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DOUGLAS G. BAIRD & DONALD S. BERNSTEIN

Absolute Priority, Valuation Uncertainty, and the Reorganization Bargain

ABSTRACT. In a Chapter 11 reorganization, senior creditors can insist on being paid in full before anyone junior to them receives anything. In practice, however, departures from "absolute priority" treatment are commonplace. Explaining these deviations has been a central preoccupation of reorganization scholars for decades. By the standard law-and-economics account, deviations from absolute priority arise because well-positioned insiders take advantage of cumbersome procedures and permissive judges. In this Essay, we suggest a different force is at work. Deviations from absolute priority are inevitable even in a world completely committed to respecting priority as long as the value of the reorganized enterprise is uncertain. Uncertainty accompanies any valuation procedure. Bargaining in corporate reorganizations takes place in the shadow of this uncertainty, and standard models of litigation and settlement show that valuation uncertainty alone can explain many of the departures from absolute priority in large corporate reorganizations. Even when rational and well-informed senior investors expect the absolute priority rule to be strictly enforced, they must take into account the uncertainty associated with any valuation. The possibility of an unexpectedly high appraisal may sometimes cause them to offer apparently out-of-the-money junior investors contingent interests in the reorganized business. The debate over absolute priority—the central principle of modern corporate reorganization law—has been misdirected for decades. It has failed to recognize that a substantive rule of absolute priority does not always lead to absolute priority outcomes. A coherent account of reorganization outcomes must take into account the junior investors' right to insist on an appraisal the result of which is uncertain. This uncertainty may by itself give that right option value. The most sensible path for reform is one that seeks to minimize this valuation uncertainty.

AUTHOR. Douglas G. Baird is Harry A. Bigelow Distinguished Service Professor, University of Chicago Law School. Donald S. Bernstein is Partner, Davis Polk & Wardwell and Chair, National Bankruptcy Conference. Previous drafts of this Essay were presented at the annual meeting of the American Law and Economics Association and the Law and Economics Workshop at Boalt Hall. We are grateful to Barry E. Adler, Harvey R. Miller, Edward Morrison, Robert K. Rasmussen, David A. Skeel, J. Ronald Trost, Marshall S. Huebner, Laureen F. Bedell, and Joanna Cohn Weiss for their help. We also thank the Sarah Scaife Foundation and the Russell Baker Scholars Fund for research support.

ESSAY CONTENTS

This Essay offers an explanation for one of the most important and persistent puzzles in corporate reorganizations. In a Chapter 11 reorganization, senior creditors are, in principle, entitled to insist upon "absolute priority." They have a right to be paid in full before junior investors receive anything. This "fixed principle" has been the foundation of our corporate reorganization laws for decades.[1] In practice, however, departures from absolute priority are commonplace.[2] Senior creditors regularly allow those junior to them to participate in recoveries even when the senior creditors may not be paid in full. Explaining this gap between law and practice has been a central preoccupation of reorganization scholars since the 1920s.

To most observers, these persistent deviations from absolute priority suggest that something is seriously amiss. Conventional accounts, particularly in the law-and-economics literature, are replete with finger-pointing. Bankruptcy judges are biased, incompetent, or in any event powerless to protect the priority of senior investors. Old managers, the representatives of the shareholders, "use their power to run their businesses and to control reorganization agendas to capture portions of the value that creditors are legally entitled to receive."[3] Junior creditors invoke expensive and time-consuming procedures merely to extract a payout exceeding their entitlements.

These explanations, however accurate they may once have been, are not adequate to capture the dynamics of corporate reorganizations today. The typical modern bankruptcy judge is committed to respecting legal priorities and does not hesitate to entertain the sale of a business as an alternative to reorganizing.[4] She is far less likely to allow junior investors to play for time or otherwise manipulate the process. Old managers frequently are replaced (often before the Chapter 11 case even begins) with turnaround specialists whose loyalties, if any, are with the senior creditors. Old equityholders, far from

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1. *See* Case v. L.A. Lumber Prods. Co., 308 U.S. 106, 116 (1939) ("This doctrine is the 'fixed principle' according to which *Northern Pacific Railway Co. v. Boyd* [228 U.S. 482 (1913)] decided that the character of reorganization plans was to be evaluated.").

2. *See, e.g.*, Allan C. Eberhart et al., *Security Pricing and Deviations from the Absolute Priority Rule in Bankruptcy Proceedings*, 45 J. FIN. 1457, 1468 (1990) (finding departures in 77% of cases); Julian R. Franks & Walter N. Torous, *An Empirical Investigation of U.S. Firms in Reorganization*, 44 J. FIN. 747, 754, 768 (1989); Lawrence A. Weiss, *Bankruptcy Resolution: Direct Costs and Violation of Priority Claims*, 27 J. FIN. ECON. 285, 286 (1990) (finding departures from absolute priority in 78% of cases).

3. Alan Schwartz, *A Contract Theory Approach to Business Bankruptcy*, 107 YALE L.J. 1807, 1836 n.69 (1998).

4. In 2002, 56% of the large Chapter 11 reorganizations resulted in a sale of one sort or another. *See* Douglas G. Baird & Robert K. Rasmussen, *Chapter 11 at Twilight*, 56 STAN. L. REV. 673, 675 (2003).

controlling the process, typically are wiped out. The contest is most often among seasoned investors (banks, hedge funds, and other institutional investors) who hold debt at different levels of the debtor's capital structure. None of them enjoys special sympathy from the judge. Bankruptcy judges make every effort to prevent those who are out of the money, or indeed anyone else, from derailing the reorganization process. Compared to ordinary federal litigation, reorganization cases today move with surprising speed.

The Chapter 11 case of Conseco Corporation offers a good example of how the standard account fails to offer an adequate explanation of deviations from the absolute priority rule in modern reorganization practice. Conseco, one of the largest Chapter 11 debtors in history, was a successful insurance holding company when it made a multibillion dollar purchase of a mobile home financing company. The mobile home business turned out to be worth only a fraction of what Conseco paid for it, and Conseco, after having been successful for so long, proved insolvent. Conseco's founder (as well as his replacement as CEO) was removed before the Chapter 11 case even began. The negotiations were between the senior banks and the bondholders junior to them. Equityholders did not play any material role.[5] Neither creditor group had information the other did not. Neither had any special power over the business or how its affairs were run.

Conseco's senior bank debt amounted to approximately \$2.04 billion.[6] In the bargaining over a plan of reorganization, the senior banks agreed to accept

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5. An official committee representing holders of "trust-preferred" securities that were junior to Conseco's bondholders did object to confirmation of the plan embodying the settlement ultimately reached between Conseco's banks and the bondholders. This objection forced the bankruptcy court to hold a valuation trial at which the committee sought to establish that the value of the business was high enough that the trust-preferred securities were in the money. The confirmation hearing was completed, but before the court ruled, the banks and bondholders settled with the trust-preferred security holders, offering them a small amount of value, mostly in the form of warrants with a strike price in the money only at high enterprise values. *See* Conseco, Inc., Annual Report (Form 10-K), at 3 (Mar. 15, 2004). This post-trial settlement with the holders of Conseco's trust-preferred securities is illustrative of the theme of this Essay. It was, in effect, the price the banks and bondholders were willing to pay for an insurance policy against the possibility of an unexpectedly high valuation.

6. Conseco's senior bank debt consisted of approximately \$1.54 billion of outstanding loans under a syndicated bank credit agreement and approximately \$500 million associated with Conseco's guarantees of bank borrowings by officers and directors, including in each case unpaid interest through the date on which the Chapter 11 proceedings commenced. Second Amended Disclosure Statement for Reorganizing Debtors' Joint Plan of Reorganization Pursuant to Chapter 11 of The United States Bankruptcy Code, Conseco, Inc. at 18-20, *In re* Conseco Corp., No. 02-49672 (N.D. Ill. Mar. 18, 2003) [hereinafter Second Amended Disclosure Statement].

notes in the amount of $1.3 billion and callable, convertible preferred stock with a liquidation preference equal to the balance of their claims.[7] The bondholder classes, all of which were junior to the banks, divided among themselves substantially all of the common stock of the reorganized company.[8] At the time of these negotiations, it was suggested in the press that Conseco was not worth enough to pay even the bank debt in full.[9] By the standard law-and-economics account, a well-functioning reorganization process should have left junior investors with little or no distributions under a plan of reorganization. In this light, the substantial distributions received by Conseco's bondholders seem highly suspect. They appear to represent a deviation from absolute priority that the conventional model would attribute to the bondholders' ability to delay or otherwise manipulate the reorganization process.

Conseco's bondholders, however, had minimal ability to delay or manipulate the process. Insurance regulators were ready to appoint receivers for Conseco's insurance subsidiaries to protect policyholders if the companies were not speedily restructured.[10] The appointment of receivers would have meant that the profitable insurance subsidiaries would cease to write new policies and would shut down. The going-concern value of the enterprise would have been lost. This left little opportunity for junior investors to delay the day of reckoning.

The Conseco example captures a dynamic often seen in large corporate reorganizations. Sophisticated senior investors with clear entitlements to priority treatment, facing an impartial bankruptcy judge who holds a tight leash on the process, regularly agree to plans of reorganization that provide for distributions to apparently out-of-the-money junior investors, typically in the form of a residual stub of equity or warrants.[11] If these outcomes are not driven

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7. Conseco, Annual Report, *supra* note 5, at 102; Reorganizing Debtors' Sixth Amended Joint Plan of Reorganization Pursuant to Chapter 11 of the United States Bankruptcy Code, *In re* Conseco, Inc., No. 02-B49672 (Bankr. N.D. Ill. Sept. 9, 2003) [hereinafter Conseco Plan of Reorganization].

8. Conseco Plan of Reorganization, *supra* note 7.

9. *See, e.g.*, Floyd Norris & Joseph B. Treaster, *Conseco's Troubles Outlast Reign of a Would-Be Savior*, N.Y. TIMES, Oct. 4, 2002, at C2 (quoting an analyst as stating that "'we don't think the company can be liquidated for even $2 billion'").

10. *See* Conseco, Annual Report, *supra* note 5, at 73.

11. Warrants are a common feature of securities issued in large Chapter 11 reorganizations. A recent paper found them in 60% of recent large reorganizations. *See* Eric Nierenberg, Stock Warrants and Bankruptcy Restructuring Efficiency (Nov. 11, 2005) (unpublished manuscript, on file with authors). For a discussion of various forms of "rights offerings," see Kerry O'Rourke, *Valuation Uncertainty in Chapter 11 Reorganizations*, 2005 COLUM. BUS. L.

by junior investors' control of the process, as the standard account would have it, something else must be at work.

We believe the standard account ignores something that is quite important and straightforward: Applying the absolute priority rule in the context of a corporate reorganization requires the enterprise to be valued. Uncertainties accompany any valuation procedure. These uncertainties affect bargaining over reorganization distributions in ways that can readily be predicted from the standard models of litigation and settlement, and they regularly drive negotiated outcomes in many large corporate reorganization cases.

In this Essay, we show that the uncertainty inherent in valuing a large corporation in financial distress creates a bargaining dynamic that accounts for many of the puzzling departures from absolute priority that the standard model cannot explain. "Deviations" from absolute priority often are nothing of the kind. They are instead the natural product of bargaining in a system that is committed to respecting priority, but must do so in a world in which priorities are enforced through a valuation process the outcome of which is uncertain.

