lessor at the end of the lease, then use-depreciation over the life of the lease has reduced the value of the lessor's residual interest. As long as the value of the asset at the end of the lease is greater than zero, then every additional dollar of use-depreciation costs leads to a dollar-for-dollar reduction in the lessor's residual interest.[128] Thus the marginal cost of the additional widget to the lessor and the lessee is C'. As long as the lessor can negotiate use restrictions with the lessee and monitor the lessee's behavior, the output of widgets will not exceed q_1.

Importantly, this is true even if the lessee exercises an option to purchase the asset at the end of the lease term. As long as the contractual purchase option is an *option* rather than a *requirement*, the lessee is free to renegotiate the terms of the acquisition at the end of the lease.

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[128] The *perfect* dollar-for-dollar match between depreciation costs and the corresponding reduction in the lessor's residual interest is—admittedly—an artifact of this Paper's assumption that the time value of money is zero. In reality, the reduction in the present value of the lessor's residual interest is equal to $D'/(1+r)^t$, where r represents the risk-free real interest rate and t represents the time (in years) until the lease expires. Economists often use the yield on Treasury Inflation-Protected Securities (TIPS) as a measure of the risk-free real interest rate. *See, e.g.*, Marcus Miller, Paul Weller & Lei Zhang, *Moral Hazard and the US Stock Market: The Idea of a 'Greenspan Put'* 2 (Ctr. for Econ. Policy Research, Discussion Paper No. 3041, Nov. 2001), *available at* http://www.cepr.org/pubs/dps/DP3041.asp. As of the writing of this Paper, the most recent auction of five-year TIPS generated an 0.55% yield. U.S. Department of the Treasury, Bureau of the Public Debt, Recent Note, Bond, and TIPS Auction Results, http://www.treasurydirect.gov/RI/OFNtebnd (last visited May 23, 2010). At an 0.55% risk-free real interest rate, the lessor would internalize 97 cents of every dollar of depreciation costs for a lease five years from expiration—and 95 cents of every dollar of depreciation costs for a lease ten years from expiration. In sum, this Paper's assumption of zero time value of money has little substantive effect on the models' core results.

Assuming that the market for widget-making machines is perfectly competitive, the lessor will not be able to force the lessee to pay more than the fair market value of the machine.

Of course, a "lessor" and "lessee" could structure an equipment financing transaction and call it a "lease" even if the lessee's unsecured creditors bore some portion of marginal depreciation costs. However, such a transaction would *not* be a "lease" under section 1-203(b) of the UCC. Indeed, each of the four factual scenarios in section 1-203(b) weeds out financing transactions that shift depreciation costs away from the lessor; a transaction that meets one of these four criteria is, *ipso facto*, not a lease.

First, "[a] transaction in the form of a lease creates a security interest if . . . the original term of the lease is equal to or greater than the remaining economic life of the goods."[129] Since the "lessor" has no expectation that she will receive an asset with any value at the end of the lease term, she has no incentive to negotiate use restrictions or monitor the lessee's behavior. The marginal cost of the additional widget to the firm's present owners will be $C' - \pi D'$, and the cost to the lessor will be zero, so the firm's total output will be q_2 (hence giving rise to a deadweight loss). The cross-cutting statutory scheme of the UCC and the Bankruptcy Code addresses this risk by reclassifying these "entire economic life" leases as loans, thus subjecting them to bifurcation by the bankruptcy court.

Second, a transaction creates a security interest under the UCC if "the lessee is bound to renew the lease for the remaining economic life of the goods or is bound to become the owner of the goods."[130] Under this scenario, the "lessor" has monopoly power over the lessee at the end of the lease term, since the lessee is contractually obligated to rent or acquire the asset from the lessor. Thus the lessee does *not* have access to a perfectly competitive market and cannot

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[129] U.C.C. §1-203(b).
[130] *Id.*

necessarily obtain fair market value for the asset. Therefore, there is not necessarily a one-to-one correlation between use-depreciation costs *during* the lease term and the lessor's residual interest *after* the lease term. The firm may be forced to acquire the asset for more than its fair market value, and if the firm is bankrupt, these costs will be borne by its unsecured creditors. Sensibly, the UCC avoids this outcome by reclassifying the transaction as a security interest.

