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The Economic Logic of the Lease/Loan Distinction in Bankruptcy

ABSTRACT. The Bankruptcy Code accords much more favorable treatment to lessors than to 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 Note identifies a normative basis for the lease/loan distinction—the maximization of aggregate welfare—and explains why leases are likely to generate less deadweight loss than are secured transactions. In a secured loan, the secured lender and the borrower may be able to shift depreciation costs to the borrower’s other creditors. By allowing bankruptcy courts to alter the terms of secured loans, the Bankruptcy Code limits (but does not eliminate) the depreciation cost externalities that may arise from secured transactions. In a lease, by contrast, the lessor and the lessee internalize depreciation costs in full. Since leases do not generate depreciation cost externalities, the Bankruptcy Code does not authorize courts to alter the terms of such transactions.

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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 into question the efficiency of secured credit.² In 1983, Professor R.M. Goode characterized the secured credit 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

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 Levmore, *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, *The Continuing Puzzle of Secured Debt*, 37 VAND. L. REV. 1051 (1984); Alan Schwartz, *Security Interests and Bankruptcy Priorities: A Review of Current Theories*, 10 J. LEGAL STUD. 1 (1981) [hereinafter Schwartz, *Current Theories*]; 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).
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 (2009); and Richard Squire, *The Case for Symmetry in Creditors' Rights*, 118 YALE L.J. 806 (2009).

All the while, relatively few scholars have weighed in on whether the full priority treatment of true leases promotes efficient outcomes.⁶ But although it 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.⁷ Approximately 70% of Fortune 1000 firms⁸—and approximately 80% of all U.S. companies⁹—lease some of their equipment. A recent study of 4718 public companies in the United States found that the firms’ off-balance-sheet lease commitments were equal to 35% of their reported liabilities.¹⁰ And, according to one account, leasing is the “largest source of external finance” for small businesses.¹¹

Not only does leasing play an important role in the capital structure of individual firms,¹² but personal property leasing is also 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 totaled \$120 billion (up from \$95 billion in 2002).¹³ At last count, the non-real-estate

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6. *But see* John D. Ayer, *Further Thoughts on Lease and Sale*, 1983 ARIZ. ST. L.J. 341; John D. Ayer, *On the Vacuity of the Sale/Lease Distinction*, 68 IOWA L. REV. 667 (1983) [hereinafter Ayer, *Vacuity*]; Amelia H. Boss, *Leases and Sales: Ne’er or 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).
 7. SCOTT BESLEY & EUGENE F. BRIGHAM, *ESSENTIALS OF MANAGERIAL FINANCE* 720 (14th ed. 2008).
 8. *Id.*
 9. See Alessandro Gavazza, *Asset Liquidity and Financial Contracts: Evidence from Aircraft Leases*, 95 J. FIN. ECON. 62, 62 (2010).
 10. Elizabeth MacDonald, *Debt Hazards Ahead*, FORBES, June 18, 2007, at 80, 80-81, available at <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. *Id.* Although this Note focuses on the definition of leases in section 1-203 of the Uniform Commercial Code (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*, 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”).
 11. Gavazza, *supra* note 9, at 62.
 12. This Note 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, 15 U.S.C. §§ 1667-1667f (2006); UNIF. CONSUMER LEASES ACT (2001). Thus, to the extent that it discusses bankruptcy restructurings, this Note will focus on Chapter 11 rather than Chapter 13.
 13. These numbers were calculated from figures for NAICS codes 5321, 5322, 5323, and 5324 in the two most recent Economic Censuses. See *Detailed Statistics: Real Estate and Rental and*

rental and leasing sector employed approximately 640,000 people in the United States.¹⁴

One explanation for the prevalence of leasing is that “[l]easing . . . ha[s] lower expected bankruptcy costs to the lessor than borrowing has to the lender, resulting in lower financing costs for the lessee than the borrower, *ceteris paribus*.”¹⁵ Accordingly, a provider of funds (that is, a lessor or lender) will often argue in bankruptcy court that an asset-related transaction should be treated as a lease. Meanwhile, a trustee, a debtor, or a debtor’s other creditors will often argue that the same transaction should be classified as a loan. The Bankruptcy Reporter is replete with cases involving disputes of this type.¹⁶

While huge stakes hinge on the lease/loan distinction,¹⁷ many legal scholars are doubtful that the distinction should exist at all. In 1982, Professor Homer Kripke wrote that “[t]he man from Mars, with a clear eye undistorted by training in law,” would find long-term leases and secured loans to be so similar “that the differences should fade into insignificance.”¹⁸ One year later, Professor John Ayer characterized the differentiation between leases and loans as “an exercise in false concreteness”¹⁹ and called on the drafters of the

Leasing: Preliminary Comparative Statistics for the United States: 2007 and 2002, U.S. CENSUS BUREAU, http://factfinder.census.gov/servlet/IBQTTable?_bm=y&-geo_id=&-ds_name=EC0753I2&-lang=en (last visited Nov. 1, 2010).

14. *Id.*

15. V. Sivarama Krishnan & R. Charles Moyer, *Bankruptcy Costs and the Financial Leasing Decision*, 23 FIN. MGMT. 31, 31 (1994); see Steven A. Sharpe & Hien H. Nguyen, *Capital Market Imperfections and the Incentive To Lease*, 39 J. FIN. ECON. 271 (1995); see also *infra* Part I (discussing the disparate treatment of leases and loans under the Bankruptcy Code).

16. See, e.g., *In re Uni Imaging Holdings, LLC*, 423 B.R. 406 (Bankr. N.D.N.Y. 2010); *Pummill v. McGivern (In re Am. Eagle Coatings, Inc.)*, 353 B.R. 656 (Bankr. W.D. Mo. 2006); *WorldCom, Inc. v. Gen. Elec. Global Asset Mgmt. Servs. (In re WorldCom, Inc.)*, 339 B.R. 56 (Bankr. S.D.N.Y. 2006); *In re Bailey*, 326 B.R. 156 (Bankr. W.D. Ark. 2005); *In re Buehne Farms, Inc.*, 321 B.R. 239 (Bankr. S.D. Ill. 2005); *In re Fleming Cos.*, 308 B.R. 693 (Bankr. D. Del. 2004); *In re Our Secret, Ltd.*, 282 B.R. 697 (Bankr. D.N.M. 2002); *In re Metrobility Optical Sys., Inc.*, 279 B.R. 35 (Bankr. D.N.H. 2002); *PSINet, Inc. v. Cisco Sys. Capital Corp. (In re PSINet, Inc.)*, 271 B.R. 1 (Bankr. S.D.N.Y. 2001); *Smith v. Fendley (In re Allied Sign Co.)*, 280 B.R. 694 (Bankr. S.D. Ala. 2001).

17. By one estimate, “trillions of dollars” hinge on the lease/loan distinction. See Michael J. Abatemarco & Anthony Michael Sabino, “*True Lease*” Versus *Disguised Security Interest: Is the United Trilogy Truly the Last Stand?*, 40 UCC L.J. 445, 447 (2008). Professors Abatemarco and Sabino do not explain how they arrived at that estimate.

18. Homer Kripke, Book Review, 37 BUS. LAW. 723, 727 (1982) (reviewing *EQUIPMENT LEASING—LEVERAGED LEASING* (B.E. Fritch & A.F. Reisman eds., 2d ed. 1980)).