Critics of Chapter 11 assume that a substantive right to enjoy absolute priority should lead to outcomes that reflect absolute priority. Those participating in this debate have, however, been looking for greater conformity with the absolute priority rule than they should expect to see in a system that

REV. 403, 441-42, which cites a prior version of this Essay. Recent examples include US Airways, Lodgian, Weblink Wireless, Pillowtex, Factory Card Outlet Corp., Sun HealthCare Group, and Exide Technologies. *See* Disclosure Statement with Respect to First Amended Joint Plan of Reorganization of US Airways Group, Inc. and Its Affiliated Debtors and Debtors-in-Possession at 54-55, *In re* US Airways Group, Inc., No. 02-83984 (Bankr. E.D. Va. Jan. 17, 2003); First Amended Joint Plan of Reorganization of US Airways Group, Inc. and Its Affiliated Debtors and Debtors-in-Possession at Exhibit L, *In re* US Airways Group, Inc., No. 02-83984 (Bankr. E.D. Va. Jan. 17, 2003); Disclosure Statement for Joint Plan of Reorganization of Lodgian, Inc. et al. (Other Than the CCA Debtors), Together with the Official Committee of Unsecured Creditors Under Chapter 11 of the Bankruptcy Code at 25-27, *In re* Lodgian, Inc., No. 01-16345 (Bankr. S.D.N.Y. Sept. 5, 2002); Second Amended Plan of Reorganization of WebLink Wireless, Inc., Pagemart PCS, Inc., and Pagemart II, Inc. Under Chapter 11 of the Bankruptcy Code at Exhibit G, *In re* Weblink Wireless, Inc., No. 01-34275 (Bankr. N.D. Tex. July 19, 2002); Disclosure Statement Pursuant to Section 1125 of the Bankruptcy Code for the Second Amended Joint Plan of Reorganization of Pillowtex Corporation and Its Debtor Subsidiaries at 67-68, *In re* Pillowtex, Inc., No. 00-4211 (Bankr. D. Del. Mar. 6, 2002); Debtors' Joint Disclosure Statement Pursuant to Section 1125 of the Bankruptcy Code at 36, *In re* Factory Card Outlet Corp., No. 99-685 (Bankr. D. Del. Feb. 5, 2002); Disclosure Statement for Debtors' Joint Plan of Reorganization at 25, *In re* Sun Healthcare Group, Inc., No. 99-357 (Bankr. D. Del. Dec. 18, 2001); Press Release, Exide Techs., Exide Technologies Announces First Quarter of Fiscal 2005 Earnings Results (Aug. 12, 2004), *available at* http://www.exideworld.com/News/pressrelease/financial/20040812_1qfy05_earnings_results.html.

relies on judicial appraisal for enforcement of the rule. The need to rely on appraisal as an enforcement mechanism has predictable consequences. Senior creditors who bargain in the shadow of the threat of appraisal will sometimes agree to something less than an absolute priority outcome even if their entitlement to priority treatment is unambiguous and the valuation process is unbiased. The presence of valuation uncertainty can, by itself, give option value to the claims of junior creditors even when they are, in expectation, out of the money.

The available evidence suggests that valuations made by modern bankruptcy judges, though unbiased, are subject to substantial variance.[12] This should not be surprising. In Chapter 11, a single, nonexpert judge is expected to value the reorganizing business on the basis of the testimony of experts who, far from being impartial, are advocates for competing points of view. If reorganization law should facilitate absolute priority outcomes (as we believe it should) and if it already takes close to maximum advantage of markets (as we believe it does), reform should focus on its appraisal mechanism and the challenge of minimizing the variance associated with its valuations.

In Part I of this Essay, we review the absolute priority rule and the standard explanations for deviations from it offered in the law-and-economics literature. We suggest why these explanations do not adequately account for actual outcomes in reorganizations involving large, publicly traded businesses. In Part II, we describe the context in which a large business typically is reorganized in Chapter 11 today. In Parts III and IV, we lay out the bargaining dynamics created by valuation uncertainty and explain how those dynamics account for many of the deviations from absolute priority commonly seen in large reorganization cases. In Part V, we connect our observations to the longstanding debate in corporate reorganization law over the optimal distribution rule—the choice between relative and absolute priority—a debate that was joined by two legal scholars, James Bonbright and Milton Bergerman, in 1928[13] and that has been raging ever since.

12. *See* Stuart C. Gilson et al., *Valuation of Bankrupt Firms*, 13 REV. FIN. STUD. 43, 44 (2000) ("We find that estimates of value are generally unbiased, but the estimated values are not very precise.").

13. *See* James C. Bonbright & Milton M. Bergerman, *Two Rival Theories of Priority Rights of Security Holders in a Corporate Reorganization*, 28 COLUM. L. REV. 127 (1928).

I. ABSOLUTE PRIORITY IN THEORY AND IN PRACTICE

A single engine drives law-and-economics accounts of corporate reorganization: The reorganization of an insolvent enterprise is the equivalent of a going-concern sale of the business to its creditors in exchange for their claims.[14] The business has an uncertain future. It is like a lottery ticket before a drawing[15]: While there is a chance that it may do well, there is also a chance that it will do poorly. At the time this lottery ticket is sold, it must be valued for purposes of allocating interests in it among its new owners (the creditors).[16] This valuation necessarily collapses all future possibilities to a present value, and, absent agreement of the requisite majorities of each impaired class of creditors, the valuation dictates how interests in the reorganized enterprise must be allocated to satisfy the absolute priority rule.

Assume that the debtor's business will be worth $200 or $100 in a year's time with equal probability.[17] The senior investor is owed $160 and the junior investor $40. At a going-concern sale, the senior investor should, in theory, be able to sell the business for $150, the amount that reflects the probability both that the business will do well and that it will fail. Because the senior investor is owed $160, its priority should entitle it to the entire $150 generated in the sale. Hence, it should receive the value of the entire business in any plan of reorganization that respects the absolute priority rule.

Some law-and-economics accounts of deviations from absolute priority focus on private information and firm-specific human capital. Departures from absolute priority can be justified if the junior investors run the business and

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14. A reorganization may be viewed as nothing more than a change-of-control transaction. *See, e.g.*, Robert C. Clark, *The Interdisciplinary Study of Legal Evolution*, 90 YALE L.J. 1238, 1250-54 (1981). Under this view, the majority voting provisions of Chapter 11 might be considered the shareholder governance provisions of an acquisition vehicle called the debtor-in-possession. By permitting the majority of creditors in each class to bind the minority, the provisions of Chapter 11 solve a collective action problem within the acquiring (creditor) group. For the classic exposition of reorganization law as a solution to a collective action problem, see Thomas H. Jackson, *Bankruptcy, Non-Bankruptcy Entitlements, and the Creditors' Bargain*, 91 YALE L.J. 857, 860-65 (1982).

15. *See, e.g.*, Barry E. Adler, *Bankruptcy and Risk Allocation*, 77 CORNELL L. REV. 439, 474 (1992). In other work, however, Adler was quick to identify the bargaining dynamics that are our central concern here. *See* Barry E. Adler, *Bankruptcy Primitives*, 12 AM. BANKR. INST. L. REV. 219, 226-29 (2004) [hereinafter Adler, *Bankruptcy Primitives*].

16. The allocation of the proceeds among the creditors follows the priorities agreed upon in their ex ante bargain.

17. In this and later examples we follow convention and assume, for ease of exposition, a discount rate of 0%.

possess private information or firm-specific human capital.[18] In such circumstances, a portion of the value of the business may be linked inextricably to the participation of the junior investors.[19] In the case of smaller businesses, the junior investors, who may well be the managers of the firm, often possess just such characteristics. Allowing them to participate in reorganization distributions, even if, as investors, they are out of the money as a matter of strict legal priority, is a price senior investors sometimes are willing to pay to ensure their cooperation.

Such explanations of deviations from absolute priority do not, however, typically apply to larger companies. The managers are professionals who can be and frequently are replaced, sometimes even before the Chapter 11 case is filed, and equityholders commonly are wiped out.[20] Prebankruptcy boards of directors, sooner or later, are replaced.[21] Restructuring negotiations take place primarily between senior and junior creditors, none of whom has participated in running the business. Trading of claims in advance of Chapter 11 or shortly afterward ensures that these groups consist largely of seasoned professionals who specialize in recapitalizing distressed businesses.[22] In connection with the reorganization process, these parties soon know more about the business than any outsider, but neither senior nor junior creditors have an informational

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18. *See, e.g.*, Paul Povel, *Optimal "Soft" or "Tough" Bankruptcy Procedures*, 15 J.L. ECON. & ORG. 659 (1999); Robert Gertner & Randal C. Picker, Bankruptcy and the Allocation of Control 12-13 (Feb. 16, 1992) (unpublished manuscript, on file with authors); *see also* Lucian Arye Bebchuk & Randal C. Picker, *Bankruptcy Rules, Managerial Entrenchment, and Firm-Specific Human Capital* 2-3 (Univ. of Chi., John M. Olin Law & Econ. Working Paper No. 16, 2d ser., 1993), *available at* http://www.law.uchicago.edu/Lawecon/WkngPprs_01-25/16.Bebchuk-Picker.pdf.

19. *See* Bebchuk & Picker, *supra* note 18, at 2-3.

20. *See* Baird & Rasmussen, *supra* note 4, at 692 n.65.

21. Douglas G. Baird & Robert K. Rasmussen, *Private Debt and the Missing Lever of Corporate Governance*, 154 U. PA. L. REV. 1209 (2006).

22. *See* Harvey R. Miller & Shai Y. Waisman, *Does Chapter 11 Reorganization Remain a Viable Option for Distressed Businesses for the Twenty-First Century?*, 78 AM. BANKR. L.J. 153, 181 (2004) (noting that "distressed debt trading has grown to proportions never contemplated at the time of the enactment of the Bankruptcy Reform Act"); Glenn E. Siegel, *Introduction: ABI Guide to Trading Claims in Bankruptcy*, 11 AM. BANKR. INST. L. REV. 177, 177 (2003) ("Perhaps nothing has changed the face of bankruptcy in the last decade as much as the newfound liquidity in claims. . . . Now, in almost every size case, there is an opportunity for creditors to exit the bankruptcy in exchange for a payment from a distressed debt trader . . . ."). *See generally* Paul M. Goldschmid, Note, *More Phoenix Than Vulture: The Case for Distressed Investor Presence in the Bankruptcy Reorganization Process*, 2005 COLUM. BUS. L. REV. 191 (discussing the growing importance of the role distressed debt investors play in Chapter 11).

advantage vis-à-vis the other.[23] Models that depend upon insiders who possess private information or firm-specific human capital to explain departures from absolute priority thus do not capture the dynamics at work in these reorganizations.

To explain deviations from absolute priority in these large cases, the standard account posits that the Chapter 11 process itself is defective. It permits junior investors to interfere with the senior investors' right to insist on an accurate valuation. Junior investors are aware that an accurate valuation—one that reflects what a sale in the marketplace will yield—will afford them little or no recovery. Hence, they seek to put off the day of reckoning. If they can delay a sale (or any other accurate valuation mechanism), they enjoy the upside if things turn out better than expected, while the senior investors still bear all of the downside risk.

By this account, senior investors have difficulty defeating junior investors' delaying tactics because the debtor's managers often cooperate with the junior investors, making it difficult for the senior investors to force a sale or some other process that values the business accurately. Bankruptcy courts are thought complicit in these tactics because of their historical tendency to grant repeated extensions of the debtor's exclusive period to file a plan.[24] Moreover, once a plan is filed, bankruptcy judges, it is said, resist markets and mechanisms that mimic them, often adopting a peculiarly rosy view of the world. Reorganization value is not construed as what the enterprise would fetch in the marketplace, but the value of the enterprise if things turn out as hoped.[25]

In short, the standard law-and-economics critique of corporate reorganizations rests, to a large extent, on the assumption that out-of-the-money junior investors retain excessive influence over the Chapter 11 process.

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23. *See* William M. Landes, *An Economic Analysis of the Courts*, 14 J.L. & ECON. 61 (1971).

24. *See* James J. White, Comment, *Harvey's Silence*, 69 AM. BANKR. L.J. 467, 474 (1995).

