

## CHAPTER 11

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## **ABSTRACT**

This essay surveys the literature on Chapter 11. I start by discussing the objectives by which the performance of corporate reorganization rules is to be judged and then consider the fundamental problem of valuation that arises in corporate reorganization. I next turn to examine the performance of the prevailing bargaining-based approach to reorganization, both in terms of its effect on total reorganization value and in terms of its effect on the division of this value. Finally, I examine the two alternative approaches that have been put forward to the approach of existing rules -- that of auctioning the reorganized company's asset (put forward by Baird (1986) and Jensen (1991)) and that of using options to reorganize the company's ownership (put forward by Bebchuk (1988)).

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This essay discusses the literature on Chapter 11 of the US Bankruptcy Code, which governs corporate reorganizations. It first considers the objectives by which reorganization rules might be judged. It then evaluates, in light of these objectives, both the bargaining-based approach of the existing rules as well as two alternative approaches that have been put forward -- the auctions approach and the options approach.

**CORPORATE INSOLVENCY.** When a corporation becomes insolvent and bankruptcy proceedings are commenced, the corporation will be either liquidated or reorganized. This essay will focus, as the literature generally does, on the insolvency of large, publicly traded companies. When such companies become insolvent, they usually pursue the reorganization route.

In a liquidation, which is governed by Chapter 7 of the Bankruptcy Code, the assets of the corporation are sold, either piecemeal or as a going concern. The proceeds from this sale are then divided among all the participants -- all those that hold claims against or interests in the corporation -- with the division made according to the ranking of the participants' rights.

In contrast, in a reorganization, which is governed by Chapter 11, there is no actual sale of the company's assets. Instead, there is an "hypothetical" sale of the company to the existing participants. The existing participants "pay" for the company with their existing claims and interests, which are canceled, and they receive in exchange "tickets" in the reorganized company -- that is, claims against or interests in this new entity.

**OBJECTIVES FOR REORGANIZATION RULES.** From an efficiency perspective, there are two objectives that reorganization rules can serve. These objectives can provide us with a normative framework to assess the performance of existing rules as well as alternative ones.

(i) **Maximization of the total value of the company's assets:** Ex post, given that the company has entered insolvency proceedings, it is desirable, other things equal, that the total value of the assets -- the total value that will be available for division among the participants -- will be maximized.

There are two elements to this objective. First, it is desirable that as little value as possible will be dissipated during the reorganization process; to this end, it is desirable to minimize the time that the process will take and the direct and indirect costs incurred during this process. Second, it is desirable that, when the reorganization process ends, the company's assets will be allocated to their highest-valued use; this implies, among other things, that the assets will continue to function as a going concern if and only if the continuation value exceeds the liquidation value and that, if the assets continue to function as a going concern, they will be employed under the optimal capital structure and the optimal governance structure.

(ii) **Optimal division of total value:** From an efficiency perspective, what matters is not only that the total bankruptcy value will be as large as possible but also how this value will be divided among the participants. The reason for this is that this ex post division has important ex ante consequences. In particular, to induce participants to provide finance to the company ex ante, it is desirable that, in the event of ex post

insolvency, the value will be divided according to the distribution or ranking of priorities that were agreed upon contractually.

**THE VALUATION PROBLEM.** A major problem that reorganization rules faces is that of valuation -- the difficulty inherent in estimating the value of the reorganized company (see Bebchuk (1988)).

Note that a problem of valuation does not exist in liquidation, when an actual sale to an outsider takes place. The liquidation results in an exchange of the company's assets for cash (or cash equivalents, such as marketable securities). Whether or not this cash represents the true value of the assets sold, there is no question as to what is the total monetary value that is available for distribution. The receiver running the liquidation thus can start by paying creditors that are most senior, until either no money is left or their claims are paid in full; the receiver then will pay money to the creditors in the next tier, again until no money is left or their claims are paid in full; and the receiver will continue in this fashion until all the money runs out.

In contrast, the sale of the company's assets in a reorganization is fictional. Consequently, no verifiable, objective figure is available for the total value to be distributed or, as result, for the value of the various tickets in the reorganized company. Although achieving agreement over this reorganization value might be hard even among impartial observers, the clear conflict of interest among the participants makes it all the more difficult. Senior creditors have an incentive to advance a low valuation, because a low valuation would entitle them to a larger fraction of the tickets in the reorganized

company. For a similar reason, equityholders have an incentive to advance a high valuation.

**THE BARGAINING-BASED APPROACH OF EXISTING RULES.** The way in which the law has dealt with this problem of valuation is by leaving the division of reorganization value to a process of bargaining among the participants. The law has sought only to provide a set-up for this bargaining and to establish constraints within which the division must take place.