19. Ayer, *Vacuity*, *supra* note 6, at 681.

Bankruptcy Code to “abolish this pointless and distracting distinction.”²⁰ In the quarter-century that has elapsed since Ayer’s article, his view has elicited agreement – though little critical consideration – from other legal academics. In one influential *Yale Law Journal* article, Professor Lynn LoPucki described Ayer’s argument as “persuasive[.]”²¹ Likewise, Professors Lucian Bebchuk and Jesse Fried cited Ayer approvingly in their seminal 1996 contribution to the secured credit debate.²² Meanwhile, most scholars who have written about related matters have taken the status quo lease/loan distinction as a given but have declined to defend the distinction as it stands.²³

This Note attempts to fill that gap. It argues that the lease/loan distinction is no “exercise in false concreteness.” To the contrary, it deters market actors from using depreciable assets in value-destroying ways and, as a consequence, increases aggregate welfare.²⁴ Specifically, the current lease/loan distinction compels market actors to internalize depreciation costs into their decisions regarding asset use. In doing so, the lease/loan distinction incentivizes firms to

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20. *Id.* at 668. A few bankruptcy courts have taken note of Professor Ayer’s critique. *See, e.g.,* Consumer Lease Network, Inc. v. Puckett (*In re Puckett*), 60 B.R. 223, 233 n.21 (Bankr. M.D. Tenn. 1986) (describing Ayer’s article as a “highly provocative analysis”); *see also In re Steffen*, 181 B.R. 981, 987 & n.5 (Bankr. W.D. Wash. 1995) (citing John D. Ayer, *An Unrepentant View of the Sale-Lease Distinction*, 4 J. BANKR. L. & POL. 291 (1995), 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”).
 21. Lynn M. LoPucki, *The Death of Liability*, 106 YALE L.J. 1, 64 n.270 (1996).
 22. Bebchuk & Fried, *supra* note 2, at 928 & n.218 (“[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.”).
 23. *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 n.1 (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 commercial law . . .”).
 24. This Note considers whether the law of leases and loans satisfies the Kaldor-Hicks criterion—that is, whether existing rules maximize aggregate welfare. *Cf.* RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* § 1.2, at 12–14 (7th ed. 2007) (arguing, on philosophical and pragmatic grounds, that Kaldor-Hicks efficiency is the only criterion upon which economic analysis of the law can rely). This is not to say that policymakers ought to ignore distributive considerations; rather, this Note adopts the widely held view that redistributive goals are more effectively achieved through the Tax Code than the court system. *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).

invest in asset maintenance when the aggregate benefits of maintenance activities exceed the costs, and it deters firms from deploying depreciable assets when the marginal costs of asset use exceed the marginal returns.

Part I of this Note provides an overview of the lease/loan status quo. It compares the treatment of lessors and secured creditors under the Bankruptcy Code and explains why—until now—the consensus view among scholars and practitioners has been that the Bankruptcy Code affords much more favorable treatment to equipment lessors than to their secured-creditor counterparts. Part II of this Note analyzes existing arguments against and in support of the status quo. It shows that neither critics nor supporters of the status quo have demonstrated why the lease/loan distinction is—or is not—normatively defensible. Insofar as the lease/loan distinction rests on any normative basis, that basis has yet to be identified.

Part III presents the heart of this Note's argument. It shows 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 the transaction does cause such a shift, then the transaction creates a security interest, not a true lease. This Note presents 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. By allowing courts to reallocate depreciation costs in the case of a secured loan—but not in the case of a lease—the Bankruptcy Code promotes the efficient use of durable goods.²⁵

Ultimately, what distinguishes a lease from a loan is that in a lease, the provider of funds (the lessor) retains a residual interest in the underlying asset *regardless* of whether the asset user (the lessee) remains solvent, whereas in a loan, the provider of funds (the creditor) has an interest in the underlying asset only if the user (the debtor) becomes insolvent. While others have drawn attention to the concept of “meaningful residual interest” in the lease/loan

25. As acknowledged below, the Bankruptcy Code could promote a *more* efficient use of durable goods if it subordinated secured creditors' deficiency claims to unsecured creditors' general claims. See *infra* text accompanying note 114. See generally Squire, *supra* note 5 (arguing that secured creditors' deficiency claims should be subordinate to unsecured creditors' general claims in bankruptcy).

context,²⁶ this Note uniquely explains why the law should *care* about the allocation of the residual interest. The distinction encourages the allocation of physical capital to its most productive uses because it forces parties to factor depreciation costs into their decisions regarding asset utilization and asset maintenance.

I. LEASES AND LOANS: THE UCC MEETS THE BANKRUPTCY CODE

Although leasing is central to America's economic system, it occupies an interstitial position in the country's legal system. While lease-related issues are litigated largely in the bankruptcy context, the Bankruptcy Code itself never defines the word "lease."²⁷ Thus, federal bankruptcy courts faced with disputes over leases must turn to state commercial law for guidance.²⁸ In forty-nine states and the District of Columbia,²⁹ section 1-203 of the Uniform Commercial Code (UCC) controls the definition of true leases for personal property.³⁰ But the UCC's drafters made only passing mention of the bankruptcy implications when crafting the lease/loan distinction.³¹

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26. See Cooper, *supra* note 23, at 218 (stating that the sine qua non of a "true lease" is that "there is a meaningful residual returning to the lessor").
 27. See E. Carolyn Hochstadter Dicker & John P. Campo, *FF&E and the True Lease Question: Article 2A and Accompanying Amendments to UCC Section 1-201(37)*, 7 AM. BANKR. INST. L. REV. 517, 519 (1999).
 28. Powers v. Royce Inc. (*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." (quoting S. REP. NO. 95-989, at 26 (1978)); see also *United Airlines, Inc. v. HSBC Bank USA*, 416 F.3d 609, 615 (7th Cir. 2005) ("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 . . .").
 29. Louisiana is the only state that has not adopted Article 2A of the UCC. See *A Few Facts About the . . . UCC Article 2A—Leases*, NAT'L CONF. COMM'RS ON UNIF. STATE LAWS, http://www.nccusl.org/Update/uniformact_factsheets/uniformacts-fs-ucc2a8790.asp (last visited Nov. 1, 2010).
 30. Article 2A governs personal property leases, but the provision distinguishing true leases from secured loans is found in section 1-203 of the UCC, under the heading of "General Definitions and Principles of Interpretation."
 31. See U.C.C. § 1-203 cmt. 2 (2009) ("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))).

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.³² More precisely, the Bankruptcy Code accords considerably more favorable treatment to the lessor than to the secured lender. While lessors and secured creditors are both subject to the automatic stay at the outset of the bankruptcy process,³³ the treatment of lessors and secured creditors diverges as the process moves forward. Under § 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.³⁴ However, the trustee may assume the lease only if she "cures, or provides adequate assurance that the trustee will promptly cure" the debtor's default.³⁵ Moreover, § 365 does *not* give the court any authority to modify the terms of the lease agreement. Thus, if the trustee assumes the lease, then the lessor acquires a priority claim for the full amount of all lease obligations (both past and future).

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."³⁶ 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 § 506, the bankruptcy court must bifurcate the secured creditor's claim into secured and unsecured components.³⁷ 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 claims on the bankruptcy estate. By contrast, the "unsecured" portion of the

32. See Ayer, *Vacuity*, *supra* note 6, at 668.

33. 11 U.S.C. § 362 (2006). During the stay, creditors cannot take action to collect on a preexisting debt, *see id.* § 362(a), and a lessor cannot repossess leased goods unless the trustee has rejected the lease or the time in which the trustee may assume the lease has passed, *see id.* § 365(p). In order to obtain relief from the automatic stay, a creditor or lessor generally must seek approval from the court. *See id.* § 362(d).

34. *Id.* § 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"). *Id.* § 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. *Id.* § 365(d)(2).

35. *Id.* § 365(b)(1)(A).

36. *Id.* § 554(a).

37. *Id.* § 506(a).

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 for unsecured claims in Chapter 11 bankruptcies is only fifty-two cents on the dollar (compared to ninety-two cents on the dollar for secured claims).³⁸ 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.³⁹ Despite the language in the Bankruptcy Code, bankruptcy courts “may underestimate the collateral's market value and the appropriate interest rate . . . so that the payment stream falls short of the collateral's full value.”⁴⁰

The interactions between section 1-203 of the UCC and sections 365 and 506 of the Bankruptcy Code frequently generate seemingly strange results. An example will illustrate this point. Consider the case of a trucking company that acquires possession of a vehicle that is worth \$20,000 and that has 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 \$2000.⁴¹ If the trucking company files for bankruptcy at any point before the end of the ten years, then the transaction would be subject to

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38. Douglas Baird, Arturo Bris & Ning Zhu, *The Dynamics of Large and Small Chapter 11 Cases: An Empirical Study* 37, tbl.1 (Yale Int'l Ctr. for Fin., Working Paper No. 05-29, 2007), available at <http://ssrn.com/abstract=866865>.
39. 11 U.S.C. § 1129(b)(2)(A)(i)(II) (2006).
40. *In re Wright*, 492 F.3d 829, 830 (7th Cir. 2007) (Easterbrook, C.J.). As an empirical matter, it appears that bankruptcy courts are more likely to accept debtors' (lower) estimates of collateral value than to accept secured creditors' (higher) estimates. See Keith Sharfman, *Judicial Valuation Behavior: Some Evidence from Bankruptcy*, 32 FLA. ST. U. L. REV. 387, 396 (2005) (examining cases in which secured creditors and debtors submitted divergent estimates of collateral value, and finding that “bankruptcy judges on average allocated 65.2% of the value in controversy to debtors”). These findings indicate either that debtors submit more accurate estimates of collateral value or that judges tend to underestimate the true value of collateral. One argument in favor of the latter hypothesis is that “[u]ndervaluing collateral enables the debtor to use the collateral at a lower cost and, therefore, enhances the chances for successful reorganization. . . . Thus, a bankruptcy court with an inclination towards a reorganization might habitually err on the side of undervaluing collateral.” Theodore Eisenberg, *The Undersecured Creditor in Reorganizations and the Nature of Security*, 38 VAND. L. REV. 931, 948 (1985).
41. Of course, a lender would agree to these terms only if the time value of money were zero. See *infra* note 119 (extending this Note's analysis of the lease/loan distinction to account for a positive time value of money).

