UC Berkeley
Law and Economics Workshop

Title
Enterprise Valuation and the Puzzling Persistence of Relative Priority Outcomes in Corporate Reorganization

Permalink
https://escholarship.org/uc/item/0z7906ct

Authors
Baird, Douglas G.
Bernstein, Donald S.

Publication Date
2004-12-15
Enterprise Valuation and the Puzzling Persistence of Relative Priority Outcomes in Corporate Reorganization

Douglas G. Baird* & Donald S. Bernstein**

This paper 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.¹ In practice, however, departures from absolute priority are commonplace. Senior creditors regularly allow those junior to them to participate even when they may not be paid in full. Explaining this gap between theory and practice has been a central preoccupation of reorganization scholars since the 1920s. Conventional accounts point to the unwillingness of judges to fully recognize the rights of senior creditors and the ability of those junior to them to game the system to their advantage. In this paper, we suggest that these accounts are inadequate in the context of the reorganization of large businesses today. Something more is at work.

* Harry A. Bigelow Distinguished Service Professor, University of Chicago Law School.

** Partner, Davis Polk & Wardwell and Chair, National Bankruptcy Conference.

¹ One can posit situations (often involving small businesses in which the owner-managers have private information) in which parties bargain for something other than absolute priority. One can also posit situations (again typically involving small businesses) in which it is not meaningful to talk about an ex ante bargain among all the participants. Such cases, however, are not the norm in the large reorganizations that are the focal point of academic debates either in the 1930s or today.
Whatever might have been the case in the past, the modern bankruptcy judge who hears large cases is an experienced auctioneer, familiar with the ways of investment bankers and committed to respecting legal priorities among creditors. However much lawyers for junior investors might have been able to play for time in the past, their ability to do so today is seriously diminished. What then accounts for distributions to out-of-the-money junior investors in plans of reorganization? And what accounts for the increasingly common use of securities with option components that have the effect of putting off the day of reckoning for junior creditors until after the reorganization plan is confirmed?²

Critiques of reorganization law have paid too little attention to the uncertainties associated with valuing a financially distressed business, a problem that practitioners have long identified as the principal challenge in corporate reorganizations.³ Because of these uncertainties and the role of courts in resolving them under Chapter 11, rational parties negotiating in the shadow of absolute priority are naturally drawn to reorganization plans that appear to depart from absolute priority. These “departures” from absolute priority are in fact nothing of the sort. Rather, they are rational settlements negotiated in a world where the alternative is an unbiased, highly sophisticated judicial valuation with a range of possible outcomes.

² Warrants are a common feature of the securities issued in modern large Chapter 11 reorganizations. Recent cases include Lodgian, U.S. Airways, Pillowtex, Weblink Wireless, Sun HealthCare Group, and Factory Card Outlet Corp.

³ See, e.g., Peter F. Coogan, Confirmation of a Plan Under the Bankruptcy Code, 32 Case Western Reserve L. Rev. 301, 314 (1982).
Part I of this paper reviews the absolute priority rule and the various accounts and justifications offered for it in the law and economics literature. We show that these cannot be reconciled with the patterns we see today in the reorganization of large, publicly traded, businesses. Part II of the paper describes the context in which a large business typically is reorganized in Chapter 11 today. Part III presents our explanation for departures from absolute priority in reorganization cases, and Part IV discusses its implications for reorganization policy. Part V concludes and connects our observations here with the longstanding debate in corporate reorganization law over the optimal distribution rule -- between relative and absolute priority -- a debate two legal scholars, Bonbright and Bergerman, joined in 1928⁴ and that has been raging ever since.

I. Absolute Priority in Theory and in Practice

A single engine drives law-and-economics accounts of corporate reorganizations. The business in reorganization has an uncertain future. While there is a chance that it may do well, there is also a chance that it may do poorly. A reorganization is the equivalent of a foreclosure sale, and the business is like a lottery ticket before a drawing. At the sale, a value must be placed on the business that necessarily collapses all future possibilities to a present value. Assume, for example, that the business will be worth $200 or $100 in a year’s time with equal probability. The senior investor is owed $160 and the junior

Investor $40. At a foreclosure sale, the senior investor should, in theory, be able to sell the business for $150, the amount that reflects both the probability that the business will do well and that it will fail. Because the senior investor is owed $160, it is entitled to the entire $150 generated in the foreclosure sale. Hence, it should receive the value of the entire business in any plan of reorganization that respects the absolute priority rule.

Departures from absolute priority might, however, be justifiable if junior investors run the business and possess private information.\(^5\) Allowing them to participate may be the price that needs to be paid to ensure their cooperation. However, although junior investors may have private information in the case of smaller businesses, such factors are much less likely to predominate in large reorganizations. Equityholders are commonly wiped out in large reorganizations.\(^6\) Existing managers are dumped, sometimes even before the Chapter 11 is filed. The board of directors is dispatched sooner or later as well. The negotiating we see in large Chapter 11 cases today takes place primarily between senior and junior investors. Trading of claims in advance of Chapter 11 or shortly afterwards ensures that both groups consist of seasoned professionals who specialize in distressed businesses. They may know more about the business than the outside world does, but neither has an informational advantage vis-à-vis


the other. Models that depend upon private information to explain departures from absolute priority have no role to play here.

To explain departures from absolute priority, the standard account also focuses on the ability of junior creditors to interfere with the senior creditors’ right to insist on an accurate valuation. The junior investors know that an accurate valuation—such as one that a sale in the marketplace will yield—will wipe them out. Hence, they will seek to put off the day of reckoning. If they can delay the sale (or any other accurate valuation mechanism), they have a chance of recovery. Return to the metaphor of the lottery ticket. If the lottery ticket proves a loser, they still receive nothing. But if it proves a winner, there will be $200 to be divided. After the senior investors receive the $160 they are owed, there is still enough to pay junior investors. The ability of junior investors to postpone the day of reckoning gives them bargaining power through the possibility that the ticket may prove a winner. This power in turn leads to plans of reorganizations that deviate from absolute priority. Senior creditors agree to less than their nominal legal entitlement because of the value that junior investors can extract through delay.

Junior investors may be able to take actions that increase their own chance of being paid at the expense of everyone else. They may be able to use the resources of the business itself to undermine the priority position of the senior investors. They may also be able to delay or prevent other steps, such as a shutdown of the business followed by an asset sale that will maximize the value of the business. The senior investors cannot avoid these costs because, again according to the standard law-and-economics account, it is difficult for them to force a sale or, in the alternative, some other process that values the assets accurately. Even though an unbiased valuation would give them the entire
business, bankruptcy judges resist markets and mechanisms that mimic them. The bankruptcy judge too often adopts a peculiarly rosy view of the world. “Reorganization value” is not what the assets would fetch in the marketplace, but rather reflects the value of the assets if things turn out as hoped. The lottery ticket, in other words, tends to be valued closer to $200, its value if it proves a winner, rather than to $150, the amount that fully reflects both the upside and the downside.7

By this account, departures from absolute priority arise because out-of-the-money junior investors retain excessive influence over the process. Bankruptcy judges give 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 assets accurately and expeditiously. To be sure, the senior and junior investors can reach a deal with each other to prevent the needless dissipation of assets. Nevertheless, these “deviations” from absolute priority are still costly. A world in which absolute priority is not respected is one in which entrepreneurs will 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 will not be funded.

If these models capture what is going on in large Chapter 11 reorganizations, a number of reforms seem sensible. Procedures could be imposed that ensure a swift day of reckoning, such as an immediate sale in the

7 [Cite Exide Technologies.]
market place or a process that forces that junior investors to buy out the seniors as a condition of maintaining their interests.8

These models, however, fail to capture the true bargaining dynamic of large Chapter 11 proceedings in recent years. We elaborate on these dynamics in the next two parts of the paper, but the basic problem is plain. Contrary to the assumption of these models (i.e., that junior investors hold the levers of power), senior investors have sufficient ability to prevent those junior to them from exercising undue control over the process. They are increasingly successful at insisting upon a relatively speedy day of reckoning. Assets sales are commonplace. We see them in more than half the cases, and they are the benchmark against which consensual plans are measured in the rest.9 In addition, even when a bankruptcy judge must value the assets, there is far less systematic bias than traditional accounts suggest. To explain the apparent departures from absolute priority, one must look elsewhere.