The third and fourth elements of UCC section 1-203(b) address the same general set of facts: a "lease" agreement contains a term that allows the "lessee" to keep the asset for "no additional consideration or for nominal additional consideration" at the end of the term.[131] Upon first glance, these provisions may seem to conflict with other elements of the UCC and the Bankruptcy Code that attempt to protect unsecured creditors. From the unsecured creditor's perspective, the bargain purchase option is much more desirable than a purchase option at fair market value. However, if the cross-cutting statutory scheme is viewed as an efficiency-maximizing mechanism, then these provisions make perfect sense. If the lease agreement gives a bargain purchase option to the lessee firm, then the lessor has no expectation of realizing her residual interest in the asset. Thus she has no incentive to negotiate, monitor, and enforce restrictions on the firm's use of the asset. Again, assuming that unsecured creditors cannot organize to protect their interests pre-bankruptcy, the marginal cost of the additional widget to the firm's present owners ($C' - \pi D'$) is the only binding cost constraint, and output at q_2 generates a deadweight loss.[132]

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[131] *Id.* Section 1-203(b)(3) covers agreements in which the option allows the "lessee" to "*renew* the lease for the remaining economic life of the goods" at no or nominal cost. Section 1-203(b)(4) covers agreements in which the option allows the "lessee" to "*become the owner* of the goods" for no or nominal cost.

[132] Instead of phrasing this argument in terms of *overuse*, one can make the same argument in terms of *underinvestment in maintenance*. Let M' equal the marginal cost of maintenance on the widget-making machine and let A' equal the marginal increase in the value of the machine as a

So far, this Part has focused on the scenarios in which a transaction in the form of a lease *does* create a security interest—i.e., the criteria set forth in section 1-203(b) of the Uniform Commercial Code. The depreciation externalities framework also sheds light on the logic behind section 1-203(c), which sets forth scenarios in which a transaction does *not* create a security interest. Two of these 1-203(c) scenarios deserve additional discussion.

First, a transaction does not create a security interest "merely" because the present value of the lessee's obligations exceeds the fair market value of the leased goods.[133] This provision is interesting because it conflicts with the treatment of leases under Generally Accepted Accounting Principles (GAAP), which require a lease to be recorded as a liability if "[t]he present value . . . of the minimum lease payments . . . equals or exceeds 90 percent . . . of the fair value of the leased property . . . to the lessor."[134] Why does the UCC ignore this factor?

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result of maintenance. Assume, for the sake of simplicity, that all of the benefits of maintenance are reaped at the end of the economic life of the machine (i.e. the machine's efficiency is unrelated to the maintenance investment, but the machine's economic life increases over the amount invested in maintenance). Investment in maintenance generates a social surplus as long as $A' > M'$. However, if π represents the probability that the firm that owns the widget-making machine will go bankrupt before the end of the economic life of the machine, then the firm's owners will only invest in maintenance to the point that $(1-\pi)A' \geq M'$.

In a true lease, A' accrues to the lessor, so the lessor has an incentive to ensure that the optimal amount of maintenance investment occurs. In a secured loan, $(1-\pi)A'$ accrues to the borrower; $(1-\mu)\pi A'$ accrues to the secured creditor; and $\mu A'$ accrues to the borrower's unsecured creditors. Assuming that secured creditors can influence the amount invested in maintenance but that unsecured creditors cannot, maintenance investment only occurs up to the point that $(1-\mu\pi)A' \geq M'$.

[133] § 1-203(c).