25. Some argue that the result in *In re Exide Technologies*, 303 B.R. 48, 58-66 (Bankr. D. Del. 2003), supports this proposition. The judge valued the business in a way that imputed a value of $24.50 per share to the new equity when the business emerged in the spring of 2004, and a year later the equity traded for less than $5. Exide Tech New, Basic Chart, http://finance.yahoo.com/q/bc?s=xide&t=2y (last visited Apr. 12, 2006); *see also* O'Rourke, *supra* note 11, at 406. The stock, however, traded close to the judicial valuation at first. Exide Tech New, Basic Chart, *supra*. What empirical evidence exists suggests that Chapter 11 valuations are unbiased. *See* Gilson et al., *supra* note 12, at 44. As we suggest below, the major deficiency of existing procedure may lie not in bias, but instead in reliance on an adversarial process in which experts take extreme positions before a nonexpert judge without access to any other sources of information, leading to excessive variance.

Bankruptcy judges pay lip service to the dictates of absolute priority, but they lack the discipline, the training, or the inclination to rein in junior investors and value business assets accurately and expeditiously. To be sure, senior and junior investors can reach a deal with each other to prevent the needless dissipation of value. Nevertheless, these deviations from absolute priority are still costly. A world in which absolute priority is not respected is one in which entrepreneurs have less access to capital. Prospective investors take the dynamics of Chapter 11 into account and either refuse to lend or demand higher rates of interest. Some projects with a positive expected value are not funded.[26]

If the standard model captures the essence of what is going on in large Chapter 11 reorganizations, a number of reforms seem sensible. For example, procedures could be imposed that ensure a swift day of reckoning, such as an immediate sale in the market or a process that forces junior investors to buy out the senior investors as a condition of maintaining their interests.[27] At a minimum, provisions could be added to Chapter 11 that force plan negotiations to conclusion at an earlier date.[28]

The standard model, however, appears to be, in important respects, at odds with modern Chapter 11 practice in large cases. Contrary to the assumption that junior investors hold the levers of power and have the ability to impose delay, senior investors are, with increasing frequency, able to insist upon a relatively speedy day of reckoning.[29] Among other things, they are often successful in pressing for a sale of the debtor's business. We now see such sales in more than half the cases, and they are the benchmark against which

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26. *See* Schwartz, *supra* note 3, at 1814.

27. *See, e.g.*, Philippe Aghion et al., *The Economics of Bankruptcy Reform*, 8 J.L. ECON. & ORG. 523, 524, 532-36 (1992). Bebchuk was the first to advance such an "options approach" to Chapter 11. *See* Lucian Arye Bebchuk, *A New Approach to Corporate Reorganizations*, 101 HARV. L. REV. 775 (1988).

28. This was part of the rationale for the recent Bankruptcy Code amendments limiting extensions of the debtor's exclusive period to file a plan. For Chapter 11 cases commencing after October 17, 2005, the availability of such extensions is limited by recent amendments to the Bankruptcy Code to eighteen months following the petition date. Bankruptcy Abuse Prevention and Consumer Protection Act of 2005, Pub. L. No. 109-8, § 411, 119 Stat. 23, 106-07 (codified at 11 U.S.C.S. § 1121(d)(2) (LexisNexis 2005)).

29. Conseco, for example, one of the largest reorganizations in history, was in Chapter 11 for less than a year. In the absence of special circumstances (like fraud or other misconduct, or intractable mass tort or labor disputes), this amount of time is increasingly becoming the norm.

consensual reorganization plans are measured in the rest.[30] When the business is not sold, many Chapter 11 cases involve prepackaged or prenegotiated reorganization plans. In these cases, the basic terms of the plans of reorganization are fixed before the Chapter 11 petitions are even filed. The Chapter 11 proceedings take only a few months and the junior investors have little or no ability to delay. In the other cases, those in which values are disputed and bankruptcy judges are called upon to value the debtor's business, there is far less delay or systematic bias than the traditional account suggests.[31]

But the standard model neglects a factor critical to the outcome of most reorganization cases—valuation uncertainty. The valuation problem in a reorganization case is fundamentally different from the one associated with valuing a lottery ticket. With a lottery ticket, the parties know the probabilities and payoffs with certainty. Risk-neutral investors will place the same value on the expected outcome. Collapsing future possibilities to present value is a matter of arithmetic. It yields a sum certain. A business, however, cannot be valued with such precision. There are different methods of valuing a business,

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30. *See* Baird & Rasmussen, *supra* note 4, at 679. The modern Chapter 11 process itself may even create an opportunity for a sale that did not otherwise exist. A buyer may be willing to pay a control premium for the distressed enterprise that would not have been available outside of bankruptcy. The bankruptcy process can ensure that the buyer will receive clean title, free and clear of pre-bankruptcy claims. Dilatory tactics on the part of out-of-the-money creditors have not, however, altogether disappeared. They still surface from case to case in varying degrees. Such tactics are especially likely to be successful if the business cannot be operated profitably on a stand-alone basis and must be sold quickly to stem losses. In such cases, merely the amount of time a bankruptcy judge takes to hear and resolve a sale motion can have a significant effect on senior investors' recoveries. *See, e.g.*, Mellon Bank v. Dick Corp., 351 F.3d 290 (7th Cir. 2003) (observing that senior creditors acquiesced in a distribution of $7.5 million to expedite the sale of a business that was losing $10 million per month); *In re* Qualitech Steel Corp., 276 F.3d 245 (7th Cir. 2001).

31. The common criticisms of Chapter 11 may rely too heavily on the cases that were filed in the first few years after the 1978 Bankruptcy Code went into effect. *See, e.g.*, Jagdeep S. Bhandari & Lawrence A. Weiss, *The Untenable Case for Chapter 11: A Review of the Evidence*, 67 AM. BANKR. L.J. 131, 135 n.12 (1993) (looking at cases from the 1980s). There were notorious failed Chapter 11s, such as Eastern Airlines. *See, e.g.*, Robert K. Rasmussen, *The Efficiency of Chapter 11*, 8 BANKR. DEV. J. 319, 319-21 (1991). The available empirical data suggest that, in their willingness to liquidate businesses that have no future, today's bankruptcy judges do as well as market actors subject to the same constraints. *See* Edward R. Morrison, *Bankruptcy Decisionmaking: An Empirical Study of Continuation Bias in Small Business Bankruptcies*, 49 J.L. & ECON. (forthcoming 2006). In addition, lenders over time have learned how to exercise greater control over the Chapter 11 process. *See* David A. Skeel, Jr., *The Past, Present and Future of Debtor-in-Possession Financing*, 25 CARDOZO L. REV. 1905 (2004). Indeed, some believe that senior creditors exercise too much power. *See, e.g.*, Miller & Waisman, *supra* note 22.

but in the end all are merely estimates of the present value of the business's future earning capacity. Founded as they must be on subjective predictions, such valuations come associated with significant uncertainty.

A valuation expert typically begins with management's projections regarding the future performance of the company's business. The expert then makes adjustments based on the expert's informed judgment about macroeconomic factors, such as the projected performance of the economy and the company's industry sector over time, and the evolution of technology relevant to the business. The expert also makes adjustments based on the expert's own view of factors specific to the company, such as the future demand for its products, the cost environment it will face (such as the costs of labor and materials), its future capital expenditures, the amount of competition it will face, and the like. Once the expert is satisfied with a set of performance projections, the expert estimates the appropriate discount rate, which in turn depends on an assessment of the risk-free cost of capital for the period in question and the expert's opinion as to the appropriate risk-premium to apply to that rate for the earnings stream of the business in question. Combining all of these elements, the expert can then form a view regarding the value of the business.

The uncertainties associated with the factors affecting predictions about future cash flows and with determining the appropriate discount rate leave considerable room for skepticism about the value the expert arrives at for the business. In the end, such a valuation is nothing more than "a guess compounded by an estimate."[32] Well-informed experts often will agree about many of the components of their analysis, but they also invariably will have legitimate differences of opinion regarding at least some of the components. Even if these differences are small, they can result in a wide range of equally persuasive expert valuations for the business.[33] Differences of 10% are almost

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32. This phrase from reorganization folklore, which presumably refers to the "guess" about the appropriate discount rate and the "estimate" of future cash flows of the business, has been attributed to Professor Peter Coogan. *See* H.R. REP. NO. 95-595, at 222 (1977), *as reprinted in* 1978 U.S.C.C.A.N. 6179, 6181. Professor Coogan was, however, coy about the accuracy of this attribution. *See, e.g.*, Peter F. Coogan, *Confirmation of a Plan Under the Bankruptcy Code*, 32 CASE W. RES. L. REV. 301, 313 n.62 (1982).

33. Some valuation methods try to avoid the uncertainty involved with discounting the cash flows of a particular business by relying on market valuations of comparable businesses that are publicly traded or that were recently sold. The expert identifies publicly traded or recently sold companies whose business characteristics are most comparable to those of the company being valued. The expert determines the multiple of current earnings at which these companies trade (or were sold) and makes adjustments in the multiple to reflect any unique characteristics of the company being valued. These methods seem to avoid the inevitable, and often the differences are far larger.[34] As Fischer Black once famously observed, "[a]ll estimates of value are noisy."[35]

A market transaction (sale) resolves valuation uncertainty by rewarding the highest bidder with ownership of the asset. It is the highest bidder's perspective that counts. In the absence of a market transaction in a reorganization case, however, it is the bankruptcy judge's perspective—and how senior and junior investors perceive it—that counts. Their potentially different assessments of the judge's ultimate valuation drives bargaining behavior. For this reason, starting with the equivalent of a lottery ticket to model corporate reorganizations—as virtually all of the law-and-economics literature does in one way or another—is seriously incomplete. Such models assume that differences in valuation perspectives can safely be ignored—that they do not affect the dynamics of Chapter 11 reorganizations in an important way. This is a mistake. Disparities in investors' views over how to value the

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uncertainties associated with projecting future earnings and discounting, but these uncertainties enter indirectly nevertheless. No company is ever exactly comparable to another, and public reporting frequently masks the actual performance of the other companies. One must use judgment to identify those companies that are comparable and then adjust the multiple to take account of the business's peculiar circumstances and the risks it faces going forward. These adjustments to the multiplier are also "estimates compounded by a guess," only in a different guise. This comparable company methodology is, in any event, no more precise than one that attempts to predict cash flows directly. *See* Steven N. Kaplan & Richard S. Ruback, *The Valuation of Cash Flow Forecasts: An Empirical Analysis*, 50 J. FIN. 1059 (1995) (showing the cash-flow method to be at least as accurate as the comparable company approach, with particular reference to financially distressed businesses).

34. *See* Kaplan & Ruback, *supra* note 33 (promoting the valuation methodology on the ground that it comes within 10% of true value). The Chapter 11 proceedings of Mirant Corporation offer an excellent illustration of how large the disparities in expert opinion over enterprise valuation can be. The valuation hearing in the Mirant case continued for twenty-seven days over an eleven-week period, with separate experts testifying for the debtors, various creditor constituencies, and equity holders. *In re* Mirant Corp., 334 B.R. 800, 809 (Bankr. N.D. Tex. 2005). The experts' valuations diverged widely, with enterprise values ranging from as low as $7.2 billion to as high as $13.6 billion. *Id.* at 824. The judge was acutely aware of the uncertainties associated with such a valuation (calling it at best "an exercise in educated guesswork" and at worst "not much more than crystal ball gazing"), and recognized the inadequacies of the adversarial process as a method for ascertaining value. *Id.* at 848 ("It may be that there are better ways to determine value than through courtroom dialectic. That said, the court must work within the system created by Congress—and, in valuing a company in chapter 11, that system contemplates an adversary contest among parties before a neutral judge.").

35. Fischer Black, *Noise*, 41 J. FIN. 529, 533 (1986). Black showed that without such valuation uncertainty, securities markets could not even exist. For him, a market is efficient if the price at which a security traded is somewhere between half and twice its true value. *Id.*

enterprise and how the judge will value it drive much of the bargaining in large business reorganization cases.