§ 506 of the Bankruptcy Code (allowing the bankruptcy judge to bifurcate the lender's claim into secured and unsecured components and to 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 \$2000. Under the terms of the agreement, the trucking company has the option to purchase the vehicle for its fair market value (that is, \$2000) after nine years; otherwise, possession of the truck will revert to the lessor. If the trucking company files for bankruptcy at any point before the end of nine years, a bankruptcy court is likely to hold that the transaction is a true lease, in which case the transaction will be subject to § 365 of the Bankruptcy Code rather than § 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.⁴²

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.⁴³) If the trucking

42. See, e.g., *Sankey v. ABCO Leasing, Inc.* (*In re Sankey*), 307 B.R. 674 (D. Alaska 2004) (holding that an equipment lease allowing the lessee to acquire the equipment at the end of the lease term for 10% of the original purchase price is a true lease); *Coode v. M & J Fin. Corp.* (*In re Boling*), 13 B.R. 39, 44-45 (E.D. Tenn. 1981) (holding that an agreement giving the lessee the option to acquire trailers at the end of the lease term for 10% of the original cost is a true lease because "the option price for the purchase of the . . . trailers at the end of the lease term . . . bears a reasonable resemblance to the fair market price of the trailers"); *In re Universal Med. Servs., Inc.*, Bankr. No. 70-456, 1970 WL 12640 (Bankr. E.D. Pa. Dec. 4, 1970) (holding that an agreement giving the lessee "an option to purchase the leased equipment at the end of the five year term of the lease by paying a sum equal to ten percent of the original purchase price" is a true lease where "the 10% option purchase price . . . approximates the fair market value of the equipment after five years").

Not all authorities are in agreement on this point. See, e.g., *Percival Constr. Co. v. Miller & Miller Auctioneers, Inc.*, 532 F.2d 166, 171-72 (10th Cir. 1976) (comparing the option price at the end of the lease to the cost of the goods at the beginning of the lease and concluding that an option to purchase for 10.6% of the original list price "presents the classic example of a lease intended as a security interest"). *But see Morris v. Dealers Leasing, Inc.* (*In re Beckham*), 275 B.R. 598, 604 (D. Kan. 2002) (holding that *Percival* has been superseded by amendments to the Kansas Statutes that reflect nationwide changes to the UCC); see also Cooper, *supra* note 23, at 226-27 & n.103 (suggesting that the result reached by the *Percival* Court may have been "incorrect" because "without inquiry into the anticipated value of the goods at the time the option is exercised, this test is irrelevant to the true nature of the lease").

43. The lessor might be interested in tax benefits because 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 (codified as amended in

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 grant the petition.⁴⁴ But, as above, if the trucking company has an option to buy the vehicle for \$2000 at the end of the nine-year term, the court would likely hold that the transaction is a true lease.⁴⁵ 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 offers aid to unsecured creditors only when the lease terms are already quite generous to the bankruptcy estate.

Even jurists who are charged with the everyday application of the UCC and the Bankruptcy Code have failed to see any hidden logic of the lease/loan distinction. For example, Bankruptcy Judge Dennis O'Brien of the District of Minnesota has characterized § 365 as “unreasonable” and “misguided.”⁴⁶ He further stated: “Unfortunately, the effect of . . . [§ 365] is to improve post-petition (by substantial measure) the pre-petition position of a . . . lessor . . . at the expense of other creditors.”⁴⁷ Judge O'Brien concluded, however, that bankruptcy courts are bound by the language of § 365 “[u]nless the Congress addresses this situation.”⁴⁸ Similarly, Bankruptcy Judge J. Craig Whitley of the Western District of North Carolina has observed that § 365 “seems at odds with the general premise in bankruptcy that one creditor should not enjoy a windfall at the expense of other creditors.”⁴⁹ But Judge Whitley, like Judge O'Brien, concluded: “that is the intent of [§ 365] as enacted by Congress and as

scattered titles of the U.S.C.), eliminated many of the tax shelters that had made leasing an especially attractive means of tax avoidance. See Sharpe & Nguyen, *supra* note 15, at 280-81.

44. Cf. U.C.C. § 1-203(b)(4) (2009) (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, Inc.), Bankr. Case No. 09-40154-JDP, 2010 Bankr. LEXIS 114, at *13 (Bankr. D. Idaho Jan. 14, 2010) (holding as a matter of law that an agreement under which Wing Foods, the ostensible “lessee,” had the right to purchase a walk-in freezer for \$1 at the end of the twenty-four month term was a disguised security interest).

45. See *supra* note 42.

46. *In re* Monica Scott, Inc., 123 B.R. 990, 993 (Bankr. D. Minn. 1991).

47. *Id.*

48. *Id.*

49. *In re* Wright, 256 B.R. 858, 861 (Bankr. W.D.N.C. 2001).

interpreted by previous courts.”⁵⁰ In short, the statutes that set forth the status quo treatment of leases and loans are in need of an explanation—or in need of repeal.⁵¹

II. A CRITICAL REVIEW OF CURRENT THEORIES

Part II of this Note reviews two of the most important contributions to the lease/loan debate: Professor John Ayer’s argument that the lease/loan distinction is “vacuous” and Judge Frank Easterbrook’s defense of the distinction. Neither scholar has made his case convincingly. Thus, if the differential treatment of leases and loans under the Bankruptcy Code is to be justified, that justification must come from an as-yet-unidentified source.

A. *Shifting Risks and Drawing Lines*

Leases and secured loans are both mechanisms for allocating the risks and opportunities attendant to asset ownership. Professor Ayer has argued that although asset users assume more risks in the loan context than in the lease context, this is not a sufficient justification for distinguishing between leases and loans.⁵² Professor Amelia Boss has argued, in response, that if leases and loans transfer risks to different degrees, then that difference in risk might be a reason to distinguish between the two transaction types.⁵³ Ultimately, neither argument carries the day because neither a lease nor a loan necessarily involves a greater assumption of risk for the asset user.

When a buyer acquires an asset and grants a security interest to a creditor, the buyer/borrower still “has upside opportunity and downside risk,” according to Professor Ayer.⁵⁴ If the buyer/borrower defaults on the secured loan and the creditor repossesses the collateral, then 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

50. *Id.*

51. Since the Bankruptcy Code imports the lease/loan distinction from state law, repeal could come either through federal bankruptcy reform or through state legislation narrowing the range of transactions that qualify as leases.

52. Ayer, *Vacuity*, *supra* note 6.

53. Boss, *supra* note 6.

54. Ayer, *Vacuity*, *supra* note 6, at 672.

less than the outstanding balance on the loan, the buyer/borrower is generally liable for the deficiency.⁵⁵

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. To see why this is the case, imagine that a trucking company rents a vehicle for \$2000 a year and, the next day, the fair market rental value of the truck rises to \$3000 a year. Presumably, according to Ayer, the lessee “has a gain.”⁵⁶ Now imagine that instead of rising to \$3000, the rental value of the truck falls the next day to \$1000. “Surely,” then, the trucking company has “suffered a loss.”⁵⁷ Thus, when rental payments are fixed in advance, the lessee assumes the risk that the value of the asset will fall during the lease period but also acquires an opportunity for gain if the value of the asset rises during the lease period.

Moreover, one can construct an endless number of permutations on the standard lease agreement, all of which allocate risks and opportunities in unique ways. What if “[t]he transferee agre[es] 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”?⁵⁸ In that case, “the transferee has acquired the upside opportunity . . . while leaving the downside risk . . . with the transferor.”⁵⁹ 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.⁶⁰ In such a scenario, the lessee stands neither to gain nor to lose based on fluctuations in the asset price.