Put simply, the models are missing a crucial element. Recall that these models assume that the valuation problem is like the one associated with valuing a lottery ticket. While there is no way to know whether the ticket will prove a winner, the probabilities and the payoffs are known. Risk-neutral investors given the relevant information will place the same value on the lottery ticket. Collapsing future possibilities to present value yields a sum certain. No one, of course, thinks that valuing a business is a simple as valuing a lottery ticket.


9 See Baird & Rasmussen, supra note ●, at 679.
Nevertheless, the models rest on the assumption that the uncertainties associated with the valuation can be safely ignored. They do not affect the dynamics of Chapter 11 reorganizations in an important way. This is wrong.

Unlike a lottery ticket with known probabilities and payoffs, two rational investors often will place different values on the same business. Two equally sophisticated investment bankers can be in honest disagreement over the value of a business. Differences of ten or twenty percent are commonplace. This variance of views is the dominant feature of the problem we face in valuing a business, especially a business in economic distress. It drives much of the bargaining in large, Chapter 11 reorganizations, yet the standard law and economics models of corporate reorganizations assume it away. Such divergences in view over how to value the enterprise often account for the departures we see from absolute priority and, as important, they explain why the participation that junior investors enjoy in many such cases (a payout to junior investors that has value only if the business does well) takes the form that it does.

Once the impact of divergent views of the value of the enterprise is recognized, reforms that focus upon ensuring closer adherence to the absolute priority rule appear misguided. Apparent departures from absolute priority are an inevitable feature of negotiations conducted in the shadow of the absolute priority rule because, in the context of reorganization, the rule itself must rely for its enforcement on a non-market based asset-valuation mechanism. Whether a better mechanism can be found to place a value on the enterprise is not clear. One can press for greater use of markets, but there is little evidence to support the idea that Chapter 11 as currently practiced in large cases fails to make sufficient use of markets. Creditors who desire to reorganize the enterprise rather
than sell it, by hypothesis, have concluded the enterprise is worth more to them than the market will bring.\(^{10}\) From this perspective it would appear that many, if not most, so-called “departures” from absolute priority—the most often-voiced weakness of Chapter 11\(^{11}\)—are illusory.

II. The Prototypical Large Corporate Reorganization

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) and those in which existing investors become the owners of a reorganized enterprise.\(^{12}\) For the former, the outcomes are, to a very large extent, consistent with absolute priority as traditionally understood. For the latter, the bargaining dynamics create a world in which the option to insist on a judicial valuation is a prominent feature of the reorganization landscape. The next two sections of the paper look at each in turn.

A. Asset Sales in Chapter 11

Sales of operating businesses in Chapter 11 are commonplace. This is true even in very large Chapter 11 cases—cases involving businesses that, in a prior

\(^{10}\) [Add cites.]

\(^{11}\) [Add note here re “lemons” problem.]

\(^{12}\) As others have observed, as with a sale, a reorganization is nothing more than a change of control transaction—a sale of the business to the creditors. 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 each class of creditors to bind the majority, the provisions of Chapter 11 solve a collective action problem within the acquiring (creditor) group.
era, were thought to be too large to be readily sold. A Chapter 11 sale takes a number of different forms and the timing can vary. Sometimes, as in the recent case of U.S. Office Products, negotiation of the sale of the debtor’s core businesses (its office products business and its Mailboxes, Etc. subsidiary) is largely completed before the commencement of Chapter 11 proceedings. In such cases, sales are consummated within weeks of the company’s Chapter 11 filing. In other cases, like that of Bethlehem Steel, the business may remain in Chapter 11 for an extended period before being sold.  

A sale of the troubled business or assets is often the only logical course. Such is usually the case when the value of the business is less than the amount of secured claims and the debtor’s operations are losing money. Consider Qualitech Steel. Qualitech Steel was formed in 1996 to exploit new technologies for producing specialty steels. Its two plants cost more than $400 million. They took longer to build than expected, were more costly to construct and operate than expected, and generally performed below expectations. When it entered Chapter 11, it owed secured lenders about $265 million and it was losing $10

\[ \text{Bethlehem ongoing operations were sold} \] months after commencement of its Chapter 11 proceedings.

\[ \text{A case in which substantially all of the debtor’s assets are encumbered by liens exceeding the value of those assets is usually referred to as an “administratively insolvent” case. The estate has no free assets to cover administrative expenses or to provide the secured lender with adequate protection for the use of the secured lender’s collateral. Because the Bankruptcy Code prohibits the use of cash collateral without providing adequate protection to the secured creditor or obtaining the secured creditor’s consent, the secured creditor usually is in a position to insist upon a sale of the business in the administratively insolvent case.} \]
million a month. Everyone recognized from the outset that the plants had to be sold promptly, either to an established producer or to someone willing to take considerable risk in an effort to get the plants working to original hopes. Within 6 months, all of Qualitech’s operating assets were sold for less than $230 million.

Under the rule of absolute priority, Qualitech’s equityholders should be wiped out completely, and they were. Indeed, in the great majority of large Chapter 11s today, equity is wiped out. Under absolute priority, however, Qualitech’s unsecured creditors also should have received nothing. Once the debtor’s estate was reduced to cash by a sale, a bright line was established between those who were in the money (the secured creditor) and those who were not (everyone else). In Qualitech, this did not happen. The secured lenders agreed to a plan in which $7.5 million was distributed to the unsecured creditors. Given the millions that the secured lenders stood to lose every month if the company was not sold, the ability of the unsecured creditors to delay the consummation of the sale by even a few weeks gave them negotiating leverage to extract a payment. This leverage varies, as a practical matter, from one bankruptcy case to another depending on the facts of the case and the tolerance

15 See Mellon Bank v. Dick Corp., 351 F.3d 290 (7th Cir. 2003).
16 During the early years after enactment of the Bankruptcy Code in 1978, it was commonplace in large reorganization cases for pre-bankruptcy equity holders to retain a small residual interest in the reorganized company despite being out-of-the-money from an absolute priority point of view. [Cites.] This practice has diminished in recent years. [Cites.]
17 The outcome in U.S. Office Products was similar to the outcome in Qualitech. In U.S. Office Products, the major junior creditors agreed to support the orderly sale of the debtors’ businesses, and received a small portion of the proceeds of sale after the payment of administrative expenses.
of the court for litigiousness and delaying tactics. Merely the amount of time that
a bankruptcy judge takes to hear and resolve a contested motion can have a
significant effect on the senior creditor’s recoveries. The senior creditor receives
less because of continuing losses suffered by the business, a reduction in its sale
value during the period of delay, or even the loss of the opportunity to sell the
business at all. Even if the sale ultimately is consummated, its present value is
less if consummation of the sale is delayed.

Departures from absolute priority in such cases are, however, diminishing
over time.\(^{18}\) In the first 10 years after the Bankruptcy Code went into effect,
bankruptcy judges often permitted out-of-the-money classes to abuse the
bankruptcy process through delay.\(^{19}\) The prompt sales of the debtor’s business
that have become common in recent years have changed things. A sale
crystallizes the rights of creditors and determines whether junior creditors are
entitled to receive anything. The prospect of a sale therefore makes more
manifest the junior creditors’ incentive to delay. Courts appear to be less and less

\(^{18}\) See, e.g., Arturo Bris, Ivo Welch, Ning Zhu, The Costs of Bankruptcy:
Chapter 7 Cash Auctions vs. Chapter 11 Bargaining (manuscript March 2004)
(absolute priority rule followed in 88% of the cases). Earlier studies suggested
that in the 1980s this was not the case. See, e.g., Julian R. Franks & Walter Torous,
An Empirical Investigation of U.S. Firms in Reorganization, 44 J. Fin. 747 (1989);

\(^{19}\) Bankruptcy Courts have regularly been criticized for the extended
duration and excessive cost of Chapter 11 cases. [Cite notorious examples.]
Among other things, it has been suggested that bankruptcy courts have
permitted excessive extensions the debtor’s exclusive period to file a plan or
reorganization. [Add some description of the other criticisms and citations.]
Criticisms of this type are among the motivations articulated to place absolute
limits on the court’s discretion to extend the exclusive period, as contemplated
by currently pending litigation. [Add cite.]
tolerant of junior creditors’ efforts to throw up roadblocks that delay a sale where it is obvious that a sale will bring the most value for the assets. Because bankruptcy judges in large cases today appear to have diminishing patience with stalling tactics of out-of-the-money junior classes when a sale is in prospect, there is an increased likelihood that one or more parties will seek a sale of the business. Hence, the hold-up power of out-of-the-money junior classes accounts for fewer unjustified departures from agreed-upon priorities than it did in the past.