[134] Statement of Fin. Accounting Standards No. 13, § 7(a)-(D), at 8 (Fin. Accounting Standards Bd. 1976). Under Financial Accounting Standard 13 (FAS 13), a transaction also must be recorded as a liability rather than a lease if (a) "[t]he lease transfers ownership of the property to the lessee by the end of the lease term"; (b)"[t]he lease contains a bargain purchase option"; or (c) "[t]he lease term . . . is equal to 75 percent or more of the estimated economic life of the leased property." These three criteria have analogues in the UCC: (a) a transaction is not a true lease if the lessee *becomes* the owner of the asset at the end of the term; (b) a transaction is not a true lease if the lessor has the *option* to become the owner for nominal consideration; and (c) although section 1-203 only reclassifies a lease as a security interest if the lease term is equal to

The depreciation externalities framework offers an answer. There is not necessarily *any* correlation between the *total* sum of lease payments and the *marginal* cost of depreciation to the lessor. Consider the hypothetical five-year lease agreement between United and AIG in Section II.B. Every dollar of depreciation reduces the value of the jet (which will revert back to AIG at the end of year five) by one dollar. This is true regardless of whether United is paying $2.5 million per year in rent, or $5 million a year in rent, or one cent. If the hypothesis of this Paper is correct—that true lease status under the UCC hinges on whether depreciation costs lie with the lessor—then it makes sense that the UCC would disclaim reliance on the total sum of lease payments.

Second, section 1-203(c) provides that a transaction does not create a security interest "merely because . . . the lessee agrees to pay . . . maintenance costs."[135] If one of the efficiency advantages of leases is that the less*or* dictates maintenance investment,[136] then this provision might seem to be anomalous. However, this provision may be justifiable based on the Coasean assumption that *if* the lessor and the lessee internalize all the benefits of maintenance investment, and if transaction costs between the lessor and the lessee are sufficiently low, then the parties will only shift maintenance costs to the lessee if the lessee is the "cheapest-cost maintainer." In the case of a passenger car lease, the dealer (lessor) might be the cheapest-cost maintainer because the dealer has greater automotive expertise than the consumer. In the case of an aircraft lease like the hypothetical AIG-United transaction considered above, the airline (lessee) might be the cheapest-cost maintainer because it employs teams of mechanics at each of its destinations.

100% or more of the estimated economic life of the asset—whereas FAS 13 draws the line at 75%—both the UCC and FAS 13 look at the same general attribute (the ratio of the term of the lease to the economic life of the asset). By contrast, the UCC explicitly states that lease status does *not* depend on the ratio of the present value of lease obligations to the fair value of the asset.

[135] U.C.C. § 1-203(c).

[136] *See* supra note 132.

There is no reason for the *law* to impose maintenance costs on one of the parties as long as the parties internalize the benefits of maintenance themselves.

IV. Conclusion

So far, this Paper has hypothesized that a firm's lessors are more likely than its unsecured creditors to prevent it from putting depreciable assets to inefficient uses. When depreciation reduces the lessor's residual interest dollar-for-dollar, the lessor has a strong incentive to negotiate use restrictions in the lease agreement, to monitor the firm's use of the depreciable asset, and to enforce the use restrictions if the firm fails to comply with the terms. By contrast, when the costs of depreciation are spread among a large number of unsecured creditors, each creditor may have an incentive to free-ride off the bargaining, monitoring, and enforcement efforts of others. Moreover, some unsecured creditors (e.g. tort claimants) may have no ability to negotiate asset use restrictions with the firm. Relative to unsecured creditors, secured creditors have *more* of an incentive to negotiate use restrictions, monitor firm behavior, and enforce those terms in the event of noncompliance. Relative to lessors, secured creditors have *less* of an incentive to incur negotiation, monitoring, and enforcement expenses because secured creditors do *not* bear depreciation costs dollar-for-dollar. Every dollar of depreciation reduces the value of the creditor's secured claim by one dollar but increases the value of the creditor's unsecured deficiency claim by one dollar. Unsecured deficiency claims are rarely paid in full, but they are often paid in part. The secured creditor's net loss from each dollar of depreciation is likely to be around 40 cents[137] (although that figure will vary dramatically from case to case).