55. See U.C.C. § 9-608(a)(4) (2009) (“A secured party shall account to and pay a debtor for any surplus, and the obligor is liable for any deficiency.”); *id.* § 615(d) (“If the security interest . . . secures payment or performance of an obligation,” then, except under narrowly defined circumstances, “the secured party shall account to and pay a debtor for any surplus; and . . . the obligor is liable for any deficiency.”). The creditor might still find herself bearing some portion of the asset-specific risk if the value of the collateral is less than the outstanding balance on the loan *and* the borrower’s assets are insufficient to cover the deficiency.

56. Ayer, *Vacuity*, *supra* note 6, at 680.

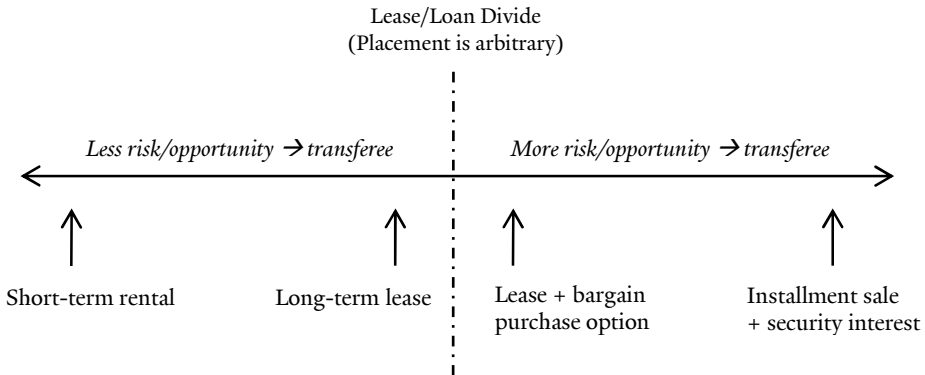
57. *Id.*

58. *Id.* at 676-77.

59. *Id.* at 677.

60. As Professor Ayer notes, this arrangement is “widely used in shopping centers.” *Id.* at 681. See generally B. Peter Pashigian & 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).

Figure 1.
RISK/OPPORTUNITY CONTINUUM



Accordingly, Professor Ayer has argued that all equipment-financing transactions lie on a risk/opportunity continuum, with some (such as secured loans and long-term leases) involving large transfers of risk and opportunity from the provider of funds to the asset user and others (such as short-term leases with adjustable rental payments) involving much smaller transfers. Since there is no bright line on the continuum between transactions that involve large risk/opportunity transfers and transactions that involve small transfers, Professor Ayer argues that the “dichotomy” between leases and secured loans is artificial.⁶¹ But even if Professor Ayer is correct that the dividing line between leases and loans is arbitrary, it does not logically follow that the distinction should be abolished. Indeed, the law often 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”⁶²—but this arbitrariness “does not imply that we could do without a speed limit entirely.”⁶³ Indeed, as Professor Amelia Boss points out, Ayer’s argument might easily lead to the conclusion opposite 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

61. Ayer, *Vacuity*, *supra* note 6, at 684.

62. Charles W. Moore, Editorial, *The Problem with Speed Limits Is that They Are Too Low*, GAZETTE (Montreal), Dec. 4, 2007, at A21.

63. R.L. Crouch, *A Framework for the Analysis of Optimal Maximum Highway Speed Limits and Their Optimal Enforcement*, 8 ACCIDENT ANALYSIS & PREVENTION 187, 198 n.‡ (1976).

. . . it also demonstrates that some sales and leases (which are at opposite ends of the continuum) 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.⁶⁴

Although Professor Boss does not explain why this distinction is necessary in the bankruptcy context,⁶⁵ the next step in the logic seems relatively apparent: to the extent that a transaction transfers risks to unconsenting⁶⁶ third parties (that is, the lessee/debtor's unsecured creditors), bankruptcy courts should have the power to alter the terms of the risk transfer.

To see why equipment-financing transactions may shift risks to unconsenting third parties, imagine that a trucking company has \$1000 in assets along with \$1000 in debt to unsecured creditors and that the company chooses to acquire a new vehicle. Assume that the vehicle is worth \$20,000 at the outset and that it is expected to depreciate at a rate of \$2000 a year. Imagine that the trucking company agrees to pay an automotive financing firm (for example, GMAC⁶⁷) \$2000 to “lease” the vehicle for the first year and that the contract obligates the trucking company to pay \$18,000 at the end of year 1 in order to acquire the vehicle outright. Under the terms of this transaction, the trucking company's owners hold the opportunity to gain if the vehicle's value at the end of year 1 turns out to be greater than \$18,000. But what happens if the vehicle's value turns out to be, say, \$17,000 at the end of the year? If the trucking company files for bankruptcy and if GMAC were still allowed to collect the full \$18,000 on its secured claim (the \$17,000 vehicle plus the trucking company's \$1000 in other assets), then there would be no assets remaining for the company's other unsecured creditors. In other words, the unsecured creditors—who were not party to the truck transaction—would bear the full loss of the decline in the vehicle's value.

64. Boss, *supra* note 6, at 360.

65. See *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.”).

66. See *infra* notes 68–72 and accompanying text.

67. The firm formerly known as GMAC was the largest auto lender in the United States until 2008. See Michael Harley, *Toyota Tops GMAC as the Biggest U.S. Auto Lender*, AUTOBLOG (Aug. 25, 2008, 6:59 PM), <http://www.autoblog.com/2008/08/25/toyota-tops-gmac-as-the-biggest-u-s-auto-lender/>. Following the financial collapse of 2008, the U.S. government injected more than \$17 billion into the firm. The company is now majority-owned by the federal government, and it has changed its name to Ally Financial Inc. Dan Wilchins, *Ally Financial Eyes 2011 IPO, Negotiation with U.S.*, REUTERS, Aug. 3, 2010, <http://www.reuters.com/article/idUSN0314449820100803>.

This transfer of risk to the trucking company's unsecured creditors would not raise many concerns if unsecured creditors could adjust the interest rates on their claims in response to the additional risk. However, "in the real world," as Professors Bebchuk and Fried note, "[a] firm will have many . . . 'nonadjusting' creditors."⁶⁸ These include tort creditors, public entities with tax and regulatory claims, and creditors whose claims are simply so small that they remain "rationally uninformed" (that is, the cost of monitoring the debtor's behavior exceeds any potential benefits).⁶⁹ Moreover, the class of nonadjusting creditors will include creditors who lent funds to the trucking company on fixed terms before the vehicle transaction.⁷⁰ Employees⁷¹ and consumers with outstanding warranties⁷² may also be nonadjusting creditors.

Section 1-203 of the UCC and § 506 of the Bankruptcy Code, in combination, make it more difficult for the consenting parties in a commercial transaction to transfer risk to nonadjusting creditors. A transaction automatically creates a security interest rather than a true lease if the putative lessee is, as in the example above, "bound to become the owner of the goods."⁷³ Thus, in the example above, a bankruptcy court could rewrite the terms of the transaction so that if the trucking company filed for bankruptcy and the debtor-in-possession chose to keep the vehicle, and if the market price of the vehicle turned out to be less than \$18,000, the auto dealer would *not* have a secured claim for the full \$18,000.

There are two normative justifications for limiting the debtor's ability to transfer asset-related risks to 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, all of whose claims are unsecured in part or in whole. Second, granting priority status to GMAC's claim might lead to inefficient allocations of capital. To see why, it is useful to break the hypothetical contract above into three components: the trucking company's first-year rental payment, the trucking company's call option allowing it to purchase the truck after one year for a strike price of \$18,000, and a put option allowing GMAC to sell the vehicle to

68. See Bebchuk & Fried, *supra* note 2, at 864.

69. See *id.*

70. See *id.*

71. 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).

72. See F.H. Buckley, *The Bankruptcy Priority Puzzle*, 72 VA. L. REV. 1393, 1408 (1986).

73. U.C.C. § 1-203(b)(2) (2009).

the trucking company for \$18,000 after one year. If the trucking company and GMAC both had zero default risk, then—in theory—the positive value of the call option to the trucking company would exactly offset the negative value of the put option. But once we introduce the possibility that the trucking company will file for bankruptcy, then the values are no longer offsetting: the trucking company acquires an opportunity for gain that is greater than its corresponding risk of loss.⁷⁴

As a result, the trucking company would be willing to pay *more* than \$2000 at the start of year 1 for the right to use the vehicle for twelve months plus the put option/call option combination. Moreover, the contractual surplus shared by the trucking company and GMAC rises with the trucking company's risk of bankruptcy because the greater the probability of bankruptcy, the larger the risk that can be shifted to the trucking company's unsecured creditors. The danger here is that assets may be acquired by less efficient users with higher default probabilities, rather than more efficient users with lower default probabilities.