II. MODERN BUSINESS REORGANIZATION PRACTICE

Several distinct patterns mark modern large business reorganization practice. The major divide is between those cases in which there is a sale of the business (or its assets) to a third party and those in which the business is reorganized, with existing investors becoming the owners of the reorganized enterprise. When the business is sold in its entirety to a third party, outcomes are, to a large extent, consistent with absolute priority as traditionally understood.[36] It is when the business is reorganized that bargained-for deviations from absolute priority most often appear. One could eliminate most deviations from absolute priority simply by mandating a sale, but an immediate sale is not always the most prudent course.

Consider the case in which the business that enters Chapter 11 is stable. It is profitable on an operating basis (before the cost of servicing its prebankruptcy debts), and the operational problems that brought on the financial distress are already being addressed. There is no urgent need to take decisive action, and the junior investors' delaying tactics pose little threat to the value of the business. Senior investors may prefer a sale in Chapter 11, but may have little leverage to insist upon one, especially if the value of the business, while uncertain, exceeds the amount of the senior creditors' claims.[37] Under such circumstances, the representatives of the key creditor constituencies (both senior and junior) have the time to take stock. Sometimes the senior creditors and the junior creditors agree that the time is not ripe for a sale of the business and both prefer to reorganize. Other times they disagree, with the senior creditors preferring a sale or, as in cases such as Adelphia Communications,

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36. As we have noted, however, out-of-the-money creditors can on occasion successfully engage in dilatory tactics when there is a pending sale. *See, e.g.*, Mellon Bank v. Dick Corp., 351 F.3d 290 (7th Cir. 2003); *In re* Qualitech Steel Corp., 276 F.3d 245 (7th Cir. 2001).

37. Secured creditors have greater leverage to insist on a sale of the business in cases in which they can demonstrate that they will not be "adequately protected" within the meaning of § 361 of the Bankruptcy Code. 11 U.S.C. §§ 361, 363(c), (e) (2000). If the debt-free enterprise value of the debtor substantially exceeds the amount of secured claims, the debtor has free cash flow to pay administrative expenses, and the business is not declining in value after paying such expenses, the debtor may well be able to demonstrate that secured creditors are adequately protected. In such circumstances, it will be difficult for the secured creditors—at least in the early stages of the case—to insist upon a sale if the debtor opposes one, and an adequate protection package typically is negotiated permitting the debtor to use the secured creditors' collateral, including cash collateral.

with the junior investors preferring one.[38] Either way, the reorganization option is squarely on the table and should be pursued if it maximizes the value available for creditors.

In these cases, the dynamics of the reorganization revolve around the value of the enterprise and, importantly, the mechanism through which that value will be determined for purposes of the reorganization if the parties cannot agree—a trial in which a bankruptcy judge sets a value on the company on the basis of expert testimony.[39] The simplest way to illustrate these dynamics is through a hypothetical fact-pattern that captures the essential features of a modern reorganization case in which there is no going-concern sale or prenegotiated reorganization plan.

Suppose that, several years ago American Instruments, a maker of aircraft instruments, acquired U.S. Gauge, a business that specialized in building remote sensors, for $450 million. To fund its acquisition, American Instruments borrowed $250 million from a consortium of banks. It raised an additional $200 million through a high-yield bond offering. The bonds, which remain outstanding, were contractually subordinated to the bank debt. Interest was payable on the bonds semiannually at a fixed rate.

Except for its obligations to its banks and the bondholders, American Instruments has no other borrowings. The company incurs many obligations in the course of its operations: to employees, vendors, counterparties to executory contracts and leases, governmental entities (principally for taxes), and others. American Instruments has no mass tort liabilities, environmental liabilities, pension liabilities, or other extraordinary operating liabilities.[40] Apart from the bank loan and the bonds, its operating obligations are relatively short-term and small in the aggregate when compared to its borrowed money (bank and bond) debt.

The merger of American Instruments and U.S. Gauge has not gone well. Their corporate cultures are altogether different, and the hoped-for business

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38. *See* Peter Thal Larsen, *Adelphia Puts Itself Up for Sale: Cable Company Fails To Persuade Creditors and Shareholders To Accept Independence Plan*, FIN. TIMES, Apr. 23, 2004, at 15.

39. Other disputes may affect the dynamics of a particular reorganization case, including disputes over the priority and amount of claims, causes of action held by the estate, and corporate separateness and control. However, while the nature and extent of such other disputes vary from case to case, enterprise valuation dictates the allocation of distributions in every case. In this sense, enterprise valuation and the mechanism for accomplishing it are fundamental to the bargaining dynamics of every reorganization.

40. This assumption is somewhat artificial. A company of this type will almost inevitably have other liabilities that, while not large enough to alter the basic dynamics of concern to us, play a significant role nevertheless.

synergies have been harder to realize than expected. Meanwhile, demand in the aerospace industry for instruments (and especially for those with remote sensors) has been falling. American Instruments' revenue has been declining dramatically. As a result, by the end of last year, American Instruments was in breach of several financial covenants in its loan agreement with the banks and was forced to approach the banks to ask for a waiver of the covenants.[41] The banks agreed to waive the covenants (in return for a fee and an increase in interest rate), and at the same time they began to pay more attention to the loan.[42]

American Instruments now finds it necessary to return to its banks to ask for additional waivers. It is having difficulty making the semi-annual interest payments on the bonds. In anticipation of the need to restructure its debt, the company begins to identify its large bondholders to include them in the restructuring negotiations. By this time, a number of bondholders are sub-par purchasers, investors who acquired the debt as an investment opportunity after the company's fortunes had already begun to decline (at a time when the bonds were trading at a discount to par).[43] After identifying the largest bondholders, the company requests that they organize an informal bondholder committee to participate in restructuring negotiations. By encouraging the bondholders to organize themselves, American Instruments' board can be confident that any restructuring proposal will have significant support within the bondholder group before formal approval is sought.[44]

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41. Even when the senior debt is changing hands, the lenders typically are part of a readily identifiable lender group. This group may consist of several lenders, but sometimes may number fifty or more. In most cases, however, one lender is designated as the "administrative agent" in the loan documents. The administrative agent, usually the bank that syndicated the original loans, is the conduit for information flow between the company and its lenders. In our case (and in the typical case), the administrative agent is the organizing force among the lenders in any debt restructuring, setting up lender-debtor-advisor communications, as well as spearheading any restructuring negotiations.

42. For one view of how creditors such as banks monitor and interact with their debtor inside of bankruptcy and out, see Baird & Rasmussen, *supra* note 4, at 697-99.

43. Such sub-par investors purchase both bonds and "bank" debt in the secondary market. They include the "troubled debt trading desks" at almost every large financial institution, as well as all varieties of private investment funds and other investors. These investors are highly sophisticated and are exceedingly knowledgeable about the restructuring process. Many of these investors plan to hold on to the debt only for a limited period, but, as is increasingly common, a substantial number take a longer term view and approach their investment the way a private equity investor would. In any event, the holders of American Instruments' bonds are relatively easy to identify and organize.

44. The ability of lenders, debt traders, and other professional investors to influence, and in some ways drive, the restructuring of a troubled business both before the Chapter 11 case

As part of the ongoing negotiations, the banks and the committee representing the bondholders are supplied with large amounts of information about American Instruments and its business.[45] They retain, with American Instruments' agreement and at its expense, legal and financial advisors to help them evaluate the information and alternative restructuring plans.[46] American Instruments provides the creditor groups and their advisors with direct access to its books, records, and employees for the purpose of permitting them to evaluate the company and its restructuring proposals. The management, with the assistance of its own financial advisor, accounting firm, and turnaround experts, develops a long-range plan for the business, which includes detailed projected cash flows and estimates of debt capacity.

The banks and the bondholder committee continue to monitor American Instruments and its business. The board hires a turnaround specialist as its Chief Restructuring Officer. After several months, it "promotes" its chief executive to the status of nonexecutive Chairman of the Board and makes the turnaround specialist the company's new CEO. As the workout negotiations continue, the new management stabilizes and restructures the operations of American Instruments' core business and prepares to sell its noncore businesses. The new management team gains the confidence of the banks and the bondholder committee. Both believe that the company, as restructured, can consistently turn an operating profit (assuming it can restructure its debt obligations).

The remaining hurdle to reorganizing the company is the negotiation over the company's new capital structure. A debt restructuring is still required. The banks and the bondholders try to reach an agreement outside of Chapter 11, but this proves unsuccessful.[47] American Instruments is unable to make an

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and during it is an important feature of modern reorganization practice. *See* David A. Skeel, Jr., *Creditors' Ball: The "New" New Corporate Governance in Chapter 11*, 152 U. PA. L. REV. 917 (2003); Skeel, *supra* note 31.

45. Often, the greatest difficulty for a troubled company seeking to organize a bondholder committee is the unwillingness of some large holders to participate because, to do so, they would have to gain access to material nonpublic information about the company and its restructuring. Such access would limit their ability to continue trading the company's securities.

46. Paying the expenses of the bondholder committee is simply a device that allows the bondholders as a group to share the expenses of the restructuring among themselves. As the residual claimants, the bondholders as a class ultimately bear the restructuring costs regardless of whether they are reimbursed.

47. In many instances, those in the position of the banks and the bondholder committee will be able to reach an agreement on a debt restructuring outside of bankruptcy. Sometimes the restructuring can be implemented entirely outside of Chapter 11, for example through interest payment to its bondholders. Once the default becomes known, trade creditors tighten the reins, and American Instruments, running out of liquidity, enters Chapter 11. No reorganization plan has been agreed upon, and the bondholders (who will dominate the official Chapter 11 creditors committee) and the banks must take stock of where things stand. This is not a "free fall" bankruptcy. The operational problems of the business are on their way to being under control, and the banks and the bondholders have substantially similar views about the way the business should be run.

When the parties finally reconvene, the first question will be whether the business should be sold. The banks might prefer a sale, but they cannot insist upon one, and the bondholders may take the view that a current sale is not in their interest. Even the banks will recognize that a buyer will not pay the highest possible price for the business until the problems of the business and of the industry are sorted out.[48] The entire aerospace sector of the economy is depressed. Businesses in the sector are selling for multiples that are near or at their historic lows. Potential strategic buyers face the same problems as American Instruments. They have also lost money and have their own debt and liquidity problems. They cannot easily enter the capital markets and acquire the resources needed to acquire American Instruments.[49] The absence of strategic buyers depresses the sale price. The creditors as a group stand to gain by waiting until conditions improve and such buyers again appear on the scene.

amendments to bank agreements and an exchange offer for the bonds. In other cases, the company uses the Chapter 11 process to put in place a deal that already has the support of the major players. Indeed, a substantial number of large Chapter 11 cases—perhaps 30% or so—are cases in which the investors reach such a deal among themselves before the Chapter 11 petition is even filed. *See* Baird & Rasmussen, *supra* note 4, at 678. The business enters Chapter 11 merely as a clean-up operation in which, among other things, dissenting members of the impaired creditor classes can be bound by the requisite Chapter 11 majorities of their classes while the bankruptcy judge assures that the Bankruptcy Code's requirements for protection of their interests are honored. In such cases, the debtor can emerge from Chapter 11 extremely quickly. *See* Douglas G. Baird, *The New Face of Chapter 11*, 12 AM. BANKR. INST. L. REV. 69, 76-77 (2004).

48. If the banks believe that a current sale will realize less than the full value of their claims (after costs of sale) and that a future sale would realize more, they may also prefer to reorganize (as long as they are confident they will realize from the reorganized enterprise on a present value basis enough to compensate them for the additional risk they are assuming by deferring a sale).

49. *See* Andrei Shleifer & Robert W. Vishny, *Liquidation Values and Debt Capacity: A Market Equilibrium Approach*, 47 J. FIN. 1343 (1992).