More interesting than the hopelessly unprofitable, administratively insolvent debtor is the debtor that is profitable on an operating basis (before debt service). Such a company can survive on its own if it can reduce its debt load by reorganizing. When there may be value well in excess of the secured creditor’s claims, its ability to insist upon a sale in Chapter 11 is significantly diminished.\footnote{Because the debtor has free assets to pay administrative expenses and provide adequate protection, it should be able to use cash collateral (or obtain debtor in possession financing) without the secured creditor’s consent. In the typical case, an adequate protection package is negotiated and consent is granted.} The debtor has a positive cash operating flow and has free assets. The secured creditor’s consent is not required to use cash collateral because it is given adequate protection. The representatives of the key creditor constituencies (both senior and junior) can be given the time to take stock of the debtor’s circumstances (either before or after the commencement of Chapter 11 proceedings). After doing so, they still may conclude a sale is appropriate, or they have the option of reorganizing.

The market for businesses, including very large ones, is much more developed than it was even only 10 years ago. Moreover, Chapter 11 may create
the possibility of a sale to a buyer willing to pay a control premium that would not have existed outside of bankruptcy. The bankruptcy process can ensure the buyer that it will receive clean title. If a prompt bankruptcy auction will yield a greater value for the business than any other alternative in the foreseeable future, all of the in-the-money classes—both senior and junior—have reason to support a current sale. In Budget’s Chapter 11, for example, the junior creditors were the ones pushing for a sale. The majority of Budget’s unsecured creditors were strong supporters of this deal.21 The sale to Avis generated a premium commonly seen in corporate control transactions outside of bankruptcy and left the general creditors with more than would a traditional reorganization. Similarly, in Adelphi, junior creditors initially pressed for a sale because they believed it would give them more than they would receive under a proposed plan.

In a substantial number of cases, however, the business is not sold. In modern reorganization practice the failure to sell increasingly reflects not the commandeering of the reorganization by those who would likely prove to be out-of-the-money in the event of a sale, but rather the quite plausible belief on

21 It makes sense for unsecured creditors, or even equity holders, to push for a sale if they believe the bankruptcy process will undervalue the company and reward senior creditors with ownership rights in excess of their entitlements. In Budget’s case, some of its unsecured creditors even considered signing a lock-up agreement with Avis before the petition date committing themselves to supporting the sale. However, they did not sign such an agreement. Signing might disqualify them from service on the creditors’ committee. By being on the creditors committee, they would be more likely to be able to ensure that the sale would go through.

Adelphia Communications is an example of a case in which the junior classes are pushing for a market sale. [Refer to recently filed objections to extension of Adelphia’s exclusive period to file a plan of reorganization.]
the part of creditors who view themselves to be in-the-money that owing the enterprise will promote their interests more than a sale. 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, the junior creditors). Either way, the reorganization option is squarely on the table. It is to this situation that we now turn.

B. Reorganizing Businesses in Chapter 11

While sales are increasingly commonplace in Chapter 11, a significant number of businesses – especially larger ones – continue to reorganize. Some departures from bargained-for priority in these cases are like the ones we saw in Qualitech and U.S. Office Products and are hard to explain on any grounds other than “hold-up” value. Junior creditors extract some value merely by greasing the skids (or declining to stand in the way) of a speedy sale. But this does not provide an adequate account of the dynamics that lead to the participation of junior investors in many negotiated reorganization plans. The simplest way to illustrate these dynamics is through a hypothetical fact pattern that captures the

---

22 This perhaps reflects a change in attitudes for senior creditors who today analyze the reorganize or sell decision the way a private equity investor might. This change in attitudes is explained in part by changes in the composition of the typical senior creditor group (increasingly hedge funds) as well as changes in the business model of traditional senior creditors (banks).
essential features of modern reorganizations in which there is not a going-concern sale or a prenegotiated Chapter 11 plan.23

Founded in 1911 as a business that provided instruments for the automobile industry, American Instruments made speedometers and fuel gauges. It was the primary supplier for Dodge, Chrysler, and many of other automobile manufacturers of the era. American Instruments also designed instruments for aircraft, and over time these became its principal focus. American Instruments survived the Great Depression, flourished during the Second World War and the growth in civilian aviation afterwards. It navigated the change to instruments that relied increasingly on transistors and other electronic components during the 1960s and 1970s. Its sales reached $100 million a year in 1980 and approached $500 million by the end of the 1990s.

In 1999, American Instruments acquired US Gauge for $450 million, a business that specialized in building remote sensors. The synergies seemed obvious. US Gauge was a relative newcomer. (A group of engineers from

23 In focusing on these cases, we do not want to understate the importance of sales and preexisting deals in modern reorganization practice. For an overview of recent large Chapter 11s, see Douglas G. Baird & Robert K. Rasmussen, Chapter 11 at Twilight, 56 Stan. L. Rev. 673 (2003). Lynn LoPucki’s Bankruptcy Research Database comprehensive database provides an excellent starting place to get an overview of large Chapter 11s. It is available at http://lopucki.law.ucla.edu.

The American Instruments hypothetical that follows reflects features that one sees in many large reorganization cases today abstracted from the many complications found in actual cases. Exide Technologies, Conseco, La Roche Industries and [ ], among others, provide concrete examples of recent reorganizations where there were divergent views over enterprise value that resulted in plans of reorganization where securities with option features were distributed to creditors to resolve such disputes over the valuation.
Hewlett Packard started the business in the early 1980s.) While its annual revenues were still less than $100 million, its proprietary sensor technology seemed to be the wave of the future. New fuel efficiencies and the introduction of fly-by-wire technology required an many more remote sensors in modern aircraft, and US Gauge’s designs defined the cutting edge. US Gauge’s technology and American Instruments’ customer base and established product lines made the two a natural fit.

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. In conjunction with the acquisition, American Instrument changed its corporate structure. First, it formed a wholly owned subsidiary, American Instruments Operating Co. All of its operating assets were placed in this subsidiary, as well as all the assets of US Gauge. The bank loan was made to the parent company, but the banks also obtained an upstream guarantee from the operating company. The loan was secured by a lien on the parent’s stock in the operating company, and the guarantee was secured by a lien on all the subsidiary’s assets, including all the debtor’s personal property (inventory, equipment, receivables and intangible rights, including intellectual property), as well as all of its property, plant and fixtures. Interest on the loans was payable monthly, based on a floating interest rate. The obligations on the bonds were exclusively from the parent company and the bonds were contractually subordinated to the bank debt.\textsuperscript{24} The bonds required the debtor to pay interest semi-annually at a fixed rate.

\textsuperscript{24} In this case, the subordination agreement contains contain absolute blocks on payments on the bonds after a default on the bank debt until the bank debt is
Apart from the obligations to the banks and the bondholders, American Instruments has no other borrowings. The operating subsidiary incurs many obligations in the course of its operations, such as to employees, vendors, counterparties to executory contracts and leases, and governmental entities (principally for taxes). American has no mass tort liabilities, environmental liabilities, pension liabilities or other extraordinary operating liabilities. Apart from the bank loan and the bonds, its obligations are relatively short term and small in the aggregate when compared to the debtor’s borrowed money (bank and bond) debt.