Interestingly, and logically, section 1-203 of the UCC *would* allow GMAC and the truck company to enter into a short-term lease for one year, with rent of \$2000, combined with the opportunity (but not the obligation) for the trucking company to purchase the vehicle for \$18,000 at the end of the year. 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 reasonably predictable fair market value of the goods.”⁷⁵ The UCC recognizes a categorical difference between, on the one hand, put options that foist *risks* upon

74. Let π equal the probability that the trucking company will file for bankruptcy between $t=0$ and $t=1$; let v equal the value of a call option giving the trucking company the right to acquire an asset for its ex ante expected value x at $t=1$; and let $-v$ equal the value (to the trucking company) of a put option obligating the trucking company to acquire the asset for value, x , at $t=1$. Assume that variations in the value of the asset at $t=1$ are normally distributed around x . Let a represent the probability that the trucking company—if it files for bankruptcy—will have sufficient available assets such that the lender/lessor can exercise its put option, $0 \leq a \leq 1$. Let b represent the share of the contractual surplus that trucking company will capture in the bargain, $0 \leq b \leq 1$. The value of the call option to the trucking company's owners is v , which is equal to its cost to the lender/lessor. Because the cost of the put option to trucking company's owners will be $v(1-\pi)$, while its value to the lender/lessor will be $v(1-\pi)+\pi av$, the contractual surplus will be πav . Thus, we can expect that the trucking company's payment to the lender/lessor at the beginning of year 1 will be equal to the fair market rental value of the asset for one year plus $(1-b)\pi av$.

75. U.C.C. § 1-203(c).

unconsenting unsecured creditors and, on the other hand, call options that foist *opportunities* upon unconsenting unsecured creditors.⁷⁶

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. (This argument only applies to transactions that shift downside risk to the lessee/debtor's unsecured creditors, not to transactions that only shift upside opportunity to the unsecured creditors.) 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.⁷⁷

Thus, Professor Ayer's attack on the lease/loan distinction could just as easily be read as a justification for that distinction. Professor Ayer is correct that leases and loans shift downside risks and upside opportunities to unsecured creditors in different degrees. But even in the absence of a bright line separating the left side of the spectrum from the right, there may be a normative justification for limiting the ability of the lessor/lender and the lessee/debtor to foist downside risks on the lessee/debtor's other creditors. Yet this justification breaks down at two points. First, the argument against

76. Given the recent financial problems at large-volume lessors (for example, AIG, CIT Group, and GMAC), we may be worried about transfer of risk to the lessor'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 § 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 § 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 consideration of the [1978 Bankruptcy Reform Act] by Congress, the argument that subsection (h) applies equally to personal property leases is unpersuasive").

77. 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 § 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.

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) acquires 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 example above, the transaction between the trucking company and GMAC would be a "true lease" if the trucking company retained the option (not the obligation) to purchase the truck after year 1 for \$18,000; however, the transaction would be recharacterized as a loan if the trucking company had the option to purchase the truck after year 1 for substantially *less* than \$18,000. In the latter case, the call option could be characterized as "an option to become the owner of the goods for . . . nominal additional consideration,"⁷⁸ thus converting the lease into a security interest. If section 1-203 of the UCC and § 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 example above, the trucking company enters into a ten-year lease agreement with GMAC in 2011 at \$2000 a year, and the fair market rent for comparable trucks rises to \$3000 in 2012, then the transaction constitutes a gain for the trucking company. (Even if the trucking company only needs the vehicle for one year, it can assign the lease to another party for \$3000 in 2012 and book a \$1000-a-year profit.) If the fair market rent falls to \$1000 in 2012, then surely the trucking company has suffered a loss.⁷⁹ But by the same token, if the trucking company instead opts for a one-year lease agreement even though it needs the vehicle for the next decade, and if the fair-market rent for comparable trucks rises to \$3000 in 2012, then surely the trucking company 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 the trucking company opts for a one-year lease and the fair market rent falls to \$1000 in 2012, then presumably the trucking company 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 also acquires the opportunity for gain if the price of the asset rises. In a short-term

78. U.C.C. § 1-203(b)(4).

79. See Ayer, *Vacuity*, *supra* note 6, at 680.

lease, the lessee assumes the risk that the price of the asset will rise but 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

Perhaps the only academic who has offered a full-throttled defense of the lease/loan distinction is Frank Easterbrook, who did so in his judicial—rather than his professorial—capacity.⁸⁰ In a 2005 case arising out of United Airlines’ \$23 billion bankruptcy,⁸¹ Judge Easterbrook turned to the Bankruptcy Code, the UCC, and California common law⁸² to “flesh[] out the definition”⁸³ of a true lease.

Whereas Professor Ayer’s analysis takes the UCC as its “beginning point,”⁸⁴ Judge Easterbrook’s analysis begins by considering the basic objectives of the Bankruptcy Code; from there, Easterbrook attempts to deduce why the Bankruptcy Code’s drafters might have chosen to distinguish leases from secured loans.⁸⁵ Judge Easterbrook’s argument in *United Airlines* springs from his analysis of the Bankruptcy Code in *Boston & Maine Corp. v. Chicago Pacific Corp.*,⁸⁶ one of his first opinions after joining the Seventh Circuit. In *Boston & Maine Corp.*, Judge Easterbrook explained his view of the Chapter 11 process:

80. *United Airlines, Inc. v. HSBC Bank USA*, 416 F.3d 609 (7th Cir. 2005).

81. 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, *Bankruptcy Case Is Filed by United*, N.Y. TIMES, Dec. 10, 2002, at A1.

82. 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. *United Airlines*, 416 F.3d at 616.

83. *Id.* at 612.

84. Ayer, *Vacuity*, *supra* note 6, at 669.

85. *United Airlines*, 416 F.3d at 612-14.

86. 785 F.2d 562 (7th Cir. 1986). *Boston & Maine Corp.* was argued on October 29, 1985. *Id.* at 562. Judge Easterbrook was confirmed by the Senate in April 1985. See *History of the Federal Judiciary: Easterbrook, Frank Hoover*, FED. JUD. CENTER, <http://www.fjc.gov/servlet/nGetInfo?jid=678> (last visited Nov. 1, 2010).

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.⁸⁷

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 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.⁸⁸ 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” from the state agency.⁸⁹ Thus, United’s obligations should be treated as debt service owed by the “old” United rather than postbankruptcy expenses of the “brand new venture.” That, in itself, does not seem like a controversial conclusion. As Judge Easterbrook noted, “Reversion without additional payment is the UCC’s *per se* rule for identifying secured credit.”⁹⁰ The Seventh Circuit panel’s decision was a straightforward application of black-letter lease law. The more pertinent question—at least for the purposes of this Note—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

87. *Bos. & Me. Corp.*, 785 F.2d at 565; see also *United Airlines*, 416 F.3d at 613 (citing *Bos. & Me. Corp.*, 785 F.2d 562).

88. *United Airlines*, 416 F.3d at 617.

89. *Id.* The state agency had issued bonds to finance the construction of the United maintenance base and had then lent the proceeds from the bond sale to United. The advantage of this setup was that the bondholders paid no taxes on the interest associated with the bonds because debt service payments made by state entities are generally tax-exempt. See *id.* at 610-11.

90. *Id.* at 617; cf. U.C.C. § 1-203(b) (2009) (“A transaction in the form of a lease creates a security interest if . . . the lessee has an option to renew the lease for the remaining economic life of the goods . . . or . . . to become the owner of the goods for no additional consideration or for nominal additional consideration upon compliance with the lease agreement.”).

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.”⁹¹ The lessor’s claim would have been paid pro rata along with the claims of all of United’s other unsecured creditors.⁹² Anything above the amount that the lessor would have received in liquidation is “going-concern surplus.”⁹³ As Judge Easterbrook has argued elsewhere, returns beyond the sum that a claimant would have recovered in liquidation should “go[] into the pot with other unsecured claims.”⁹⁴

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 intended 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 promptly cure, such default.”⁹⁵ 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 § 365. In *NLRB v. Bildisco & Bildisco*,⁹⁶ the Court explicitly

91. U.C.C. § 2A-528(1) (2009).

92. The formula would be different for real property because real property leases are not covered by UCC Article 2A, and § 502 of the Bankruptcy Code caps lessors’ claims for damages under unexpired leases of real property at “the rent reserved by such lease, without acceleration, for the greater of one year, or 15 percent, not to exceed three years, of the remaining term of such lease.” 11 U.S.C. § 502(b)(6)(A) (2006).