There are, of course, financial investors who specialize in acquiring distressed businesses such as American Instruments.[50] Such investors, however, will be at an even greater informational disadvantage than the strategic buyers. They will adjust their bids accordingly. To be sure, in a bankruptcy auction (just as in a nonbankruptcy auction) potential bidders typically are offered substantial access to factual information about the company and its business, including its assets and liabilities, historical financial statements, contracts, leases, employees, licenses, intellectual property, and the like. A (physical or virtual) data room is created where the bidder and its advisors have the opportunity to review these materials. The bidder is given the opportunity to meet with current management and sometimes with current employees. This due diligence can be extraordinarily thorough and the bidder can glean from it the information it requires to formulate its own views about the company's future business, prospects, opportunities, and risks. Nevertheless, the bidder does not have unfettered access to the existing management's own assessments of all of these matters. Nor does it have the existing management's plans for the future in the event no sale is consummated.

By contrast, the banks and the bondholder committee have a perspective nearly on a par with an insider's. They have an insider's knowledge about the ability of the business to successfully bring its next generation of instruments and sensors to market. They know what management thinks it can do with the business if it is not sold. Because of their pivotal position in the restructuring process and the informational advantage they possess, these organized creditor representatives have views of the value of the debtor that may depart from those of the outside world. From the point of view of the banks and the bondholders, third-party bids may reflect an undue discount because bidders lack the private information to which the banks and bondholders have been given access. Put most simply, the banks and the bondholders face another variation on the standard "lemons" problem.[51]

Bidders will set their bids based on the rate of return that compensates them for the risks they associate with the uncertain future of American and

50. Wilbur Ross, the buyer of Bethlehem Steel, is one example. *See* Nicholas Stein, *Wilbur Ross Is a Man of Steel*, FORTUNE, May 26, 2003, at 121.

51. *See* George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970). Akerlof suggests that used cars are sold for unusually low prices because sellers have private information about whether the car is a lemon. Buyers lower their price accordingly, and sellers with the best cars decide not to sell. This lowers what buyers are willing to pay still further. In the extreme, a market can unravel completely and sales may cease altogether.

adjusts for what they do not know about the business. The banks and the bondholders may think to themselves, based on their superior knowledge of the company, "This bidder probably has a rate-of-return hurdle on the purchase price of thirty percent. But the risks aren't that large. Why should we let him get away with stealing the business for that price? We can just fix the business, sell it in several years, and earn that return for ourselves." As long as the banks and the bondholders are confident of their own assessment of the business and their ability to control the reorganization process, they may prefer to own rather than sell. The central problem that remains is negotiation of the allocation between them of the value of the business. The banks and bondholders can both agree that the business is worth more than a third party will pay without agreeing on exactly how much more.

Creditors of reorganizing companies (ranging from banks and other financial institutions to universities, mutual funds, and hedge funds) increasingly are professional investors who specialize in distressed businesses. They are often willing to forego a market sale in order to recapitalize the debtor through a stand-alone reorganization.[52] American's banks and the bondholders do not face a Hobson's choice between a sale in an illiquid market or a costly reorganization. Instead, they see the choice as one between selling the business to other investors in a developed, but not perfect, market or acquiring it themselves in a process that has become less expensive and more efficient than in the past.[53]

American Instruments is the prototypical case our corporate reorganization laws were designed to address. The interaction between in-the-money classes of different priority is the key to the restructuring process.[54] The negotiations are among a relatively small group of professional investors and their experienced advisors who can be counted on to cast a cold eye on the business and the likely course of any litigation. The subject of that negotiation is the proper allocation of the equity of the reorganized enterprise. This allocation depends, ultimately, upon the value of the enterprise. If the parties cannot

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52. *See* Goldschmid, *supra* note 22, at 200-06.

53. Lynn M. LoPucki & Joseph W. Doherty, *The Determinants of Professional Fees in Large Bankruptcy Reorganization Cases*, 1 J. EMPIRICAL LEGAL STUD. 111, 114 (2004) (explaining that professional fees have fallen 57% since the 1980s).

54. To simplify matters, we assume that American Instruments' banks enjoy a priority position that is watertight. Some of the "departures" from bargained-for priority merely reflect the uncertainty (albeit often small) about whether an investor who claims to be senior is in fact entitled to priority. Cases may simultaneously involve disputes over priority and enterprise value. *See, e.g.*, *In re* Exide Techs., 303 B.R. 48, 60-61, 66 (Bankr. D. Del. 2003). For purposes of analysis, these sorts of disputes and their negotiated outcomes should be separately considered.

reach a deal, the valuation issue will be decided by the court as it applies the absolute priority rule.

As in litigation generally, the banks and the bondholders can make themselves jointly better off by reaching a deal. If the parties can strike a deal, each can avoid the costs of a judicial valuation. More importantly, American Instruments is in an industry in which long-term supply contracts are an essential part of the business. Unless it can convince buyers of its products that its financial problems are behind it and that it will be around for the long haul, its ability to improve earnings is compromised.

The environment in which the senior and junior creditors find themselves, while typical of many large Chapter 11 reorganizations, is quite foreign to most academic accounts of the absolute priority rule and departures from it. There is no plausible claim that the ex ante bargain called for anything other than absolute priority. The negotiations are among professionals. The subordination of the bondholders to the banks was established through contract. Every bondholder knew at the outset the nature and the extent of the banks' priority. We are not dealing with tort victims or workers or any other nonadjusting creditors. The managers are newly hired turnaround specialists, not entrepreneurs whose firm-specific skills are essential to the business nor well-entrenched owner-managers who exclusively possess valuable private information. Those in charge—the turnaround specialists—want to move the case forward. Their incentives are aligned with the creditors', not the shareholders'.

The dynamics of cases such as American Instruments turn on the way the banks and the bondholders each assesses the information available to them. Both the banks and the bondholders may know, for example, that American Instruments is all but sure to land long-term contracts to supply instruments for the next generation of commercial aircraft. Yet they may have different views of other factors that affect value, such as the worldwide demand for aircraft or the likelihood that the instruments can be developed as quickly as the managers predict. Moreover, even if the banks and bondholders have identical views on value, they may believe the bankruptcy judge can be persuaded by their side or the other to arrive at a different value.

In litigation over the value of the enterprise, the banks, as the senior creditors, will press for a low valuation, and the bondholders will press for a high one.[55] The judge might be persuaded by one side or the other that the new

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55. Because the value of the enterprise is allocated first to the satisfaction of senior claims, a lower valuation will require a higher percentage of the enterprise to be reserved for the satisfaction of senior claims.

technology is a little more or a little less likely to become the industry standard. She might be persuaded by one side or the other that the discount rate should be at the high or the low end of the appropriate range. Small differences in assumptions can easily change the valuation by 10% or 20%. There is a certain amount of inherent ambiguity in any valuation, and, in an adversarial process, the parties will seek to exploit this ambiguity. Though the banks and the bondholders may know the same amount about the company, they may have very different beliefs about how the judge will respond to what they put before her.

In this environment, the banks and bondholders are likely to behave in a predictable way. They are likely to agree on a consensual plan of reorganization in which the bondholders end up with some form of junior securities or rights that will have real value only if the business proves sufficiently successful. In the next Part, we explore the bargaining dynamics at work and suggest reasons why the outcome between the banks and the bondholders takes the form it does.

III. BARGAINING IN THE FACE OF VALUATION UNCERTAINTY

Many accounts of bargaining in Chapter 11 assume it possesses a dynamic peculiar to businesses in financial distress, but bargaining in Chapter 11 is no different from any other negotiation that takes place in the shadow of litigation. The dynamics at work are captured by the standard settlement model, one in which parties to the negotiations have different beliefs about the likely outcome of the litigation.[56] This model illuminates the forces at work in the American Instruments hypothetical.

Reorganization bargaining between American Instruments' banks and bondholders takes place in the shadow of whatever mechanism sets a value on the business in the event they fail to reach an agreement. One possible mechanism would force the junior investor to buy out the senior investor at par to preserve the value of the junior investor's interest in the business. It would effectively require the junior investor to "put up or shut up" based on the

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56. This model is set out in Landes, *supra* note 23. Alternative models of settlement are useful when the bargaining dynamic turns on one party having access to information not available to the other. *See, e.g.*, Lucian Arye Bebchuk, *Litigation and Settlement Under Imperfect Information*, 15 RAND J. ECON. 404, 408-09 (1984). These models, however, do not capture as well the dynamic between the banks and the bondholders, as the bargaining tension arises not from an asymmetry in information, but rather from the uncertainties inherent in the information and over the way the parties assess the likely outcome of the mechanism for deriving the value of the enterprise from such information.

junior investor's own views of the value of the business. Based on her view of the value of the business, the junior investor would decide whether, as a risk-reward proposition, she has enough confidence that the value of the enterprise will exceed the senior investor's claims to buy out the senior investor's position. Alternatively, one could provide for an allocation of ownership of the enterprise based on a judicial appraisal, but allow the parties to avoid this allocation by agreeing to an allocation among themselves. The latter approach—the one adopted in Chapter 11—avoids the need for consideration to change hands between the parties. In the absence of a settlement, it "splits the baby" based on the judge's determination of value, which may depart from what either the senior investor or the junior investor thinks the business is worth.

Each of these two valuation procedures—forced sale and appraisal—has its own strengths and weaknesses. In environments (such as the dissolution of a partnership) in which parties can agree on the valuation mechanism that advances their mutual self-interest in their ex ante bargain, they sometimes opt for one procedure and sometimes the other. In the next two Sections, we explore the advantages and disadvantages of each of these procedures in the context of a corporate reorganization.

A. The "Forced Sale" Model

When two parties enter a joint venture, they recognize that, at some point, one or the other will want to terminate the arrangement. When neither faces any liquidity constraints and both are equally able to run the business, they may agree at the outset that as soon as one of them wants to terminate the venture, she can put a value on the business and the other has the choice to buy or sell the business at this price. This way of dissolving a joint venture is called a "Texas Shootout."[57] Because both parties have sufficient resources to pay the true value of the venture, this mechanism forces the party who makes the offer to reveal the value she places on the business. For this reason, this mechanism has a distinct advantage over use of a third-party appraiser who does not know as much as either partner about the value of the business.

A law of corporate reorganizations could use a variation on this valuation mechanism. Indeed, as others have observed, the hierarchical nature of the

57. *See* Richard Brooks & Kathryn E. Spier, *Trigger Happy or Gun Shy? Dissolving Common-Value Partnerships with Texas Shootouts* (Yale Law Sch., Ctr. for Law, Econ., & Pub. Policy, Research Paper No. 298, 2004), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=556164.

parties' interests in the distressed debtor makes such mechanisms, in theory at least, easy to implement. The junior investor would have the option to buy out the senior investor for the amount of the senior investor's claim.[58] If the junior investor thought the business worth less than what the senior investor was owed, it would not exercise the option, and the senior investor would end up with the entire business as the absolute priority rule requires. If the junior investor believed the business worth more than what the senior creditor was owed, it would have to pay the secured creditor in full, again vindicating the absolute priority rule. There are variations on this scheme, but they all force the junior investor to reveal the information she possesses, information that is unavailable to the bankruptcy judge or any third-party appraiser.

Whether such a mechanism best serves the interests of the parties, however, is not clear. It relies on the junior investor possessing sufficient capital. The junior investor may find it impossible to borrow the full amount from a third party because the third party does not know as much about the business and will therefore lend only a fraction of the business's value. The private information problem that makes a sale of the business unattractive also makes it difficult for the junior investor to borrow the funds needed to buy out the senior investor. Even if the junior investor possesses the needed capital, the investment may be hard for her to diversify against.

In the case of American Instruments, for example, the bondholders would collectively need to put $250 million at risk, something they might not be willing or able to do as a concerted group even if the largest holders, with the benefit of private information, believed that, in expectation, the business was worth more than $250 million.[59] To be sure, if the junior position is spread among many creditors, the ones with the smallest position may have no need to borrow and comparatively less concern about diversifying the risk, but these small creditors are also the ones least likely to have private information that allows them to assess the business's value accurately.