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[137] *See supra* text accompanying note 26.

So far, this Paper has made the case that lease transactions deter firms from putting depreciable assets to inefficient uses. But even if one accepts this Paper's argument, that alone will not resolve the lease/loan debate. The analysis above ignores the *redistributive* implications of current lease law. Although some scholars have argued that the economic analysis of law should focus *only* on the Kaldor-Hicks criterion[138] (or, at the very least, that redistributive goals should be pursued through the income tax system rather than through legal rules),[139] others argue that if existing legal rules really *are* Kaldor-Hicks efficient, then the argument for adjusting those rules in order to redistribute wealth is even stronger. If the law *is* as efficient as some scholars have claimed, then existing rules are already set at the point where the marginal social benefit of a shift in any direction is precisely equal to the marginal cost. Thus, a slight shift of legal rules in one direction or another will have an infinitesimal effect on social surplus while potentially advancing redistributive aims. Since we *know* the income tax system generates deadweight loss,[140] then *some* redistributive efforts should be channeled through the system of legal rules (where, at least at first, the deadweight loss will be minimal).[141]

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[138] *See* RICHARD POSNER, ECONOMIC ANALYSIS OF THE LAW § 1.2, at 12-14 (7th ed. 2007). Posner justifies the Kaldor-Hicks concept on philosophical grounds, *see id.* at 13 n.2 (citing Amartya Sen, *The Impossibility of a Paretian Liberal*, 78 J. POL. ECON. 152 (1970)) and pragmatic grounds. *Id.* (arguing that it is probably impossible to measure the impact of economic transactions on *all* non-parties, such that Kaldor-Hicks efficiency becomes the only criterion upon which economic analysis of the law can rely).
[139] *See, e.g.*, Louis Kaplow & Steven Shavell, *Why the Legal System Is Less Efficient than the Income Tax in Redistributing Income*, 23 J. LEGAL STUD. 667 (1994).
[140] On this point, economists at all points on the ideological spectrum can agree. *See, e.g.*, PAUL KRUGMAN, ROBIN WELLS & MARTHA L. OLNEY, ESSENTIALS OF ECONOMICS, 151-52 (2007).
[141] *See* Chris William Sanchirico, *Taxes versus Legal Rules as Instruments for Equity: A More Equitable View,* 29 . LEGAL STUD. 797 (2000). For bankruptcy-oriented analyses that take issue with the Kaldor-Hicks criterion as the sole basis upon which to judge existing rules, see Donald R. Korobkin, *Value and Rationality in Bankruptcy Decisionmaking*, 33 WM. & MARY L. REV. 333 (1992), arguing for a bankruptcy regime that recognizes "diverse human values," and Robert K. Rasmussen, *An Essay on Optimal Bankruptcy Rules and Social Justice*, 1994 U. ILL. L. REV. 1

This latter argument assumes, however, that the redistributive implications of shifts in legal rules are *knowable*. But can we say, with any certainty, that less favorable treatment of lessors in bankruptcy would result in redistribution of wealth in a progressive direction? Upon first glance, it might seem that lease law—as it exists today—benefits lessors at the expense of the lessee's nonadjusting unsecured creditors, and that the latter category contains individuals who are, on balance, less sophisticated and not as well-resourced as the former. Indeed, in commercial law casebooks, we often see examples of relatively sophisticated leasing companies trying to force individuals in Chapter 13 proceedings to classify transactions as leases instead of loans.[142] From this perspective, it might seem that priority treatment of leases tends to reduce the value of the bankruptcy estate and redistribute wealth in a regressive direction. But that is only apparent when we consider the *ex post* effects of section 365. *Ex ante*, the redistributive implications are much more ambiguous.