The merger of American Instrument and US Gauge proved unexpectedly difficult. The corporate cultures were altogether different. (American Instrument was a staid, old-fashioned business based in St. Louis; US Gauge a high-tech, more laid-back outfit based in Sunnyvale.) In addition, the synergies were harder to realize than expected. US Gauge’s sensors and American’s instruments both needed to be redesigned to become fully integrated with each other and this would take time.

paid in full in cash. Other types of subordination agreements exist. For example, some have a block that is limited in duration unless insolvency proceedings are commenced with respect to the debtor. Yet others may permit the subordinated debt to retain distributions, even in bankruptcy, if the form of such distributions consists of securities that are junior to the securities received by the senior creditors. This latter provision is often referred to as an “X clause” because it is an exception to strict subordination. For a discussion of “X clauses” and their implications, see In re Envirodyne, Inc., 29 F.3d 301 (7th Cir. 1994).

25 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.
Moreover, demand in the aerospace industry for instruments (and especially for remote sensors) fell in 2000. American Instrument’s revenue declined dramatically. By early 2002, American Instruments was in breach of several financial covenants in its loan agreement with the banks. At this point, American Instruments approached the banks to ask for a waiver of the covenants. 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.

By the time American returns several months later to ask for additional waivers, it is having difficulty making the semi-annual payments on the bonds. In anticipation of the need to restructure its debt, the company begins to identify the most important bondholders to include in the restructuring negotiations. At this point, 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 debt was trading at a discount to

---

26 Even where 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 50 or more. In most cases, however, one lender is designated “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.

27 For one view of how creditors such as banks monitor and interact with their debtor inside of bankruptcy and out, see Douglas G. Baird & Robert K. Rasmussen, Corporate Governance, State-Contingent Control Rights and Financial Distress (manuscript, first draft October 2002).
par). After identifying the largest bondholders, the company contacts them and requests that they organize an informal bondholder committee to participate in restructuring negotiations. By encouraging the bondholders to organize themselves, American’s board can be confident that any restructuring proposal will have significant support within the bondholder group before formal approval is sought.

As part of the ongoing negotiations, the banks and the committee representing the bondholders are supplied with large amounts of information about the debtor and its business. They retain, with American’s agreement and at its expense, legal and financial advisors to help them evaluate the information and alternative restructuring plans. American provides the negotiating

28 Such sub-par investors 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 to take a longer term view and approach their investment the way a private equity investor would. In any event, the holders of these bonds are relatively easy to identify and organize.

29 The greatest difficulty for a troubled company seeking to organize a bondholder committee often is the unwillingness of some large holders to participate because to do so they would have to gain access to material non-public information about the company and its restructuring. Such access would preclude continued trading in the company’s securities by such holders.

30 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.
committees and their advisors with direct access to the books and records of the
debtor and to its employees for the purposes of permitting them to evaluate the
compny and its restructuring proposals. The management, with the assistance
of its own financial advisor, accounting firm and turnaround experts, develops a
long-range business plan for the business, which includes detailed projected cash
flows and estimates of debt capacity.

In the first several months of 2003, the banks and the bondholder committee
continue to monitor American Instruments and its business. The board hires a
turnaround specialist as it Chief Restructuring Officer. After several months, it
“promotes” the chief executive to the status of non-executive 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’s core business and prepares to sell its and its non-
core businesses. The new management team wins the confidence of the bank 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 agreement outside of Chapter 11, but this
proves unsuccessful. The American Instruments is unable to make an interest

31 In many instances, those in the position of the banks and the bondholder
committee will be able to reach agreement on a debt restructuring outside of
bankruptcy. Sometimes the restructuring can be implemented entirely outside of
Chapter 11, for example through amendments to bank agreements and an
payment to its bondholders. Once the default becomes known, trade creditors tighten the reins, and American, running out of liquidity, enters Chapter 11. No plan is in place and the banks and the bondholders (who will dominate the official Chapter 11 creditors committee) 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.

In the absence of a deal on a capital restructuring, the first question becomes whether the business should be sold. American Instruments finds itself in a different situation from Qualitech, U.S. Office Products, Bethlehem Steel, or Budget. The banks might prefer a sale, but they cannot insist upon one, and the bondholders take the view that a current sale is not in their interest. Even the banks recognize that a buyer will not pay the highest possible price for the business until the problems of the business and of the industry it is in are sorted out. 32 The entire aerospace sector of the economy is depressed. Businesses in its 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. 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.

32 If the banks believe a current sale will realize less than $250 million (after costs of sale) and future sale would realize more, they too may prefer to reorganize (as long as they receive a sufficient percentage of the future enterprise value in a reorganization to realize the full value of their claims on a present
sector are selling for multiples that are near or at their historic lows. Potential strategic buyers face the same problems as American. They have also lost money and have problems paying off the loans for the businesses they acquired in the late 1990s. They cannot easily enter the capital markets and acquire the resources needed to acquire American Instruments.33

There are, of course, investors who specialize in acquiring distressed businesses such as American. The banks and the bondholders, however, are interested in selling to them only if these investors are willing to pay for the business at least the value the banks and bondholders place on it. Financial buyers will adjust their bids to take account of the risks they perceive themselves to be running. Among other things, the bids must take account of the informational disadvantage they have relative to the banks and the bondholder committee. To be sure, potential bidders typically have receive full access to factual information they may reasonably request about the company and its business, including its assets and liabilities, its historical financial statements, its contracts, its leases, its employees, its licenses, its intellectual property and the like. A 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 is often extraordinarily thorough and the bidder gleans from it the information it requires to formulate its own views about the company’s future business, prospects, opportunities and risks.

value basis [and compensate them for the additional risk they are assuming by deferring a sale.]).

Nevertheless, the arms’ length bidder does not have is access to the existing management’s own assessments of all of these matters. Nor does it have existing management’s plans for the future in the event no sale is consummated. By contrast, the banks and the bondholder committee have the perspective nearly on a par with an insider. They know as much as anyone about the ability of the business to successfully bring its next generation of instruments and sensors to market. They know what management thinks it could do with the business if it is not sold. Because of their close relationship with the debtor’s managers and their pivotal position in the restructuring process, these organized creditor representatives have views of the value of the debtor that may depart from those of the outside world. The private information they acquire in the process dampens outside interest. Put most simply, the banks and the bondholders face another variation on the standard “lemons” problem.\(^{34}\)

Moreover, unlike creditors of distressed businesses in an earlier era, the banks and the bondholders sometimes prefer forming a new capital structure through the Chapter 11 process to a market sale. The more sophisticated the bankers and the bondholders and the more secure their control of the Chapter 11 process, the less tolerant they will be of an imperfections in the market for sale of

\(^{34}\) See G. Akerlof, The Market for Lemons: Quality Uncertainty and the Market Mechanism, 84 Q.J. Econ. 488 (1970). [Even in the absence of differences in information, the banks and the bondholders may find the rates of return expected by potential buyers of the business to be attractive relative to alternative uses to which they might put the purchase price if the businesses were sold. Under such circumstances, they might opt to step into the shoes of the buyer rather than sell.]
the business as a going concern. The banks and the bondholders no longer see 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 completely competitive, market or keeping it themselves in a proceeding that has become cheaper and easier to control over time.

When prospective financial bidders talk about the uncertain future of American and the rate of return that compensates them for the risks they would be running, the banks and the bondholders may think to themselves, “This bidder has a rate-of-return hurdle on the purchase price of 40 percent. But the risks aren’t that large. He shouldn’t be able to bargain for this rate of return. 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 not want a sale.