Under the existing rules, a plan of reorganization will generally be confirmed if all the classes of participants approve it. The rules governing this approval process prescribe how participants may be grouped into classes, how their votes are to be solicited, and what majority counts as class approval.

The law also includes a procedure, often referred to as a "cramdown," that enables approving a plan over the objection of a class if it is shown that this class is treated in a way that is "fair and equitable." However, because of the difficulties involved in getting a cramdown approved, the designers of reorganization plans commonly seek to get the approval of all classes. Consequently, the consent of each class is regarded as valuable to obtain.

**THE EFFECT OF EXISTING RULES ON REORGANIZATION VALUE.** The existing bargaining-based process appears to fall substantially short of the goal of maximizing total reorganization value. This happens both because value is often dissipated during the process and because the ultimate outcome of the process might not

be value-maximizing.

(i) The dissipation of value during the reorganization process: The reorganization process under the existing rules takes substantial time (see White (1984), Lopucki and Whitford (1990), Weiss (1990), and Gertner and Scharfstein (1991)). During this time, substantial value might be dissipated. To begin with, the Chapter 11 process involves substantial administrative costs. Indeed, the fees paid to lawyers, accountants, and other professionals in a Chapter 11 reorganization of a publicly traded company are often on the order of tens of millions dollars. (In one recent reorganization of a major corporation, for example, the administrative expenses of the company and of the creditors committee came to \$3.5 million per month -- see Cutler and Summers (1988)).

Second, and more importantly, the company under reorganization might incur substantial "indirect" costs from functioning inefficiently during the reorganization process. Because the incentives of management during the process are generally not well aligned with the maximization of reorganization value, the management decisions during the process are likely to be distorted. And because of the insolvency cloud hovering over the company, potential business partners may be reluctant to deal with the company or may demand especially favorable terms.

(ii) Potential inefficiencies in the structure emerging out of the process: There are reason to suspect that inefficiency costs might continue to be incurred even after the reorganization process ends, because the structure emerging out of the process might not be optimal. White (1994) suggests that the existing process is biased in favor of continuation -- that is, the company is likely to continue as a going concern even if the

most efficient route would be liquidation. And Roe (1983) suggests that the nature of the existing bargaining process often leads to an inefficient choice of structure for the reorganized company -- and, in particular, to excessive debt in the capital structure. Both arguments are consistent with the empirical evidence that a large fraction of the companies emerging out of reorganization go through a financial restructuring within the subsequent few years (see Hotchkiss (1995)).

**THE EFFECT OF EXISTING RULES ON DIVISION OF VALUE .** The existing bargaining-based approach leads to a division of value that often deviates from the division that is prescribed by the participants' contractual rights (or, in the case of involuntary tort creditors, from the division that is prescribed by the relevant legal rules). What each class gets under the existing process depends not only on the value to which it is entitled but also on various factors that affect the strength of its bargaining position under the existing rules. In particular, because the equityholders can often block or at least delay the approval of a plan, they will have some bargaining power even in those cases in which the value of debt exceeds the total reorganization value. The deviations from contractual priority under the existing rules are quite well documented by empirical work -- work indicating that, even when creditors are not paid in full, equityholders are often able to extract significant value (see, e.g., Eberhart, Moore and Roenfeldt (1990), Franks and Torous (1989), and Weiss (1990)).

Bebchuk and Chang (1992) develop a model of the bargaining under the existing rules that identifies three reasons as to why equityholders might be able to extract value

even when creditors are not paid in full. (The second of the reasons listed below is also suggested by the models of Baird and Picker (1991) and Bergman and Callen (1991)). First, if equityholders delay agreement over a plan, there may be a favorable resolution of uncertainty that would cause the value of the firm to exceed the value of its debt. Thus, the equityholders have an "option value," and to forgo it they must be compensated by having the reorganization plan provide them with a value exceeding this option value. This element of the model of Bebchuk and Chang (1992) is consistent with the empirical evidence that, as the value of the company's assets gets closer to the value of the debt (and thus as the option value gets larger), the larger the amount that the equityholders get.

Second, if the equityholders delay agreement, then, as discussed earlier, the company can be expected to incur during the lengthy process "financial distress costs" that will dissipate some of the value that debtholders can expect to receive at the end of the process. Therefore, because the equityholders' consent to the plan can save these costs, they can obtain a share of these savings in return for their consent. Similarly, when a reorganization would produce a surplus over the sale of the assets through Chapter 7, then, because the equityholders' consent to a reorganization plan would facilitate avoiding the losses that liquidation would produce, they would be able to extract in return for their consent a fraction of these savings.