93. 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 a firm has above and beyond the liquidation value of its discrete assets”).

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

95. 11 U.S.C. § 365(b)(1).

96. 465 U.S. 513 (1984). Although the *Bildisco* Court addressed “executory contracts,” the Court’s analysis applies with equal force to unexpired leases, as executory contracts and leases are governed by the same provision of the Bankruptcy Code. See 11 U.S.C. § 365. An executory contract is “a contract under which the obligation of both the bankrupt and the other party to the contract are so far unperformed that the failure of either to complete performance would constitute a material breach excusing the performance of the other.” Vern Countryman, *Executory Contracts in Bankruptcy: Part I*, 57 MINN. L. REV. 439, 460

stated that the “new” postbankruptcy firm does *not* have the right to alter the terms of executory contracts into which the “old” prebankruptcy firm has entered. The debtor-in-possession has the right to exit the contract entirely, but “[s]hould the debtor-in-possession elect to assume the executory contract . . . , it assumes the contract *cum onere* [that is, subject to a burden].”⁹⁷ According to the Court, “it is sensible to view the 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.⁹⁸ The “onus” is that the debtor must make all overdue payments under the contract and fulfill all additional obligations as they come due.⁹⁹

To see just how far Judge Easterbrook’s old firm/new firm analysis strays from the status quo, imagine that GMAC and the trucking company sign a lease allowing the trucking company to use the vehicle for its entire economic life, with annual payments pegged to an index of the fair market rent for similar trucks. Under this arrangement, the trucking company would never pay 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.”¹⁰⁰ If the trucking company filed for bankruptcy, the debtor-in-possession would not necessarily have to make payments in full as they arise; instead, a court could substitute its own valuation of the collateral, adjust the payment schedule, and impose a cramdown interest rate on GMAC. Contrary to Judge Easterbrook’s old firm/new firm theory, the fact that the trucking company’s rent payments

(1973). The executory contract at issue in *Bildisco* was a collective bargaining agreement. See *Bildisco*, 465 U.S. at 516.

97. *Bildisco*, 465 U.S. at 531; see also *In re Italian Cook Oil Corp.*, 190 F.2d 994, 996-97 (3d Cir. 1951) (“[T]he trustee is given the right to adopt or reject an executory contract. He must do one or the other. . . . The trustee, however, may not blow hot and cold. If he accepts the contract he accepts it *cum onere*. If he receives the benefits he must adopt the burdens. He cannot accept one and reject the other.”). The *Bildisco* Court explicitly adopted the holding of *In re Italian Cook Oil Corp.* See *Bildisco*, 465 U.S. at 531-32.

98. *Bildisco*, 465 U.S. at 528.

99. The agreement disputed in *Bildisco* was an executory contract within the scope of § 365, and the circuit courts have applied *Bildisco* to leases. 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, 295-96 (1st Cir. 2004) (applying *Bildisco* to a dispute regarding the debtor-in-possession’s attempt to assume unexpired equipment leases).

100. U.C.C. § 1-203(b)(1) (2009).

covered the cost of inputs—and no more—would not be enough to shield the putative lease from recharacterization as a loan.

Now imagine that instead of a lease for the entire economic life of the vehicle at fair market value, the trucking company and GMAC agreed to a five-year lease under which the trucking company would pay \$1000 for the first four years and \$6000 at the beginning of year five. This fifth-year payment is, in part, an “old claim” against the prebankruptcy firm. Assuming (as above) that the fair market rent for the vehicle is \$2000 a year, then the additional \$4000 in year 5 compensates GMAC for the fact that the trucking company 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. The trucking company would have to pay the full \$6000 or would have to reject the lease and surrender the vehicle. 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 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, in fact, 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 Note 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 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 depreciation 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

When a lessor/lender and lessee/debtor shift downside risks to the lessee/debtor's unsecured creditors, the result is not only a redistribution of wealth but also a reduction in aggregate welfare. To see why, 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 exceeds the market price.¹⁰¹ One of the costs incurred by the firm is depreciation, "the reduction in the valuation of fixed equipment" over time.¹⁰² Economist Joe Bain has drawn a much-followed distinction among three types of depreciation costs: "(1) obsolescence, (2) deterioration by the elements, and (3) the rate of use."¹⁰³ 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 (for example, 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

101. See, e.g., N. GREGORY MANKIW, *PRINCIPLES OF ECONOMICS* 296-97 (2d ed. 2001).

102. Joe S. Bain, *Depression Pricing and the Depreciation Function*, 51 Q.J. ECON. 705, 709 (1937).

103. *Id.*

in the short and medium terms).¹⁰⁴ This Note focuses on the third factor—“use-depreciation”¹⁰⁵—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 § 506 did *not* allow for bifurcation (that is, if secured loans were treated like leases). If the widget-maker filed for bankruptcy, the trustee or debtor-in-possession would have two options: keep the machine or abandon the collateral. If the trustee or debtor-in-possession abandoned the collateral, the bankruptcy estate would still be liable for any difference between the outstanding principal and the resale price of the widget-making machine. If the restructured firm kept the machine, it would have to make all principal and interest payments under the loan agreement as they came due. In our imaginary world without bifurcation, the bankruptcy court could not adjust the payment schedule or impose a cramdown interest rate on the lender.

As a general rule, a firm will use an asset up to the point that the marginal revenue generated by asset use is equal to the marginal cost. However, in a hypothetical world without bifurcation, the widget-making firm would not bear all the costs of asset use. First, some of the costs of use-depreciation would be borne by the secured creditor that financed the acquisition of the machine. If the widget-maker filed for bankruptcy and the trustee or debtor-in-possession abandoned the collateral, then the secured creditor could resell the machine in an attempt to recoup the outstanding principal on the loan. To the extent that the value of the machine had depreciated faster than the principal on the loan had been paid down, the secured creditor would have a deficiency claim against the bankruptcy estate. But because deficiency claims are unsecured claims, which are rarely paid in full, the secured creditor would recover only a portion of the difference between the outstanding principal and the value of the collateral.

Second, and more disconcertingly, at least some (and potentially all) of the costs of use-depreciation would be borne by the debtor’s *unsecured* creditors. If the trustee or debtor-in-possession abandoned the collateral, the secured creditor’s deficiency claim would dilute the other unsecured claims against the bankruptcy estate. If the debtor-in-possession *assumed* the loan, the costs to the unsecured creditors could be even greater. In our hypothetical world without

104. See MANKIW, *supra* note 101, at 277-78.

105. See, e.g., A.D. Scott, *Notes on User Cost*, 63 ECON. J. 368, 381 n.1 (1953).

bifurcation, the bankruptcy court could not alter the terms of the loan; thus, the debtor-in-possession would be obligated to pay off all of the remaining principal. Since the secured creditor would be made whole, all the costs of use-depreciation would be borne by the other unsecured claimants.

To see how this hypothetical legal regime would generate deadweight loss, consider Figure 2 (below). The line labeled Social Cost represents the aggregate costs to all market actors—the widget-maker, the secured creditor, and unsecured creditors—as a result of asset use. The line labeled Private Cost represents¹⁰⁶ the costs that the widget-maker and the secured creditor bear in the widget-making process.¹⁰⁷

106. Let π be the probability of bankruptcy and D' be the marginal cost of use-depreciation. Let C' be the marginal cost of the additional widget, including all depreciation costs, such that $C'-D'$ is equal to the marginal cost of the additional widget less the cost of use-depreciation. Let α equal the probability, conditional on bankruptcy, that the trustee or debtor-in-possession will choose to keep the collateral. Let μ represent the rate at which unsecured claims are paid out, $0 \leq \mu \leq 1$.