37 A common complaint about modern large Chapter 11s has become the degree of control senior creditors are alleged to enjoy over the process. See, e.g., Elizabeth Warren & Jay L. Westbrook, Secured Party in Possession, 22 Am. Bankr. Inst. J. 12 (Sept. 2003) (“We have a new form of chapter 11 emerging in the courts. Having invented the DIP (debtor-in-possession), American lawyers are now creating the SPIP (secured-party-in-possession). More and more chapter 11 cases seem to be no more than vehicles through which secured parties may enjoy their Article 9 rights under the umbrella, and protective shield, of the bankruptcy laws.”).
When the banks and the bondholders find themselves in this position, the central problem becomes the bargaining between the two camps over the value of the existing business. At the outset, the unsecured creditors’ committee will examine whether the banks failed to perfect their security interests, failed to include assets in the security agreement, or otherwise opened their priority to attack. If they can point to possible infirmities in the banks’ position, some of them may be able to share in the estate even if the banks are not paid in full.\(^{38}\) For example, in the Chapter 11 of Sunbeam Corporation, out-of-the-money subordinated debenture holders were able to extract 1.5% of the equity by claiming rights arising out of alleged prepetition financial misdeeds.\(^{39}\) In WKI Holding, some bondholders increased their stake of the new equity from 5.1% to 8.35% by threatening to probe transactions between its parent and an affiliate of the parent that was also a secured creditor of the debtor.\(^{40}\) The “departures” from bargained-for priority that appear here are in fact nothing of the sort, but rather

\(^{38}\) In the case of American, the bondholders have very little gain from this review. Even if there are gaps in the liens, the bondholders have agreed to be contractually subordinated. Vendors and other unsecured creditors, of course, are not subordinated to the banks, and would benefit if gaps in the banks liens were found or if the liens were voidable.

\(^{39}\) See Sunbeam Announces Court’s Confirmation of Plan of Reorganization, PR NEWswire, Nov. 25, 2002.

reflect that the uncertainty (albeit often small) about whether an investor who claims to be senior is in fact entitled to priority.\textsuperscript{41}

Let us assume, however, that the banks enjoy a priority position that is watertight, the bankruptcy judge is completely committed to the absolute priority rule, and the junior investors have relatively little ability to extract value by holding up the process. American Instruments is not administratively insolvent. It enjoys a cash flow that can more than cover the administrative expenses associated with any bankruptcy proceedings and its value comfortably exceeds the value of the banks’ secured claims.\textsuperscript{42} American Instruments, a case in which the debtor can be reorganized and general unsecured creditors can expect some recovery on their claims, is the prototypical case the rules of our corporate reorganization laws were designed to address. The interaction between the classes representing the bulk of the large corporate debtor’s prepetition

\textsuperscript{41} [Add footnote re cases like Exide Technologies, noting that, in the real world, cases may simultaneously involve disputes over priority and over enterprise value. For purposes of analysis, these sorts of disputes and their negotiated outcomes should be separately considered.]

\textsuperscript{42} It should not be surprising that the banks find themselves fully secured and the business is still worth saving. The banks design triggers in their debt obligations (due dates of payments and financial covenants) to bring parties to the table before matters deteriorate to a point at which the business lacks a value, on a going-concern basis, that exceeds the amount of its secured debt.

If matters become that bad, the dynamic in the case would be utterly different. The banks would control the cash collateral. The debtor would be unable to find a debtor-in-possession lender because the modern bankruptcy judges could not give the DIP lender a lien that primed the secured creditor. See footnote \textsuperscript{●} above. Under these circumstances, the secured lender would be able to keep the debtor on a tight leash and dictate the course of the case. The inability of the debtor to support itself would render the junior creditors relatively powerless. A relatively speedy sale would usually be the outcome.
obligations—the banks and the public bondholders—becomes the key to the restructuring process. The negotiations are among a relatively small group of creditors and their experienced professionals. Those at the bargaining table are likely to be banks or professional investors that can be counted upon to cast a cold eye on the business and the likely course of any litigation.

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 lives in an industry in which long-term supply contracts are an essential part of the business.\(^3\) Unless it can convince buyers that its financial problems are behind it and that it will be around for the long haul, its ability to improve earnings are 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. In this case, there is no plausible claim that the ex ante bargain called for anything other than absolute priority. The negotiations are between 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.

\(^3\) The need to leave bankruptcy earlier rather than later may stem from a number of different factors. In the case of Conseco, Inc., the debtor needed to regain its AM Best rating for the insurance businesses to be viable. To do so, the holding companies, which owned the stock of Conseco’s insurance subsidiaries, had to emerge quickly from Chapter 11 with a strong balance sheet.
not an entrepreneur whose firm-specific skills are essential to the business nor a well-entrenched owner-manager who possesses 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.

Private information plays no role in the bargaining between the banks and the bondholders. The banks and the bondholder committee may have different beliefs about the value of the business, but none has information denied to the other. Each knows as much as the other about the business and about the way the bankruptcy judge will value it. The bondholders’ ability to extract value through delaying tactics is muted. There is no fuzziness about the banks’ priority position, nor is there doubt about the commitment of the bankruptcy judge to respecting the bargain between the banks and the bondholders.44

In this environment, the banks and the bondholders are likely to behave in a very predictable way. Those in the position of the banks and the bondholders agree on a consensual plan of reorganization in which the bondholders end up with junior securities in the reorganized business, the value of which depends heavily on the future performance of the business. In the next part of the paper, we explore the bargaining dynamics at work and suggest why the outcome between the banks and the bondholders takes the form it does.

44 The most recent empirical studies suggest that conformity with the absolute priority rule has become the norm in Chapter 11. See, e.g., Arturo Bris, Ivo Welch, Ning Zhu, The Costs of Bankruptcy: Chapter 7 Cash Auctions vs. Chapter 11 Bargaining (manuscript March 2004) (absolute priority rule followed in 88% of the cases). Earlier studies suggest that in the 1980s this was not the case. See, e.g., Julian R. Franks & Walter Torous, An Empirical Investigation of U.S. Firms in Reorganization, 44 J. Fin. 747 (1989); Lawrence A. Weiss, Bankruptcy Resolution, 27 J. Fin. Econ. 285 (1990).
III. Settlement in the Shadow of Absolute Priority

Many accounts of bargaining in Chapter 11 assume that it possesses a dynamic peculiar to businesses in financial distress. But bargaining in Chapter 11 is no different in kind than any other negotiation that takes place in the shadow of litigation. In this part, we endeavor to show this by capturing the dynamics at work in cases like American Instruments, using the standard settlement model in which parties to the negotiations have different beliefs about the outcome of the litigation.45

The bargaining turns on the parties’ views of the value of the business. No one knows for certain how American Instruments will fare. There are two principal sources of uncertainty. First, much is unknown about the economy generally and the market for the types of goods that American Instruments produces. Second, much is unknown about American Instruments itself, including the strength of its new management team and the quality of the next generation of its product line. With respect to the first type of information, everyone stands in more or less the same position. With respect to the second type of information, the banks and the bondholders may have different beliefs, but neither has an informational advantage over the other and both know more than any outsider.

The uncertainty of the second type is the nub of the problem with which reorganization law must contend. The existence of this information and the

45 See William M. Landes, An Economic Analysis of the Courts, 14 J. L. & Econ. 61 (1971). Alternative models of settlement are based on bargaining in the face of private information. See, e.g., Lucian Bebchuk, Litigation and Settlement under Imperfect Information, 15 Rand J. Econ. 404 (1984). As between the banks and the bondholders, however, there is no private information.
expertise that the banks and the bondholders possess limits the need ability to use markets to monetize the value of the business. The dynamic we see in American Instruments would exist, even if, instead of the banks and the bondholders, entirely passive investors had been on the scene. However, it is common-place today for experienced professional investors to displace passive investors as financial distress approaches. There is a robust market for claims against the distressed business. The more liquid the market for claims, the more likely the investors who are in the money (or plausibly in the money) will be seasoned professionals. Under these circumstances, there is less likelihood the parties will need or even want the value of the business immediately monetized through a market mechanism to shift ownership of the business. The investors feel themselves to be as well qualified to restructure and maximize the return on the business at this moment in its life cycle as any purchaser in the market place. The value of the business in their hand will be as high as it would be in the hands of any other party.

Situations in which the owners of a business need to reallocate ownership interests among themselves are commonplace. Two parties to a joint venture decide to go their separate ways. Two partners no longer want to work with each other and one must buy the other out. In such situations, parties often agree in advance for a dissolution mechanism that puts a value on the business and allows one to buy the other out. A standard mechanism is “the Texas shoot-out.” One of the parties sets out a dollar figure and the other must buy out the first party’s interest or sell her own for that price. When neither party faces any liquidity constraints, 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 the use of a third-party appraiser. It takes advantage of
the private information that the parties have, but cannot credibly convey to a third party.