In short, there are likely to be practical difficulties in the corporate reorganization context with requiring junior investors to buy out senior investors, and a more practical valuation mechanism is needed. This brings us

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58. *See* Bebchuk, *supra* note 27, at 781-88. Even apart from liquidity problems, this mechanism is easy to implement only if the priority position of all the investors is clear. In many cases it is not.

59. Today, even in the absence of a bankruptcy law requirement, junior investors could offer to buy out senior investors as a group, especially, as is commonly the case, when all of the senior investors are party to a single syndicated bank credit agreement. Typically, however, while senior claims trade and junior investors are sometimes buyers, such transactions are trades between individual holders, normally at a discount to par.

to the other valuation mechanism—one also frequently seen in negotiated transactions—appraisal by a third party.

B. The Appraisal Model

Modern Chapter 11 is the equivalent of a provision in a joint venture agreement that calls for the appointment of an appraiser and uses the number that the appraiser sets (or is expected to set) as the baseline against which to measure the rights of the parties. Sophisticated parties often bargain to adopt such mechanisms.[60] A "put" mechanism based on an appraisal is particularly useful when a partner wants to terminate a joint venture, but does not have the liquidity to buy the other partner out, the sine qua non of the dissolution mechanism that uses the I-pick-you-choose "Texas Shootout" approach. Like any other valuation mechanism, however, an appraisal mechanism comes with its own costs. In particular, in the reorganization context, any valuation mechanism that does not involve a transaction that monetizes the senior investor's position (through a sale of the business or a buyout of the position) creates option value in the position of the junior investor. This will be priced into any deal the parties strike, which avoids the need to complete the valuation.

We can better understand how the prospect of an appraisal affects the bargaining dynamics between the banks and the bondholders of American Instruments by imagining an even simpler example. Imagine that Firm is a debtor in Chapter 11. Its only asset is an oil well. The only source of uncertainty is over the amount of oil beneath the ground. It has two creditors, Bank and Lender. Bank has lent \$250 and Lender \$200. Bank has a security interest in all of Firm's assets. Bank and Lender each know as much about the amount of oil in the ground as the other. They have read the same geologist reports. They know Firm's own experience and its managers' intuitions about how much oil is there. They can convey much of what they know to an outsider, but not everything.

We can imagine a number of different variations on this hypothetical. Let us assume first that Bank and Lender share the same beliefs about the amount of oil in the ground. They both believe it is worth \$250. No outside buyer, however, will pay that much for the oil well. The outside buyer will bid less, as

60. For examples of such contracts, see Keith Sharfman, *Valuation Averaging: A New Procedure for Resolving Valuation Disputes*, 88 MINN. L. REV. 357, 364-65 (2003), which describes contractual valuation mechanisms using expert appraisers in the Merck/Schering-Plough and Verizon/Vodafone joint ventures.

it must discount for the possibility that Bank and Lender are selling the oil well because their private information tells them the well is worth less than it seems.

Bank and Lender believe that the average valuation of a hundred fully informed appraisers would be the same as their own, but they recognize that any individual appraiser's valuation might be higher or lower. The standard deviation is 10%. Bank and Lender also believe that a bankruptcy judge who listens to expert witnesses is in the same position as an unbiased appraiser.[61] Over the course of a hundred cases, her median valuation, like the appraisers', will be $250, but there is again a standard deviation of 10%. The bankruptcy regime allows Lender to insist on a valuation hearing, and the valuation hearing costs Lender and Bank $2.50 each. What happens when Bank and Lender negotiate in the shadow of a valuation hearing in this environment?

Lender's ability to insist on a valuation hearing is an option that has value. The bankruptcy judge is, by assumption, an unbiased appraiser whose valuation skills are the equal of any third-party expert. Nevertheless, the bankruptcy judge's valuation is subject to substantial variance, and this variance is itself a source of value to Lender. To be sure, when the bankruptcy judge finds that the business is worth less than $250 (which she will do half the time), Lender receives nothing. But in the remaining cases, the bankruptcy judge will find that the business is worth more than $250. In these cases, Lender will receive the difference between the value the bankruptcy judge applies to the business and $250. With a standard deviation of 10%, the "cram-up" option that Lender enjoys is worth $10.[62]

The right to demand a valuation hearing before an impartial bankruptcy judge, like the right to demand an independent third-party appraisal, has distributional consequences. Seen after the fact, the junior investor is better off and the senior investor is correspondingly worse off than each would be in the counterfactual world in which the property could be sold to a third party for $250. The junior investor is also better off than she would be in a world in which she faced no liquidity constraints, but was obliged to buy out the senior investor's claim in order to continue her interest in the business. If she were

61. As we note later, under the existing Chapter 11, the bankruptcy judge's valuation, while likely unbiased, is also likely subject to greater variance than that of an expert who is both more specialized and less constrained in the evidence she uses and the procedures she adopts. *See infra* text accompanying note 90. This simple example is merely to show that the forces at work are inescapable in any appraisal mechanism, even when appraisal variance is kept to a theoretical minimum.

62. The precise figure is $9.97, assuming a normal distribution of possible judicial valuations and a standard deviation of $25. One gets to this figure by first taking each possible judicial valuation in excess of $250, subtracting $250 from it, and then discounting what remains by the probability of this valuation. Each of these is then summed together.

required to buy out the senior investor at par, she might realize the upside, but could also lose a portion of her investment in the senior claims if the business turned out to be worth less than expected. If, instead, she can impose a value allocation based on a judicial appraisal, she benefits from the upside but has no additional investment at risk on the downside.[63]

C. *The Impact of "Appraisal Variance"*

The parties to the reorganization negotiations will each have their own view of the value of the enterprise. Their respective valuations may, as in our example, be the same, or they may be different. Each party's valuation is based on an assessment of a number of variables, such as its expectation regarding the range and probability of different real-world outcomes for the business, and its subjective views regarding valuation methodology, discount rates, and the like. That each has the same access to information about the debtor's business reduces the possibility of different valuations, but does not make it disappear altogether. A less well-informed third-party appraiser is even less likely to agree with either party's privately held view. Each party accordingly faces the possibility that the appraised value of the enterprise will depart from the party's own valuation, and the party's expectations regarding the probability and the potential magnitude of such a departure directly impacts the party's negotiating strategy. We call the risk of such departures "appraisal variance."

To illustrate the impact that appraisal variance has on reorganization negotiations, compare a regime involving the option of an appraisal with one in which both Bank and Lender must wait until the oil has been extracted from the ground, at which point the amount of oil in the well is fixed with certainty and valuation issues disappear. Whether the opportunity to force an appraisal has an impact on negotiating incentives depends on whether there is a difference between the parties' expectations regarding appraisal variance on the one hand and the parties' expectations regarding the variance of real-world outcomes on the other. In a simple case, it might be that Bank and Lender both believe that the expected quantity of oil is worth $250, but also believe that, just as with respect to appraisals, there is a standard deviation in the real-world

63. Exercising the junior investor's "option" may not, however, be cost-free if the junior investor has to bear the cost of litigating the valuation issue. If a creditors' committee prosecutes the valuation litigation on behalf of the junior investor, the junior investor will be relieved of the costs of litigation (which would be borne by the debtor and, therefore, indirectly by the senior investor). *See infra* note 70.

outcomes of 10%.[64] Under these circumstances, the bargain that Bank and Lender strike in the appraisal regime should be comparable, in terms of distributional consequences, to a regime that simply obliged the parties to wait. Bank and Lender could, for example, agree upon a new capital structure in which Bank receives 100% of the equity and Lender has the option in two-years' time to buy Bank's equity for $250 plus a risk-adjusted market rate of return.[65] Even if Lender faces liquidity constraints now, these will disappear when the oil is extracted and its quantity is known. Bank will receive its entire $250 plus compensation for delay before Lender receives anything. The deal preserves the option value associated with Lender's junior position in the same way that a right to insist on an appraisal would.

The parties' expectations regarding the variance associated with an appraisal may not, however, match the parties' expectations regarding the variance in real-world outcomes. At one extreme is the situation in which there is no appraisal variance despite a wide variance in real-world outcomes. A business has only one asset, and it is a lottery ticket that has a one-in-ten chance of paying $2500. Bank is again owed $250. There is no ambiguity about the expected value of the ticket, nor any doubt that all third-party appraisers would fix on it a value of $250. The outcome in which Lender has a right to insist on a third-party valuation is no different from the outcome if Lender were obliged to buy out Bank's position or if the lottery ticket were sold in the marketplace. Lender would receive nothing under any of these scenarios. Lender's claim could, however, have value if Lender can force a delay. When the appraisal variance is small compared to the parties' expectations regarding real-world outcomes for the business, the senior investor should favor an immediate day of reckoning that collapses future values to the present, even if the mechanism for implementing the day of reckoning is an appraisal. The junior investor should favor delay. This is a familiar story about the negotiating power that junior investors gain from an ability to delay.

There is, however, a different dynamic when appraisal variance is large and the expected real-world outcomes are quite predictable to the parties with private information. In such a situation, it is the senior investor who favors

64. The variables that make it hard to predict the expected result of a third-party appraisal also make it hard to predict the actual output of the well. For our purposes, however, what matters is that the value expectations Bank and Lender are likely to hold have less appraisal variance than those of less well-informed third parties by virtue of their access to private information.

65. Bank is taking equity risk—i.e., the risk that the oil extracted turns out to be worth less than $250. Hence, Bank would bargain for a "blended" return reflecting this risk before Lender could participate in recoveries.

delay. Consider the case in which Bank and Lender believe that the value of the oil in the well is more predictable than the typical appraiser will recognize, and that, as a result, the variance among the appraisals is greater than their own uncertainty about the value of the oil in the ground. In such situations, Lender's ability to insist on an immediate appraisal has value. If the appraisal variance is large compared to the senior investor's own expectations regarding the variance in real-world outcomes for the business, the senior investor should favor delaying an appraisal until the real-world outcomes are better known. This bargaining dynamic, one in which the junior investor has both the desire and the ability to obtain a quick appraisal over the objection of the senior investor, is well understood in practice but neglected in theory.[66]

In sum, uncertainty over the outcome of a valuation generates option value. When there is sufficient uncertainty over the outcome of an unbiased valuation, the ability of the junior investor to force a valuation has value even when there is no disagreement between the parties about the uncertainties associated with the appraisal and the appraisal is completely unbiased. A rational senior investor will take into account the value of the junior investor's option (or, more specifically, the threat that it will be exercised by voting against the reorganization plan) in making any settlement offer. A senior investor's willingness to "buy" this option from the junior investor will naturally lead to reorganization plans in which the junior investor participates, even though, by the terms of the contractual bargain separated from the valuation problem, the junior investor should not participate based on the expected value both parties place on the business.

If the senior investor and the junior investor share the same view of the business's prospects and the way in which the appraiser will assess them, a settlement range exists that makes both the senior investor and the junior investor better off. They are likely to reach an agreement in which the junior investor is paid the value of her option to insist upon a valuation and the parties allocate between them the savings they would realize from bypassing

66. The familiar scenario in which the senior creditor brings about the day of reckoning is known commonly as "cram-down." Hence, the inverse—when the junior creditor can force it—should be thought of as "cram-up." It should be noted, however, that the senior investor will tolerate greater appraisal variance if the expected value of the enterprise is sufficiently low. In that scenario, appraisals at the high end of the range of variance still may not cover the senior investor's claim. In such cases, the senior investor should favor a speedy appraisal even if the appraisal variance exceeds her expectations regarding the variance of real-world outcomes. The dynamic at work here is related to but ultimately distinct from the similar dynamic Adler identifies in bargaining between senior and junior lenders. *See* Adler, *Bankruptcy Primitives*, *supra* note 15, at 226-29.

the valuation process. These would include the direct costs of the process itself and the indirect costs of delay.[67]

D. *Negotiating in the Face of Appraisal Variance: Postponing the Day of Reckoning*

If appraisal variance is expected to be large, Bank and Lender must focus upon allocating reorganization distributions in a way that accounts for the value of Lender's cram-up option (the ability to impose on the senior investor the risk that the appraiser will settle on a value for the business that is at the high end of the range of variance). As suggested above, this is so even if Bank and Lender share the same view about the expected outcome and the likely variance of the appraisal.