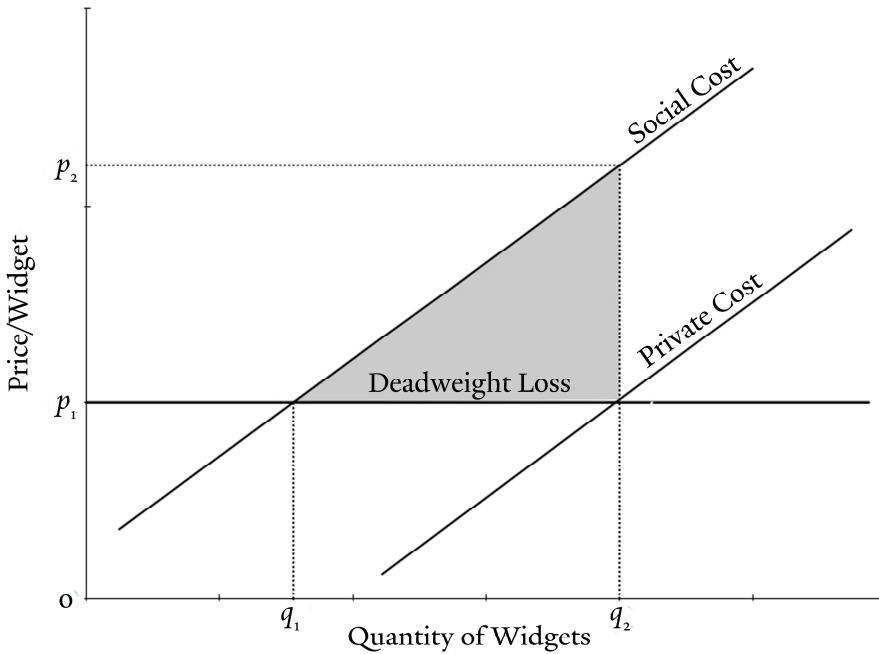
If the trustee or the debtor-in-possession abandons the collateral, then the secured creditor recoups $\mu D'$ and bears losses of $(1-\mu)D'$. In other words, the secured creditor bears the cost of depreciation to the extent that unsecured claims are paid out at less than face value. (This is because the secured creditor's deficiency claim is an unsecured claim.) If the trustee or the debtor-in-possession keeps the collateral and makes all payments in full, then the secured creditor bears no depreciation-related costs.

Thus, the costs to the secured creditor in bankruptcy are $(1-\alpha)(1-\mu)D'$ or $(1-\mu-\alpha+\alpha\mu)D'$. The secured creditor bears these costs with probability π . The costs of asset use to the secured creditor are thus $\pi(1-\mu-\alpha+\alpha\mu)D'$. Meanwhile, the costs of asset use to the widget-maker are $C'-\pi D'$. Thus, the costs of asset use to the widget-maker and the secured creditor are:

$$\begin{aligned} & C'-\pi D'+\pi(1-\mu-\alpha+\alpha\mu)D' \\ &= C'-\pi D'+\pi D'-\pi(\mu+\alpha-\alpha\mu)D' \\ &= C'-\pi(\mu+\alpha-\alpha\mu)D'. \end{aligned}$$

107. For simplicity's sake, I am assuming that the secured creditor is *undersecured*—that is, 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



Assuming that the firm's present owners and its secured creditor can bargain over the terms of the widget-making machine's use, the firm's output will be equal to q_2 . 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 full costs of use depreciation are borne by neither the firm's present owners nor its secured creditor, these costs do not disappear from the social welfare calculus. To the contrary, these costs are borne by the firm's unsecured creditors and thus are still included in the marginal social cost of the additional widget. Let q_1 equal the quantity of widgets that would be produced if output were set at the socially optimal level. For all $q > q_1$, the social

cost of the additional widget (that is, 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. The shaded triangle in Figure 2 represents the deadweight loss to society that would arise from overuse of the widget-making machine under this hypothetical legal regime.

B. The § 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, the secured creditor loses the ability to recoup the full amount of the outstanding principal. With more to lose from depreciation, the secured creditor will presumably devote more efforts toward monitoring the widget-maker's asset use. Moreover, the secured creditor will bargain for restrictions on asset use that bring the widget-maker's output closer to the socially optimal level.

Admittedly, this story overstates the efficiency of the § 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, monitoring stage, and 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 *unsecured* 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,¹⁰⁸ and coordination among unsecured creditors may be prohibitively expensive.¹⁰⁹ Secured credit addresses this coordination problem through a division of monitoring labor among the firm's various creditors.¹¹⁰ Moreover, secured credit transactions

108. See, e.g., Levmore, *supra* note 1, at 53-54.

109. *Id.* at 54 (“Creditors might solve their freeriding problem by undertaking a joint venture that would employ a predetermined, efficient monitor to investigate the debtor’s activities. . . . That such associations are not popular for monitoring debtors’ future activities may be a function of the substantial costs entailed in their establishment and the additional cost of monitoring the monitor.”).

110. 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.”).

may allocate monitoring tasks to creditors with asset- or industry-specific expertise, further reducing the sum of monitoring costs.¹¹¹ While it is an exaggeration to say that § 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, § 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.¹¹² Figure 3 represents this point graphically. The combined cost of use depreciation that the secured creditor and the widget-making firm bear under the § 506 regime is higher than the cost to those parties under a hypothetical world without bifurcation. But it is still lower than the social cost of asset use. This is because in the event of bankruptcy, the secured creditor does not bear depreciation costs in full; rather, the secured creditor bears only the portion of depreciation costs not recouped through the partial payout of the creditor's deficiency claim.¹¹³

Assuming again that the secured creditor can negotiate, monitor, and enforce use restrictions without incurring transaction costs, widget output will shift to q_3 , where $q_1 < q_3 < q_2$ (see Figure 3). The shaded triangle in Figure 3 represents the deadweight loss from overuse of the widget-making machine under the § 506 regime—less than in a world without bifurcation, but still greater than in a world in which the secured creditor's deficiency claim were eliminated or subordinated to other unsecured claims.¹¹⁴

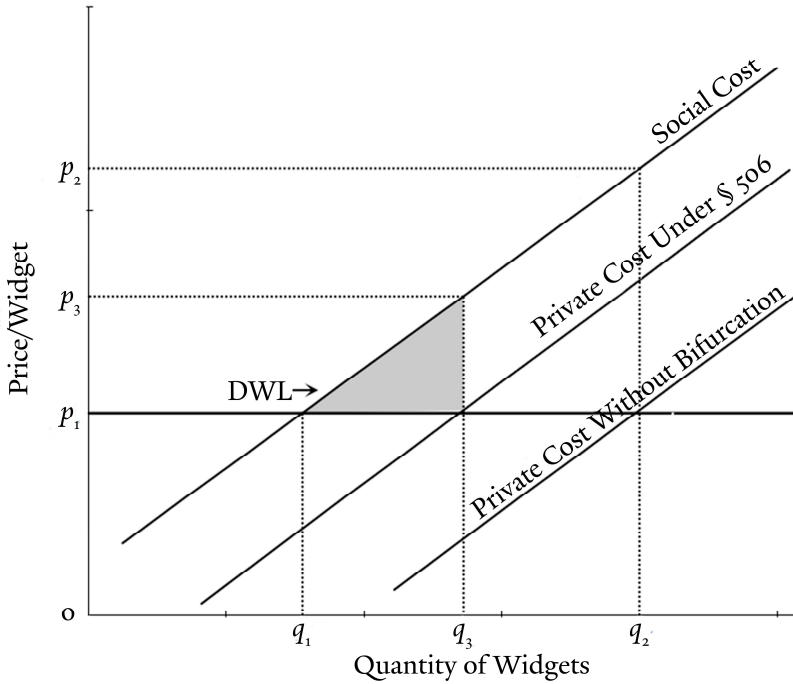
111. See, e.g., Ngo, *supra* note 1, at 427.

112. See 11 U.S.C. §§ 506(a), 726(a)-(b) (2006); see generally Squire, *supra* note 5, at 866 (arguing that secured transactions “would be more socially beneficial if the secured creditor's deficiency claim to the unsecured assets were subordinated to the claims of unsecured creditors”).

113. Assuming that the “secured” creditor is undersecured, the marginal cost of the additional widget to the secured creditor under § 506 is simply $(1-\mu)\pi D'$. The secured creditor fares no better when the debtor-in-possession keeps the collateral than when the debtor-in-possession abandons the widget-making machine. Consequently, the marginal cost of the additional widget to the firm's present owner and the secured creditor under § 506 is $C'-\pi D'+(1-\mu)\pi D'$, or, more simply, $C'-\mu\pi D'$. If the secured creditor is oversecured, then the marginal cost of the additional widget to the secured creditor is zero and unsecured creditors bear depreciation costs of $\pi D'$.

114. 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.