Situations also exist in which parties opt for a completely different valuation mechanism. A standard case arises when two parties agree to a joint venture, but one party wants the ability to leave it in the event its partner in the venture is acquired by a competitor or otherwise changes its character. The contract may require that, in such an event, an appraiser be appointed and that the party have the right to sell its interest at the venture at the amount that the appraiser sets. This mechanism is particularly useful when the party that wants the ability to terminate the venture does not have the liquidity that would allow it to buy the other out, a sine qua non of the dissolution mechanism that uses the I-pick-you-choose principle.

A law of corporate reorganizations could, of course, insist upon a market mechanism or one that took advantage of the private information the parties possess by forcing one to buy the other out. Indeed, as others have observed, the hierarchical nature of the ownership interests makes this mechanism easy to implement. The reorganization mechanism merely would need to provide that the junior investor buy out the senior investor for the amount of its claim.\textsuperscript{46} There are any number of variations on such a mechanism. They all take advantage of the private information the junior investor possesses. As long as the junior investor faces no liquidity constraints, she will buy out the senior investor if, but only if, the business is worth more than the senior creditor is owed. The senior investor cannot complain if she is paid in full, and the unwillingness of the junior

\textsuperscript{46} See Bebchuk, supra note 6.
involves the ability of the junior investor to muster the capital to buy out the senior position. Because of the private information the existing investors possess, the junior investor cannot borrow against the business from a third-party lender. Moreover, the additional investment that the junior party must make under this mechanism is hard to diversify against. This is especially true where the “junior investor” is in reality a large group of disparate investors (e.g., bondholders) who may not be in communication with each other. In our example with American Instruments, the bondholders would collectively have 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 believed that, in expectation, the business was worth more than $250 million.

Modern Chapter 11 is the equivalent of a provision in a joint venture 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. In the abstract, one cannot say whether such a regime makes sense. We see sophisticated parties adopt such mechanisms in analogous environments in which the liquid markets do not exist and other revelation mechanisms impose too much nondiversifiable risk on one of the parties. Nevertheless, adopting such a mechanism, like any other valuation mechanism, has predictable consequences. In particular, any valuation mechanism that does not involve a transaction that monetizes the senior investors’ position (through a sale of the business of a buy-out of the position) creates option value in the position of the
junior investors, like the bondholders, that will be priced in any deal the parties strike with each other.

We can understand the bargaining dynamic between the banks and the bondholders in American Instruments by imagining a much simpler example. 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 own 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. They bid less as they 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 also believe that the average estimate of 100 appraisers would be the same as their own, but they recognize that any individual appraiser 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. Over the course of a 100 cases, her median valuation, like the appraiser’s, 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 expertise is as good as that of any third party. Nevertheless, the bankruptcy judge does not know the amount of oil in the well with certainty and this uncertainty is itself a source of value to Lender. To be sure, when the bankruptcy judge finds that the oil 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%, this difference will average $xxxx. Less the costs of litigating, the “cram up” option that Lender enjoys is worth $xx.47

The right to demand a valuation hearing before an impartial bankruptcy judge is the same as the right to demand an independent third-party appraiser. Either right comes with subtle distributional effects. Seen after the fact, the junior investor is better off (and the senior investor is correspondingly worse off) than she would be in the counterfactual world in which the property was sold for the amount both Bank and Lender believe it is worth. To the extent the valuation mechanism creates option value, junior investor is better off than she would be in

47 Bank has an expected loss in the event of litigation for the same reason Lender has an expected gain. The expected value the bankruptcy judge will place on the company is equal to the value of Bank’s $250 claim, but Bank can never receive more than the entire company after a valuation and half the time it will get something less.
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.

Another comparison is between this regime and one in which both Bank and Lender had to wait until the oil had been extracted from the ground and the amount of oil in the well was fixed with certainty. In this event, whether the appraisal mechanism leaves Bank or Lender better or worse off depends on a comparison between the variance in the views of different appraisers and the variance in expected outcomes. In the simplest case, it might be that Bank and Lender both believe that the expected quantity of oil is worth $250, but also believe that there is a standard deviation of 10%. It is possible that 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. In this event, the bargain that Bank and Lender strike in a regime in which there is an option to insist on a third-party valuation has the same distributional consequences as a regime that simply obliged the parties to wait.

We can see this by imagining a deal that Bank and Lender might strike with each other under these circumstance. They could agree upon a new capital structure for the business in which Bank received 100% of the equity and Lender had the option in two year’s time to buy Bank’s equity for $250 plus a market rate of return. 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. Nevertheless, this deal preserves the option value associated with Lender’s junior position that Lender would have if she could force a third-party appraisal or a bankruptcy valuation hearing. It reflects the possibility that the oil might be worth more than $250.
There is no guarantee, however, that the variance associated with a third-party appraiser matches the expected uncertainty in actual outcomes. Imagine, for example, a business whose only asset 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 a third-party appraiser would fix on it a value of $250. A regime in which Lender had a right to insist on a third-party valuation is no different from a regime in which Lender was obliged to buy out Bank’s position or in which the lottery ticket was sold in the market place. Lender receives nothing under any of them. But if Lender could force a delay, its claim would have substantial value.

It is also easy to imagine cases at the other extreme, cases in which the expected variance in estimates from appraisers is greater than Bank and Lender’s own uncertainty about the value of the business. To the extent, for example, Bank and Lender are better informed about the amount of oil in the well, the variance among the different appraisers may be greater than their own doubts about the amount of oil in the ground.

In such situations, Lender’s ability to insist on an immediate appraisal has value. In the typical situation, senior investors favor the immediate day of reckoning that collapses future values to the present. In the canonical hypothetical, the senior lender wants to sell the lottery ticket before the drawing, but the junior investor wants to delay. Once we account for the valuation problem, the incentives of the parties become less clear. If the uncertainty in the valuation mechanism is large enough, the senior investor may favor delaying a valuation. If there were no valuation problem, the senior lender would want to force a day of reckoning that wipes out the option value the juniors enjoy from delay. But when the outcome of the valuation process is uncertain, the juniors
may be better off demanding that values be fixed today. Under the right circumstances, “cram-up” may be as potent a threat as “cram down.”

In short, uncertainty over the outcome of a valuation alone generates option value. When there is sufficient uncertainty over the outcome of an unbiased, expert valuation, the ability of the junior investor to force a valuation has value even when there is no disagreement about the probable range of values and the bankruptcy judge’s valuation is completely unbiased. A rational senior creditor will take into account the value of this option (or, more specifically, the threat it will be exercised by voting against the plan) in making any settlement offer. A senior creditor’s willingness to “buy” this option from the junior creditor will naturally lead to plans of reorganization which junior investor participates, even though, by terms of the contractual bargain separated from the valuation problem, the junior investor should not based on the value both parties place on the business.48

48 The observation we make here—that an ex ante agreement for absolute priority will in fact yield something less than absolute priority ex post—raises a second set of questions. The efficient investment contract in fact might be one that provides for absolute priority ex post. See Alan Schwartz, A Contract Theory Approach to Business Bankruptcy, 107 Yale L.J. 1807 (1998). If this is so, we should ask whether devices are available to investors to allow ex ante contracting that would in fact yield absolute priority. To frame things differently, is there a way to write an ex ante absolute priority contract that is renegotiation proof? What is the evidence such contracts are being written? And if our reorganization system precludes such contracts from being written, is the cost this imposes for the sake of preserving the opportunity to reorganize counterbalanced by benefits derived from preserving this opportunity. [Discuss implications of structured financing here.]
If Bank and Lender share the same view the business’s prospects and the way in which the bankruptcy judge will assess them, a settlement range exists that makes both Bank and Lender better off. They would reach an agreement in which they divided between themselves the value of the business in accordance with their priorities and allocated between them the savings they would realize from bypassing the valuation process. These would include the direct costs of the process itself and the indirect costs of delaying the business’s emergence from bankruptcy.49

In these environments, the easiest deals to negotiate may be ones in which Bank and Lender agree to postpone the valuation until the market itself provides a reliable benchmark. Where everyone is equally uncertain about the value of the business, Bank and Lender can save the costs of the valuation process without otherwise changing the distributional outcome by agreeing to a plan that allows Lender to buy out Bank’s interest several years hence. In a world where matters are not in equipoise, the natural deal has the same basic characteristics. Lender has the right to participate, but adjustments are made to account for the value of Bank’s cram-down option (the ability to collapse future possibilities to present value) and Lender’s cram-up option (the ability to expose the risk that the third-party appraiser will settle on a value for the business that is too high).