The parties may, however, find it difficult to agree on the value of Lender's option. If they do, there is another alternative they can explore. They can agree to postpone the day of reckoning by preserving Lender's option until a later date, by which time it is hoped the value of the enterprise can be more readily established in the market. While this type of solution raises some tricky governance issues (specifically, control of the business during the period of postponement[68]), postponing the day of reckoning permits Bank and Lender to save the cost of the valuation while preserving their relative rights. An example of such a solution would be for Bank and Lender to agree to a plan that allows Lender to buy out Bank's interest several years hence, providing Bank with an appropriate rate of return in the interim. Another possibility would be to design a distribution allocation procedure with a built-in adjustment mechanism that locks in the final allocation of investor

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67. *See* RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 607-10 (5th ed. 1998).

68. Bank and Lender must ensure that whoever is controlling the business during the interregnum does not make decisions that are biased in favor of one party or the other. The problem, however, is easy to overstate. In cases like American Instruments, the operational problems of the businesses, their new managers, and their directions are often settled before the Chapter 11 petitions are filed. To the extent that issues remain, parties can protect themselves through private contracting. Increasingly, intercreditor negotiations over corporate governance appear more akin to what one would expect in a private equity transaction. Banks will have elaborate covenants that give them the power to prevent decisions that are not in their interests. The creditor groups taking equity will insist on registration rights, "drag alongs" and "tag alongs," as well as voting agreements and restrictions on transfer. *See* Baird & Rasmussen, *supra* note 21. The initial composition of the board of directors upon implementation of the reorganization and the timing and procedures for future director elections will also be negotiated.

participation only after the market has reliably established the value of the enterprise.

The usefulness of postponing the day of reckoning can be seen if we complicate our example by assuming that the appraisal process not only exhibits substantial variance, but also that Bank and Lender have different beliefs about the likely outcome or variance associated with the appraisal.[69] This will make it more difficult or perhaps even impossible for the parties to agree upon the value of the junior investor's option. However, as we shall see, if the parties agree to postpone the day of reckoning, there may be negotiated solutions that will satisfy both parties.

Assume that Bank believes the appraiser will share its own view of Firm's value and find that, in two-years' time, Firm will be worth either $225 with 80% probability or $375 with 20% probability. Collapsing these possibilities yields an expected valuation of $255. By contrast, Lender believes that the appraiser will share its view that, in two-years' time, Firm will be worth $225 with 20% probability or $375 with 80% probability. This results in an expected value of $345. A valuation hearing costs Bank $20 and Lender $15.[70] Under these assumptions, Lender expects to receive $80 if it contests valuation.[71] Bank, however, will spend no more than $25 to settle with Lender. Bank believes Firm is worth only $255 and it expects to receive $230 after a valuation hearing.[72] From its perspective, a settlement with Lender (acquiring Lender's

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69. We are speaking here of the private beliefs that Bank and Lender actually hold. When they negotiate with each other, Bank will assert that the value is low and Lender will assert that it is high. Their private beliefs, however, are what determines whether a settlement range even exists. That their private beliefs diverge in such a fashion is not merely an accident in a world in which there is massive trading in claims and those who hold various positions hold them by choice.

70. The assumption that Lender will bear fewer of the costs of the valuation hearing is plausible. *See* Arturo Bris et al., *Who Should Pay for Bankruptcy Costs?* 34 J. LEGAL STUD. 295, 304 (2005). If the official creditors' committee carries the burden of the valuation proceeding and if the plan ultimately provides the junior creditors with contingent rights of participation, part of the cost of the process will shift from the junior creditors to the senior creditors. (In states of the world in which junior creditors have options that turn out to be out of the money, the costs of the bankruptcy borne by the debtor are borne entirely by the senior creditor.) Of course, if all payouts are in cash at the end of the case, then the junior creditors bear the cost as long as the debtor is not administratively insolvent.

71. The bankruptcy judge will find that Firm is worth $345 and will give Lender a share in the reorganized firm that is worth $95. Less the $15 cost of the litigation, Lender realizes $80.

72. Bank believes that the bankruptcy judge will agree with its valuation and hold that Firm is worth $255. Because Bank is owed $250, the judge will give it virtually the entire reorganized firm. After spending $20 on the valuation hearing, it is left with $230.

interest in the firm) can benefit it only to the extent of the difference between the two. No cash settlement will make both parties better off than they expect to be after the valuation hearing.

Bank and Lender can, however, still find common ground. They can look to a mechanism that defers the final allocation of their ownership participation in the reorganized enterprise until the value of the enterprise is better known. Consider, for example, a settlement in which Firm acquires an all-equity capital structure. Bank receives all the equity in Firm, but Lender enjoys the right to buy the equity of Firm from Bank in two-years' time for $275. Bank and Lender do as well with such a bargain as they would by going through a valuation process. This plan gives Bank an expected return of $235, $5 more than it expects to receive after a valuation hearing.[73] The plan gives Lender an expected return of $80, an amount equal to what it expects to receive after a valuation procedure.[74] The liquidity problem that Lender faces today will not exist in two years, as by then the market for Firm's securities will have established itself and Lender will be able to borrow the money needed to exercise the option or it will be able to sell the option to someone else.

In the case described above, both Bank and Lender believe that the expected value of Firm exceeds the amount Bank is owed. They merely disagree about the size of the expected surplus. Even if, however, Bank believed that the expected value of Firm were not sufficient to pay the Bank in full, it might nonetheless believe that the valuation variance is sufficiently large to put Lender in the money if the judge's valuation were at the high end of the valuation range.

Under such circumstances, Bank would still have an incentive to offer Lender some continuing rights against Firm to reflect the value of the option implicit in the right to insist on a valuation. Especially in such circumstances, Bank may find it far easier to offer Lender some form of contingent rights that defer Lender's final day of reckoning than it would be to offer Lender a cash settlement or some other finite participation interest in the ongoing firm. The possible features of such contingent rights and the flexibility parties have to

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73. Bank believes that Firm will be worth $225 in four cases out of five. When Firm finds itself in such circumstances, Lender will not exercise the option, and Bank will remain the sole owner of Firm. In one case out of five, Firm will be worth $375. In these cases, Lender will exercise its option and Bank will receive $275. Hence, the expected value of Bank's share under the plan is worth (0.8 * 225) + (0.2 * 275), which is $235.

74. When Firm proves to be worth only $225, Lender's option to buy it for $275 is worthless. But Lender believes that this will happen only 20% of the time. The rest of the time, Firm will be worth $375 and in this event the option to buy it for $275 is worth $100. An 80% chance of $100 is worth $80.

tailor them to the value (or lack of value) implicit in the junior investor's position is the topic to which we now turn.

IV. USING OPTIONS TO SETTLE VALUATION ISSUES IN REORGANIZATIONS

So far we have suggested that, to a far greater extent than commonly appreciated, bargained-for departures from absolute priority are motivated by valuation uncertainty. We have also suggested that, while negotiations in large reorganizations are fact-dense and reorganization plans are complicated, the bargaining dynamics are similar from one case to the next. These dynamics regularly lead to negotiated reorganization plans with basic features consistent with the idea that valuation uncertainty plays a key role in dictating the contours of such plans. These observations, together with the illustrations above, suggest that there should be some discernable patterns to how valuation uncertainty is addressed in reorganization settlements.

Settlements of valuation issues in large Chapter 11 cases take many forms. Sometimes such settlements do not involve giving the junior creditors options that turn on the future value of the business. It is simpler to allocate a fixed percentage of the common stock of the reorganized debtor to the junior class in recognition of the option value inherent in the junior class's ability to force an appraisal of the enterprise. The amount of equity allocated to the junior class in such circumstances includes an "option value" component[75]—a component on account of the possibility that the court might adopt a higher-than-expected valuation if the issue were litigated. The size of this component, or whether it is offered in settlement at all, will of course depend upon the expectations of the senior class regarding the likelihood and the magnitude of any higher valuation the court might adopt.

Senior and junior investors may, however, find it difficult to arrive at a mutually satisfactory split of the reorganized debtor's common stock, especially when the senior and junior investors have divergent beliefs about the underlying value of the business or the value the court will place on it. Settlements involving an outright division of the reorganized debtor's common stock cannot navigate around the central difficulty of applying the absolute priority rule. Fixing the allocation of common stock between the senior and

75. The reference to an option-value "component" is in recognition of the fact that the junior class may be entitled to some value even at the low end of the valuation range. The option value component is only that portion of the distributions that relates to the possibility that the judicial valuation could be higher than expected.

junior classes in the plan of reorganization makes the plan confirmation date a day of reckoning in the sense that the finality of the allocation extinguishes (or more precisely circumscribes) the option value of the junior class's position. As we suggest above, in these circumstances it may well be easier to reach agreement if the day of reckoning can be postponed for a time through designing a distribution mechanism that to some extent preserves the option value of the junior investor's position. Securities can be designed with option features that allow time after the effective date of the plan of reorganization for the market to determine the value of the enterprise and the allocation of ultimate ownership rights in the business.

The reorganization plan might, for example, initially allocate virtually all of the common stock of the enterprise to the senior class based on a conservative valuation. It could then preserve for a time the right of the junior class to purchase some or all of the common stock, either directly from the senior class or, more typically, from the reorganized company. The price to be paid for the stock by the junior investor could be set by reference to an enterprise value sufficient to provide the senior investors a full recovery plus an appropriate risk-adjusted return. A plan with this feature might offer the junior class only a limited period of time to elect to purchase (for example, pursuant to a rights offering) or might offer a readily marketable security, such as a warrant, that has a longer term.[76] Settlements of this type can be structured in many ways, subject to the ability of the capital markets to accommodate the new securities.

There are also alternatives that avoid the need for the junior class to supply new capital. For example, a plan can allocate the majority of the common stock to the junior class while the senior class retains a senior security convertible into common stock. The senior investors can convert the security into common stock commencing at some future date if the market proves that the senior investors are the true owners of the enterprise. In at least two recent cases (those of LaRoche Industries in 2001 and Conseco in 2003), such a "relative priority" security was issued to the senior investors, taking in each case the form of convertible preferred stock.[77] The preferred stock included a delayed-

76. The shorter the amount of time during which the junior investors have the ability to exercise these options, the more they become like Bebchuk options, which are rights that the junior investors have to buy out senior investors at the time of the reorganization. *See supra* note 58 and accompanying text. The duration and terms of rights to purchase common stock granted to junior investors can have an impact on the value and liquidity of the common stock distributed to senior investors. This "overhang" issue often becomes a factor in reorganization negotiations.

77. Conseco, Annual Report, *supra* note 5, at 149; Debtors' Second Amended Joint Plan of Reorganization at 10-11, *In re* LaRoche Indus., Inc., No. 00-1859 (Bankr. D. Del. Mar. 29, 2001) [hereinafter LaRoche, Debtors' Second Amended Joint Plan] conversion feature that permitted the debtor the opportunity to redeem the security before the date on which the conversion feature could be exercised.[78] If the debtor could not accomplish the redemption, the conversion feature would become exercisable and senior investors could effectuate a change of control.