In bankruptcy, a long-term lease may be a burden to the lessee's estate: if the bankrupt firm's managers reject the lease, the lessor can bring a breach-of-contract claim (which dilutes the value of all other unsecured claims). If the trustee or debtor-in-possession assumes the lease, the estate has no opportunity to benefit from bifurcation, cramdown, and an extension of the payment period (as it might if the transaction were recharacterized as a loan). However, the long-term lease may be valuable to the lessee's estate because the contract rate under the lease may be *lower* than the fair market rental rate. The trustee or debtor-in-possession may either assume the

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(1994), arguing that the bankruptcy regime should be judged according to a Rawlsian maximin criterion.

[142] *See, e.g.*, LYNN M. LOPUCKI, ELIZABETH WARREN, DANIEL KEATING & RONALD J. MANN, COMMERCIAL TRANSACTIONS: A SYSTEMS APPROACH § 2.A, at 26-31 (4th ed. 2009) (citing *In re Bailey*, 326 B.R. 156 (W.D. Ark. 2005)).

lease or assign it to another party (with the difference between the fair market rate and the contract rate turning a profit for the estate).

Admittedly, if the Bankruptcy Code were rewritten *today* so that all long-term leases for nonunique chattels were subject to section 506 bifurcation (as Professor Howard has proposed[143]), and the amendment took effect immediately, then firms already in bankruptcy would have more options than under the status quo. If lease terms were favorable, the trustee or debtor-in-possession wouldn't contest them; if outstanding lease obligations exceeded the fair market value of the collateral, the trustee or debtor-in-possession would seek to amend the terms through the section 506 process. However, *over time*, lessors would inevitably respond to this change in legal rules by charging higher rents for long-term leases to less creditworthy firms. Firms might respond by taking out shorter leases, and lessors might refuse to renew leases to firms on the verge of insolvency. Thus, the managers of bankrupt firms might have *fewer* options in reorganization, and firms in Chapter 11 would be more exposed to market fluctuations than they are now.

We cannot know—at least unless we try it out—whether extending section 506 to long-term leases would have net-negative or net-positive effects on unsecured creditors. On the one hand, there is a strong reason to believe that firms would shift toward short-term leasing, which might make it harder for the managers of a bankrupt firm to acquire assets needed for reorganization. When a firm acquires an asset through a secured loan, it also acquires an option—exercisable only by its estate in bankruptcy—to reduce loan payments through bifurcation and to impose a cramdown interest rate on the lender. If the firm's present owners are self-interested, then they will be reluctant to pay for a right the benefits of which accrue to

[143] *See supra note* 6.

someone else (i.e. to their unsecured creditors). On the other hand, unsecured creditors might be better off if firms took out more short-term leases and incurred fewer long-term liabilities: the total sum of unsecured deficiency claims against the bankruptcy estate would decline. On balance, extending section 506 to long-term leases would leave unsecured creditors *more* exposed to increases in the fair market rental values of leased assets, but *less* exposed to deficiency claims when collateral is abandoned. It is an open question as to whether the latter benefit would offset the former cost.

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In sum, this Paper has sought to produce what "risk/opportunity" analysis and the "'old' firm/'new' firm" theory have failed to generate: a coherent rationale for UCC section 1-203's distinction between leases and loans that takes into account the Bankruptcy Code's disparate treatment of the two transaction types. Perhaps most importantly, I have sought to draw attention to a disconnect between legal theory and economic reality: despite the prevalence of leasing in the U.S. economy, the community of law and economics scholars has so far given leasing short shrift. If the lease/loan distinction is as vacuous as Professors Kripke, Ayer, and Howard maintain, then perhaps any effort to justify the status quo will be in vain. But as this Paper has argued, the lease/loan distinction—far from being vacuous—may be a valuable tool for forcing market actors to internalize depreciation costs in their decisions regarding everyday asset use and maintenance.