Bank and Lender may also agree to a plan that postpones putting a definite value on their interests for a second reason. Bank and Lender may have different beliefs about the value the bankruptcy judge will attach to Firm. Let us assume that Bank believes the judge will share its own view of Firm’s value and find

49 See Landes, supra note •.
that, in two year’s 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 judge will share its view that, in two year’s 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 $15.50

Under these assumptions, Lender expects to receive $80 if it contests valuation.51 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.52 From its perspective, a settlement with Lender (acquiring Lender’s interest in the firm) can benefit it only to the extent of the difference

50 The assumption that Lender will bear fewer of the costs of the valuation hearing is plausible. See Ivo Welch, Arturo Bris, Alan Schwartz, Who Should Pay for Bankruptcy Costs? (Yale Law & Economics Research Paper No. 277) (February 2004). 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.

51 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.

52 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
between the two. No cash settlement will make both parties better off than they expect to be after the valuation hearing.

Bank and Lender will look for alternatives to a cash settlement. In a world in which Lender faced no liquidity constraints, Lender would buy Bank out. Lender believes Firm is worth $345 and its own stake is worth $95. Hence, it would pay up to $250 to acquire outright ownership. By contrast, Bank believes that a valuation process will bring it only $230. Hence, a bargain exists in which Lender and Bank are both better off. If those in Lender’s position generally face no liquidity constraints, the law of corporate reorganizations could simply provide that Bank succeeds to the entire Firm unless Lender were willing to pay it the face amount of its loan.  

As we have noted, however, Lender is likely subject to liquidity constraints. Bank and Lender find themselves facing a bankruptcy court valuation only because Firm itself is not readily marketable. Lender and Bank value Firm more than outsiders do. They have private information prospective buyers do not. The conditions that give rise to the situation in which Bank and Lender find themselves are inconsistent with Lender having the ability to raise the capital needed to buy out Bank’s position.

Bank and Lender, however, can still find common ground. Consider, for example, a settlement in which Firm acquires an all-equity capital structure.

---

53 Lucien Bebchuk was the first to make this point. See Lucian Arye Bebchuk, *A New Approach to Corporate Reorganizations*, 101 Harv. L. Rev. 775 (1988).

54 Even apart from the issues raised here, the bondholders who occupy Lender’s position in a case such as American Instruments are dispersed. Working in concert becomes harder if they must make capital contributions.
Bank acquires all the equity in Firm, but Lender enjoys the right to buy the equity of Firm from it 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 would receive in a valuation hearing.\(^{55}\) The plan gives Lender an expected return of $80, an amount equal to what it expects to receive in a valuation procedure.\(^{56}\) The liquidity problem that Lender faces today will not exist in 2-years time, 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, Lender participates in the reorganized business because the expected value of Firm exceeds the amount Bank is owed. However, when there is uncertainty over how the judge will value Firm, negotiations may leave Lender with rights against Firm even when Bank and Lender both believe that the expected value of the business is not enough to pay Bank in full and leave something for Lender.

\(^{55}\) Bank believes that Firm will be worth $225 in eight cases in ten. When Firm finds itself in such circumstances, Lender will not exercise the option, and Bank will remain the sole owner of Firm. One time in 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 \((0.8 \times 225) + (0.2 \times 275) = 235.\)

\(^{56}\) When Firm proves to be worth $375, the right to buy it for $275 is worth $100, and Lender believes this event will happen 80% of the time.
IV. Options and Valuation Uncertainty

To a far greater extent than commonly appreciated, departures from bargained-for priority come from valuation uncertainty. Negotiations in large reorganizations are, of course, fact-dense and plans of reorganization are complicated, but the bargaining dynamic is the same and the basic features of the plans are consistent with the idea that valuation uncertainty often explains the central contours of the plan.

Settlements of these issues in large Chapter 11 cases take many forms. Not all involve giving the junior creditors options that turn on the future value of the business. The simplest solution is to allocate a fixed percentage of the common stock of the reorganized debtor to the junior class in recognition of the settlement value inherent in the junior class’s position on enterprise valuation. The amount of equity allocated to the junior class in such circumstances includes an “option value” component—a share of the equity 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 whether or not the senior class views there to be a realistic risk of the higher valuation being adopted by the court.

Senior and junior creditors may find it hard to arrive at a mutually satisfactory allocation of common stock, especially when the senior and junior creditors have radically divergent beliefs about the underlying value of the business. Such settlements fail to navigate around the central difficulty of applying the absolute priority rule. Fixing the allocation of common stock between the senior and junior classes in the plan 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.

In many circumstances, it is easier to reach agreement if the day of reckoning can be avoided for a time through the use of a plan that involves the distribution of securities with option features. These allow the market to determine the actual value of the enterprise before the ultimate ownership allocation is finally determined. The common feature of such plans is that they allow time after the effective date of the plan for the market to determine the value of the enterprise and the allocation of ultimate ownership rights.

The 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 would also preserve for a time the right of the junior class to purchase some or all of the common stock. To exercise this right, the junior investors would have to pay an amount that gave the senior creditors a full recovery plus an appropriate return. Plans with this feature may offer the junior class only a limited period of time to elect to purchase (for example, pursuant to a “rights offering”) or may offer a readily marketable security, such as a warrant, that has a longer term.57

There are multiple variations on the theme. These settlements can be structured in many ways, subject to the ability of the capital markets to accommodate the new securities. As long as the rights or warrants are freely assignable and a market for them eventually comes into being, these contingent rights do not force

57 The shorter the amount of time in which the junior creditors have the ability to exercise these options, the more they become like Bebchuk options, rights that the junior investors have to buy out at senior investors at the time of the reorganization.
any of the junior creditors to contribute new capital as a condition of vindicating their rights.

Other alternatives exist 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 creditors can convert the security into common stock commencing at some future date if the market demonstrates that the senior creditors are the true owners of the enterprise. In at least two recent cases (those of LaRoche Industries in 2001 and Conseco, Inc. in 2003), this relative priority security took the form of convertible preferred stock. The preferred stock included a delayed conversion feature that permitted the debtor the opportunity to redeem the security before the date on which the conversion feature could be exercised. If the debtor could not accomplish the redemption, the conversion feature would become exercisable and the senior creditors could effectuate a change of control of the company.

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 creditors) time for the market to demonstrate that their asserted higher valuation is in fact 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 senior creditor’s perspective, the security sets a deadline for the transfer of control to the senior class while preserving their senior position. An adequate coupon 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.\textsuperscript{58} If properly designed, the security can be marketable, permitting those senior creditors who desire to exit before the conversion date to do so.\textsuperscript{59}

Return to American Instruments. The plan of reorganization might take the following form. Both the banks and the bondholders agree that the business that emerges from Chapter 11 should carry only $100 million in debt and that the banks will take all of it. The question becomes one of dividing the equity. The banks believe that the business is worth little more than $250 million and that they are therefore entitled to virtually all of the equity of the reorganized business. The bondholders believe that the value of the business is significantly higher—as much as $375 million—and that they are entitled to a majority of the equity of the reorganized business.

A conventional settlement is not possible because of the disparity in their views of the value of the enterprise (and the likely outcome of any litigation over valuation) and the inability of the bondholders at the time of the reorganization to borrow enough to buyout the banks’ position. They can, however, find it in their mutual interest to agree on a plan that effectively puts off the day of reckoning. Putting off the day of reckoning expands the settlement range. The crucial feature of such a settlement resides in the nature of the security that the

\textsuperscript{58} In Conseco, for example, this coupon was ___ percent and was paid in kind until redemption or the conversion date, after which the coupon was payable in cash.