A convertible preferred stock of this type has a number of attractive features. By converting senior debt to preferred stock, it reduces the debtor's indebtedness to a sustainable level. The delayed-conversion feature coupled with the redemption feature gives the new shareholders (the junior investors) time for the market to show that their asserted higher valuation can in fact be realized. If the higher values are attained, the security can be redeemed and the junior class can retain their controlling stake in the common stock. From the perspective of the senior class, the security sets a deadline for the transfer of control to the senior class while preserving their senior position. An adequate dividend rate on the security, which can be "paid in kind" until the conversion date, can assure that if the security is redeemed the senior class is in fact paid in full.[79] If properly designed, the security can be marketable, permitting those senior investors who desire to exit before the conversion date to do so.[80]

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78. LaRoche, Debtors' Second Amended Joint Plan, *supra* note 77, at Exhibit C.

79. In *Conseco*, for example, this dividend rate was 11% and was paid in kind until redemption or the conversion date, after which the coupon was payable in cash. Second Amended Disclosure Statement, *supra* note 6, at 35.

80. Price quotes were available for Conseco's new convertible preferred stock shortly after it emerged from Chapter 11 on September 10, 2003, and the stock could be sold at close to its par value. Yahoo! Finance, CNO: Historical Prices for Conseco, Inc., http://finance.yahoo.com/q/hp?s=CNO (last visited Apr. 6, 2006) (including entries for December 15-31, 2003 and January 15-30, 2004). Conseco's enterprise value proved to be far greater than the principal amount of the pre-reorganization senior debt, and the convertible preferred stock issued to the senior creditors traded close to its liquidation preference until it was redeemed in full with accrued dividends approximately two years after issuance. *See* Press Release, Conseco, Inc., Conseco To Redeem All Issued and Outstanding Shares of Class A Senior Cumulative Convertible Exchangeable Preferred Stock (May 12, 2004), *available at* http://conseco.mediaroom.com/index.php?s=press_releases&item=22. If the value of the enterprise had proved to be at or below the amount of senior debt, the preferred stock would have traded at a value based on the assumption that it would not be redeemed but instead converted into common stock at the end of the waiting period. Its value would then have been dictated by the expected value of such common stock at the end of the waiting period.

V. APPRAISALS: THE WEAK LINK IN ABSOLUTE PRIORITY

The world of Chapter 11 is one in which junior investors enjoy an option that arises whenever the outcome of the valuation process is uncertain. This option results not from the lack of a commitment to the principle of absolute priority, but from the possibility that the appraisal mechanism will place a value on the business higher, and perhaps substantially higher, than the amount realizable from a sale of the business in the marketplace. Outcomes that are commonly considered departures (or deviations) from absolute priority are often something else entirely. They can be rational, voluntary settlements made in the shadow of the absolute priority rule when the outcome of the court's appraisal of the business (and, indeed, the value of the business itself) is uncertain. If the business is not sold, the parties' different beliefs about the value of the business and the likely outcome of and variance associated with the court's valuation heavily influence the reorganization negotiations.

The settlement negotiations that take place in the context of these uncertainties are like any other litigation settlement negotiations. They will cut short litigation only if a bargaining range exists. That junior investors often take options, warrants, or other securities whose value is contingent on the future performance of the business is to be expected. When parties have different beliefs about the value of the business, the use of such securities expands the bargaining range and makes settlements possible that might not have been otherwise. What appear to be departures from absolute priority are merely the settlements we should expect in the shadow of an appraisal.

The phenomenon is not a new one. Consensual recapitalizations in the face of uncertain valuations raise the same issues today that they did in the era of equity receiverships. For the same reasons as today, in the equity receiverships of the late nineteenth and early twentieth centuries, senior investors often agreed to forego an actual sale or a judicial valuation and allowed junior investors to participate who might well have been out of the money if there were a day of reckoning and the value of the business was fixed. Two legal scholars, James Bonbright and Milton Bergerman, highlighted this behavior in a landmark 1928 article in the *Columbia Law Review*.[81] They observed that senior investors in equity receiverships often allowed junior investors to participate in distributions even when senior investors were not being paid in full. Bonbright and Bergerman rejected absolute priority and endorsed testing the fairness of a recapitalization plan against a standard of "relative priority"

81. *See* Bonbright & Bergerman, *supra* note 13.

because that standard was more congruent with the investor behavior they observed.[82]

Those who attacked this view believed that relative priority outcomes were illegitimate and unfair. They saw no reason to grant out-of-the-money junior investors participation in the reorganized enterprise, contingent or otherwise.[83] Rather than seeing such plans as a sensible way to settle in a world of uncertain valuations, critics saw advantage-taking by insiders (who tended to hold junior interests) of outsiders (who tended to hold senior claims).[84] By their account, insiders used their private information and control over the business to promote their interests while delaying the reorganization. Because of such perceived (and sometimes actual) abuses, the critics were blind to the possibility that senior creditors with the contractual right to priority might sensibly agree to grant contingent rights of participation to junior investors in a world of valuation uncertainty.

From a perspective over seventy-five years distant from Bonbright and Bergerman's original work, it appears that their work was closer to the mark than much that has been written since. Bonbright and Bergerman recognized that the prevailing practice (one in which there was relative as opposed to absolute priority) did not necessarily reflect a substantive entitlement that departed from absolute priority.[85] Settlement behavior merely reflected pragmatic negotiated solutions when valuations were uncertain,[86] avoiding the risks and costs of a full-dress valuation of the business.[87] Bonbright and

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82. *Id.* at 130.

83. *See, e.g.*, Jerome Frank, *Some Realistic Reflections on Some Aspects of Corporate Reorganization*, 19 VA. L. REV. 541, 541-42 (1933).

84. *See, e.g.*, 1-8 SEC, REPORT ON THE STUDY AND INVESTIGATION OF THE WORK, ACTIVITIES, PERSONNEL AND FUNCTIONS OF PROTECTIVE AND REORGANIZATION COMMITTEES (1937-1940) (reporting the results of a study conducted under the direction of William O. Douglas); William O. Douglas & Jerome Frank, *Landlords' Claims in Reorganizations*, 42 YALE L.J. 1003, 1012-13 (1933) (quoting N. Pac. Ry. Co. v. Boyd, 228 U.S. 482 (1913)).

85. Bonbright & Bergerman, *supra* note 13, at 131-33.

86. *See, e.g.*, Robert T. Swaine, *Reorganization of Corporations: Certain Developments of the Last Decade*, 27 COLUM. L. REV. 901, 912 (1927) ("Mathematical exactness is not required and is not possible. Reasonable adjustments are encouraged. Every reorganization plan of necessity represents a compromise." (footnote omitted)).

87. *See* Bonbright & Bergerman, *supra* note 13, at 161 ("[T]he adjustment of the claims of the various classes of securities on the basis of relative position rather than on the basis of a wiping out of equities effects an escape from the difficult, nay almost impossible, task of estimating in advance the probable values of the securities of the reorganized company in order to determine how much and what kind of securities must be offered to the senior bondholders to fully indemnify them for their investment in the old bonds.").

Bergerman felt the legal rule for approving such settlements should conform to the bargains actual investors seemed to want to strike in the real world.[88]

Modern Chapter 11 embraces absolute priority unequivocally as the ultimate substantive rule. Nevertheless, it is structured to allow consensual plans, that, because of appraisal variance, sometimes lead to relative priority outcomes. One of the key reforms effected by enactment of the Bankruptcy Code in 1978 was to permit bargains to be struck by a statutory majority of senior investors waiving enforcement of the absolute priority rule.[89] By providing an easier path to consensual plans against the backdrop of the absolute priority rule, the Bankruptcy Code achieved the very balance that Bonbright and Bergerman sought to achieve through a substantive standard of relative priority.

Bonbright and Bergerman understood what it took almost fifty years for Congress to recognize: A reorganization system based on a necessarily uncertain valuation often leads to negotiated outcomes that appear to compromise the rights of senior investors who bargained for absolute priority. Bonbright and Bergerman embraced relative priority as a substantive rule because the negotiations that now take place in Chapter 11 were more difficult in a world in which unanimous consent was required to implement a consensual restructuring, and a single dissenting senior creditor could impose on the senior class the risk of a judicial appraisal as a condition of allowing the entire plan to go forward. Bonbright and Bergerman failed, however, to recognize that the real impediment to accomplishing their goal was not the legal standard, but rather the unanimity requirement that permitted holdouts to block reorganization bargains favored by the vast majority of senior (and junior) investors.

Any law of corporate reorganizations designed to vindicate the absolute priority rule must contend with the problem of valuation uncertainty. Many, if not most, apparent departures from the rule reflect the value of the option that junior investors enjoy whenever the mechanism for establishing value involves a third-party appraisal. Once one accepts—as we believe one must—the need for some appraisal mechanism in the law of corporate reorganizations, the question becomes whether the existing mechanism can be improved. Viewed in this light, critiques of Chapter 11 should begin with an assessment of its appraisal methodology.

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88. *See id.* at 165.

89. *See* Lawrence P. King, *Chapter 11 of the 1978 Bankruptcy Code*, 53 AM. BANKR. L.J. 107, 108-09 (1979).

Chapter 11 relies upon a single bankruptcy judge to choose a value based on the testimony of competing experts. This mechanism should be compared to alternative appraisal methods in terms of how they deal with the problem of valuation variance. There is reason to believe that, compared to other methods, the current adversarial process magnifies the valuation variance problem. Variance decreases with greater and more accurate information, and the adversarial process limits the information put before the judge. Moreover, the information that is put forward is skewed by expert advocates toward one extreme or the other.

Ultimate authority in Chapter 11, as in any other legal process, must rest with the court. Within the framework of the judicial system, however, many alternatives are available. The judge could appoint an independent expert to assist the court by supplementing or assessing the expert testimony from the parties.[90] The judge could be required to appoint multiple independent experts and average the values each reaches to provide supplemental evidence on valuation, or even to provide a binding determination of value.[91] Procedures might be designed to dampen the incentive of the parties to take extreme positions.

Private parties adopt procedures that reduce valuation uncertainty in a number of different ways. Some of these procedures punish parties for asserting values that are biased in their favor. In baseball arbitration, for example, each party must submit a value, and the appraiser must pick the value closest to her own. (In one variation, sometimes called "night baseball," the appraiser comes up with her own value without knowing what the parties have chosen, and then the value closest to hers is used.) Other privately negotiated mechanisms minimize the problem by picking multiple appraisers and averaging their different views. [92]

We mention these possibilities not to advocate any particular reform, but to suggest that these issues should be the ones at the center of the Chapter 11 debate. Under current practice in large cases, Chapter 11 may come close to

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90. Rule 706 of the Federal Rules of Evidence currently permits the court on its own motion or on the motion of any party to enter an order to show cause why expert witnesses should not be appointed and to request the parties to submit nominations. An expert witness so appointed is required to advise the parties of the witness's findings, and the witness may be deposed by any party and may be called to testify by the court or any party. FED. R. EVID. 706. The Federal Rules of Evidence are applicable to cases under the Bankruptcy Code. *See* FED. R. BANKR. P. 9017.

91. See Sharfman, *supra* note 60, regarding various possible procedures involving valuation averaging.

92. *See id.*

using markets to the maximum extent possible. For the cases that remain, the challenges are largely those of designing an effective valuation mechanism and of devising reorganization bargains that resolve valuation uncertainty without the need to invoke the mechanism. The evidence suggests that the problem of reorganization outcomes that depart from absolute priority is not merely one of bias or of hold-up value. Rather, the problem derives in large measure from valuation uncertainty—an inherent feature of enforcement of the absolute priority rule whenever interests in an insolvent enterprise must be allocated between senior and junior investors without a sale. This problem cannot be made to disappear, but it can be minimized.

Ironically, although those in the academy have largely neglected the influence of valuation uncertainty on reorganization bargaining,[93] practitioners have long identified it as the principal challenge to resolving corporate reorganizations.[94]

93. For a conspicuous exception, see *id.* at 364-65, 370-72, which recognizes valuation variance in corporate reorganizations and elsewhere and proposes a procedure for valuation that mimics appraisals parties adopt in private contracts.

94. *See, e.g.*, Coogan, *supra* note 32, at 314.