Figure 3.
DEADWEIGHT LOSS UNDER § 506



To translate this argument into dollars and cents, consider the trucking company example from Part I. (A truck is, in essence, a widget-making machine, except that its output is denominated in distance moved rather than goods produced.) Imagine that a trucking company finances the acquisition of a vehicle through a secured loan from GMAC. Imagine, moreover, that there is a 50% probability of the trucking company going bankrupt, that there is a 50% probability that the trustee or debtor-in-possession will seek to keep the collateral in bankruptcy, and that unsecured claims are paid out at a rate of fifty cents on the dollar. (Assume, for the sake of argument, that secured claims are all repaid in full.)

As a general rule, for every additional mile that a commercial truck is driven, the truck loses approximately eight cents in value.¹¹⁵ Thus, the trucking company will bear four cents in depreciation costs for every additional mile

115. See Gary Barnes & Peter Langworthy, *The Per-Mile Costs of Operating Automobiles and Trucks* 22 tbl.4.2 (Minn. Dep't of Transp., Final Report No. 2003-19, 2003), available at <http://www.caf.wvu.edu/resm/faculty/borisova/TruckTrCost.pdf>.

that the truck is driven.¹¹⁶ In a world without bifurcation, the expected cost of depreciation to GMAC would be one cent per mile;¹¹⁷ thus, the trucking company would continue to use the vehicle even if the marginal cost of an additional mile (including depreciation) were three cents less than marginal revenue (because the trucking company and GMAC would externalize three cents per mile in depreciation costs to unsecured creditors).

Section 506 addresses—but does not fully solve—this problem. Now, the trucking company bears four cents per mile in depreciation costs, and the secured creditor bears per-mile depreciation costs of two cents.¹¹⁸ As the secured creditor is still paid *pari passu* along with other unsecured creditors, to the extent that the value of the vehicle is less than the balance on the loan, not all of the depreciation costs are borne by the trucking company and the secured creditor: two cents per mile of depreciation costs are still borne by the unsecured creditors. Assuming that the unsecured creditors cannot negotiate with the trucking company (and that the secured creditor *can* negotiate with the trucking company), the company will continue to drive the truck even when the marginal profits before depreciation are in the range of six to eight cents. Yet as noted above, the use of the truck is value-destroying from a societal perspective unless marginal profits before depreciation exceed eight cents. Section 506, as it stands, forces secured creditors and asset users to internalize *some* of the depreciation externalities that would arise in a world without bifurcation. But even bifurcation is not a complete solution to the problem of depreciation externalities.

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 UCC and § 365 of the Bankruptcy Code—achieves the same objective as the bifurcation of 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 § 506, because the latter section 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,

116. $(1-\pi)D' = 0.50 \times .08 = 0.04$.

117. $\pi(1-\alpha)(1-\mu)D' = 0.5 \times 0.5 \times 0.5 \times 0.08 = 0.01$.

118. $\pi(1-\mu)D' = 0.5 \times 0.5 \times 0.08 = 0.02$.

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.¹¹⁹ Thus the marginal cost of the additional widget to the lessor and the lessee is equal to the social cost. 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 .

To return to the trucking company example from Section III.B, imagine that instead of borrowing the funds to buy the vehicle, the company leases the vehicle for a term of years that is less than the useful economic life of the truck. Now, the trucking company (lessee) bears zero cents in depreciation costs for every additional mile that the truck is driven, but the lessor (in this case, GMAC) bears all eight cents in per-mile depreciation costs. As long as GMAC and the trucking company can negotiate over the terms of the asset use, the parties can allocate these depreciation costs however they like. For example, GMAC might charge the trucking company an additional eight cents for every additional mile driven. Alternately, GMAC might offer the trucking company an eight-cent-per-mile rebate if total distance falls short of a certain threshold. From an aggregate welfare perspective, the *manner* in which GMAC and the trucking company choose to allocate depreciation costs is not terribly important: what matters is that GMAC and the trucking company internalize the full costs of depreciation and thus have an incentive to manage those costs accordingly.

Importantly, this is true even if the lessee retains an option to purchase the asset at the end of the lease term. As long as the contractual purchase option is

119. 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 Note'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, 2001), available at <http://www.cepr.org/pubs/dps/DP3041.asp>. As of the writing of this Note, the most recent auction of five-year TIPS generated a 0.55% yield. *Recent Note, Bond, and TIPS Auction Results*, TREASURYDIRECT, <http://www.treasurydirect.gov/RI/OFNtebnd> (last visited Nov. 1, 2010). At a 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 Note's assumption of zero time value of money has little substantive effect on the models' core results.

an option rather than a requirement, the lessee is free to renegotiate the terms of the acquisition at the end of the lease. Assuming that the market for widget-making machines (or commercial trucks) 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.”¹²⁰ 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 costs of depreciation will be split between the present owners of the lessee firm (which will bear those costs if the firm stays solvent) and the lessee firm’s unsecured creditors (who will bear those costs if the firm enters bankruptcy). Thus, the private costs of asset use to the consenting parties (the lessee and the lessor) are less than the social costs, so the firm’s total output will be above the socially optimal level (giving rise to deadweight loss). The crosscutting 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.”¹²¹ Under this scenario, the “lessor” has monopoly power over the lessee at the end of the lease term because the latter is contractually obligated to rent or acquire the asset from the former. Thus the lessee does not have access to a perfectly competitive market and cannot 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.

120. U.C.C. § 1-203(b) (2009).

121. *Id.*

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.¹²² 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 crosscutting 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 before bankruptcy, the marginal cost of the additional widget to the firm’s present owners is the only binding cost constraint, and output above the socially optimal level generates a deadweight loss.¹²³

The depreciation externalities framework also sheds light on the logic behind section 1-203(c), which sets forth scenarios in which a transaction does

122. *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.

123. 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 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 (that is, 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 under § 506, $(1-\pi)A'$ 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 $(1-\mu\pi)A' \geq M'$.

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.¹²⁴ 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.”¹²⁵ Why does the UCC ignore this factor?

The depreciation externalities framework offers an answer. Consider again the case of the trucking company and GMAC from Part II. As long as GMAC *expects* that at the end of the lease it will receive a truck worth more than \$1, then every dollar of depreciation reduces GMAC’s expected utility by \$1 as well. This is true regardless of whether the trucking company is paying \$2000 per year in rent, or \$2 million, or one cent. It remains true up to the point that GMAC’s residual interest in the truck at the end of the lease term falls to zero. As long as the truck is worth *something* to GMAC, then every extra bit of depreciation cuts into GMAC’s expected return. If the hypothesis of this Note 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.”¹²⁶ If one of the efficiency advantages of leases is that the lessor dictates

124. U.C.C. § 1-203(c).

125. ACCOUNTING FOR LEASES, Statement of Fin. Accounting Standards No. 13, § 7(a)-(d) (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.” *Id.* § 7(a)-(c). These three criteria have analogues in UCC § 1-203: (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 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. U.C.C. § 1-203.

126. U.C.C. § 1-203(c).

maintenance investment, then this provision might seem to be anomalous. However, this provision may be justifiable based upon Coase's theorem: 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 shift maintenance costs to the lessee only 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 a commercial aircraft lease, the airline (lessee) might be the cheapest-cost maintainer because it employs teams of mechanics at each of its destinations. There is no reason for the law to impose maintenance costs on one of the parties as long as the parties themselves internalize the benefits of maintenance.

CONCLUSION

This Note 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 (for instance, 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, to monitor firm behavior, and to 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. When loans are undersecured (that is, the value of the collateral is less than the balance on the loan), an additional dollar of depreciation reduces the value of the creditor's secured claim by one dollar but also increases the value of the creditor's unsecured deficiency claim by one dollar. Unsecured deficiency claims are rarely paid in full but are often paid in part. Even when the borrower is insolvent, the secured creditor's net loss from each dollar of depreciation is likely to be only around fifty cents (although that figure will vary dramatically from case to case).¹²⁷ Thus, the secured creditor

127. See *supra* text accompanying note 38.

only bears a portion of the depreciation costs if the borrower becomes insolvent (even if the loan is undersecured). Ironically, although courts and commentators have called for leases to be treated more like secured loans,¹²⁸ the law of leases actually incentivizes parties to preserve the value of durable goods, whereas the law of secured loans may motivate market actors to use durable goods in value-destroying ways.

In sum, this Note has sought to identify 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, it seeks 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 and Ayer, among others, maintain, then perhaps any effort to justify the status quo will be in vain. But as this Note 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.

128. See, e.g., *In re Wright*, 256 B.R. 858, 861 (Bankr. W.D.N.C. 2001); *In re Monica Scott, Inc.*, 123 B.R. 990, 993 (Bankr. D. Minn. 1991); Howard, *supra* note 6, at 271 n.90.