\textsuperscript{59} In Conseco, quotes were available for Conseco’s new convertible preferred stock shortly after the effective date of the plan, and the stock could be sold close to its par value.
bondholders receive (rights that have value only if American Instruments proves
to be worth more than $250 million). These rights are something that the
bondholders value highly, given their belief that the business is worth
substantially more than $250 million), and that the banks value hardly at all,
given their belief that the business will prove to be worth only $250 million.

Under one such plan, virtually all of the common stock is issued to the
bondholders. The banks receive two different securities. First, the banks receive
new bank debt in the amount of $100 million. For the balance of their claim ($150
million), the banks receive convertible preferred stock with a par value of $150
million. Dividends accrue over time, but are not paid out. The company has the
power to redeem the preferred stock at par plus accrued dividends at any time
(at the reorganized company’s option). In two year’s time, however, the banks
have the right to convert their preferred stock. The conversion formula is set in
such a fashion to give the banks the ability to acquire most of the equity of the
business in the event that the business turns out to be worth less than $250
million. In the event that the business turns out to be worth more materially
more than $250 million, the company will exercise its right to redeem the
preferred stock. Because the robust economic condition of the restructured
business will have become apparent by that time, the company should have little
trouble raising the funds needed to redeem the stock even though that amount
cannot be borrowed today.

This bargain is a departure from absolute priority in that, if the business
were sold today, the bondholders might realize little or nothing, while the banks
might have been paid in full or nearly in full. For the bargain to be consummated
the banks must feel they are being given enough to offset the risk they run that the business will in fact prove to be worth less than $250 million.\textsuperscript{60} The benefits to the banks are the elimination of the risk of an adverse determination on valuation by the court and avoiding the cost of litigation over valuation. These, together with a sufficient level of confidence that the business will at least retain its current value until the contingencies built into the bargain are resolved, all support striking a bargain that avoids a showdown over value. This will be especially true if the preferred stock is designed in such a way that it can readily be sold. Because the reorganized company has only $100 million of debt, the preferred stock should have substantial market value—perhaps even approaching par.\textsuperscript{61}

The plan of reorganization that emerges appears to depart from the absolute priority rule. The bondholders receive more than they would in the counterfactual world in which the banks could insist on an immediate day of reckoning in which their share of the enterprise reflected a valuation that was the average valuation reached by multiple independent and unbiased experts. The world of Chapter 11 is a world in which junior investors enjoy an option that arises whenever the outcome of any given valuation mechanism is uncertain. This “option” results not from the lack of a commitment to the principle of

\textsuperscript{60} Under the absolute priority rule, senior creditors being asked to absorb equity risk would need to be given sufficient compensation when things go well to offset the risk that there will not be enough to pay them in full if things go badly.

\textsuperscript{61} [Add footnote regarding the structure of the preferred stock given to the banks in Consec and discuss its trading value – approximately par -- after Consec emerged from Chapter 11.]
absolute priority, but from being in a world in which a liquid market for the business does not exist. In our example, Bank believes that the business was worth only $250 million, but it does not believe it could be sold for that amount today nor would it favor a sale today. It is better off postponing the day of reckoning and allowing the bondholders to participate if the business does well than it would there were a sale today and took all the proceeds.

V. Conclusion

In a common category of large business reorganization case, indeed a prototypical case the distributional rules of Chapter 11 were designed to address, outcomes that are commonly considered departures (or “deviations”) from absolute priority are something else entirely. They are rational settlements parties voluntarily make in the shadow of the absolute priority rule when the value of the business is uncertain. Negotiations in a Chapter 11 in which the assets are not sold take place in an environment in which rational parties have different beliefs about the value of the business. Negotiations over the plan of reorganization are merely settlement negotiations. Like any settlement negotiations, they will truncate litigation only if a bargaining range exists. Both senior and junior investors must be better off reaching a consensual plan of reorganization than they would be in a valuation hearing. There must be some set of terms such that each is better off settling than letting the Chapter 11 process run its natural course.

Those in the position of the banks and bondholders railroad reorganizations in the late 19th and early 20th Century faced exactly the same problem of reaching a consensual bargain in the face of uncertain valuations as the investors in American Instruments. An agreement among the parties to forego an actual sale
or a judicial valuation made sense for the same reason, even if it appeared to
allowed junior investors to participate who might well be out of the money if
there were a day of reckoning and a fixed value was put on the business.

It is worth taking a moment to understand how bankruptcy academics came
to put so much (indeed too much) emphasis on the idea of absolute priority and
were so quick (indeed too quick) to conclude that departures (or, to use their
language, “deviations”) from absolute priority were suspect. It comes in the first
instance from a misunderstanding of James Bonbright and Milton Berghman’s
landmark paper in the Columbia Law Review in 1928.

Those who attacked the status quo and pushed for absolute priority saw no
reason to grant junior investors contingent rights of participation. 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).62 The critics failed to see that
senior creditors with the contractual right to priority might sensibly agree to a
plan that grants contingent rights of participation to junior investors. Junior
investors come to the table with something to sell—the right to insist upon a day
of reckoning in which the judge collapses future uncertainties to a discrete value.
This right commands a price in the marketplace. Moreover, the coin that senior
investors value relatively little (a derivative that takes into account the low

62 See, e.g., Jerome N. Frank, Some Realistic Reflections on Some Aspects of
Corporate Reorganization, 19 Va. L. Rev. 541, 541–42 (1933); William O. Douglas
& Jerome Frank, Landlords’ Claims in Reorganizations, 42 Yale L.J. 1003, 1012-13
(1933).
probability that the business will ever be worth much) is one that the junior investors may value peculiarly highly.

These academics failed to understand that Bonbright and Bergerman did not think the prevailing practice (one in which there was “relative” as opposed to “absolute” priority) reflected a different substantive entitlement, but rather a way of allowing negotiations among parties when valuations were uncertain and unanimity was not possible. Unlike a regime of absolute priority, relative priority did not require a full-dress valuation of the business. A regime of absolute priority rule grew out of the law governing real estate foreclosures in which there was an actual sale of the business for cash. Respecting the right of a creditor to be paid first is easy when there is an actual sale that creates a pile of cash. But one cannot transplant unchanged the idea of absolute priority to an environment in which there is no cash sale and some other mechanism must be used to put a value on the business. For this reason, absolute priority was “not well adapted to the corporate form of organization.”63 A system of relative priority was a more sensible response to the problems a financially distressed corporation faced. In this environment, however, relative priority embodied the same tradeoff that we see today. Instead of treating the reorganization as a day of reckoning (that requires an uncertain and costly valuation of the business), we implement a plan of reorganization that preserves the option value of the junior interests that exists precisely because the valuation process is uncertain.

On its face, Chapter 11 embraces absolute priority unequivocally as its substantive rule. It does not, however, forbid consensual relative priority plans. Put differently, equity receiverships embraced relative priority because the negotiations that now take place in Chapter 11 were not possible in a world in which unanimous consent was required and a single senior creditor could insist on payment in full as a condition of allowing the entire plan to go forward. Relative priority existed as a sensible substantive principle only because a rule of absolute priority yields relative priority plans in any situation in which valuations are uncertain, markets are illiquid, and effective negotiations among the parties are possible. The debate about absolute versus relative priority should not exist at all. We live in a world in which the absolute priority rule is flourishing, but an important feature of such a world—and that one that 70 years of scholarship has neglected—is that relative priority plans exist and indeed are the norm in such a world.

The negotiated plans of reorganization that we see today in the case of large corporations are completely consistent with what we should expect to see in a world in which bankruptcy judges are unbiased experts who strictly respect bargained-for priority rights. What appear to be departures from this norm may simply reflect the value from the option that the junior investors enjoy whenever the mechanism for establishing value involves a third-party appraisal. Critiques of Chapter 11 should begin by focusing not on whether departures from absolute priority are good or bad, but rather on the mechanism-design problem we face whenever existing investors put a higher value on the assets than others.