Third, the equityholders' bargaining power is enhanced by the exclusivity period established under the existing rules. The managers, who are often aligned with the shareholders, have an exclusive power to propose reorganization plans for a certain

period (which can be, and often is, extended by the supervising court). Having such an exclusive power to make offers strengthens one's bargaining position.

**THE AUCTIONS ALTERNATIVE TO EXISTING RULES.** The structural problems of the prevailing bargaining-based approach have led to much research work on alternative arrangements. One approach that has been natural for researchers to explore is relying on the market to address the problem of valuation.

Roe (1983) suggested selling a sample of 10% of the reorganized company's tickets on the market to get the market's estimate of the value of these tickets -- and then to distribute the remainder of the tickets on the basis of this estimate. In Roe's proposal, the market was just used to get an estimate of the reorganization value by extrapolating from a 10% sale. Subsequent work, however, did not see a reason to stop at 10% rather than sell the full 100% and developed the "auctions approach."

Under the auctions approach, which was put forward by Baird (1986) and Jackson (1986) and subsequently advocated also by Jensen (1991), the assets of the insolvent company will be always put on the block and auctioned off. The auction procedure will be designed with the aim of getting the highest value, and accordingly the assets will be sold piecemeal or as a going concern depending on which way will be judged to generate the largest revenue. The auctions approach can be regarded as suggesting a drastic change in the rules of Chapter 11 or as a suggestion for eliminating Chapter 11 altogether and effecting sales through the rules of Chapter 7; for our purposes here, it matters very little which characterization is chosen.

The argument for the auctions approach is that it provides a neat separation between two issues: (1) what should be done with the assets of the company, and (2) how to divide the reorganization value among the participants. The existing rules of Chapter 11 leave the answer to both questions for the bargaining process. And because the existing rules tie together these two issues, distortions arise. As we have seen, the haggling under the bargaining-based approach might fail both to maximize the assets' value and to divide this total value in accordance with contractual priorities.

In contrast, under the auctions approach, the two issues will be kept quite separate. The question of what should be done with the assets will be dealt with first by auctioning these assets. Thus, the resolution of this question will not have to wait until the issue of division is sorted out. And the auction procedure, according to its supporters, is bound to produce the maximum value for the assets. To begin with, it will take little time until the assets will start operating outside insolvency proceedings (with their accompanying costs and inefficiencies). Furthermore, if the auction works sufficiently well, we can expect the assets to move to their highest-value use, in which they will operate under an optimal capital and governance structure.

The second question -- that of dividing value among all the participants in the reorganization -- will be addressed under the auctions approach after the company's assets are sold. At this point, there will be no room for disagreement about the total value that will be available for division among the participants. Consequently, it will be possible to divide this total value in accordance with the distribution to which participants are entitled.

The main concern that critics of the auctions approach have expressed relates to the question of whether an auction will always work well. In particular, critics have expressed doubts as to whether an auction will generally enable the participants to capture the full value of the company's assets and whether it will necessarily move assets to their highest-value use. For example, Shleifer and Vishny (1992) argue that, when a firm becomes insolvent, other firms in the same industry, which are natural potential buyers, are likely to face liquidity problems. Consequently, a mandatory auction upon entering insolvency proceedings might result in systematic under-pricing (as well as in an inefficient allocation of assets).

**THE OPTIONS ALTERNATIVE TO EXISTING RULES.** Another alternative to the existing bargaining approach is the "options approach." This approach was put forward in Bebchuk (1988) and subsequently also advocated by Aghion, Hart and Moore (1992) and Hart (1995).

Like the auctions approach, the options approach seeks to eliminate bargaining -- and with it the costs and deviations from contractual priority that accompany it. Furthermore, the options approach seeks to do so in a way that would ensure that no participants would get less than the value of their entitlement. Under the approach, all the participants in a reorganization would receive certain options with respect to the new tickets of the reorganized value. The division of value would result from the participants' own decisions concerning the exercise of the options given to them. And the options would be designed so that, whatever the reorganization value, no participants would ever

be able to complain that they would end up with less than the value to which they are entitled.

To explain how the options scheme works, consider the following very simple example. Suppose that RC is a company in reorganization that has two classes of participants: 100 debtholders each being owed \$1, and 100 shareholders each owning one unit of equity. And suppose that the reorganized company is going to have 100 units of securities; thus, the problem for the reorganization process is how to divide the 100 units of reorganization tickets among the participants.

Let  $V$  denote the value of each unit of the reorganized company. Using this notation, each debtholder in our example is entitled to  $V$  if  $V < 1$  and to 1 if  $V \geq 1$ , and each equityholder is entitled to 0 if  $V < 1$  and to  $V-1$  if  $V \geq 1$ . If  $V$  were verifiable, we would have no problem in dividing the units of RC so as to give all participants their entitlement, but  $V$  is not verifiable and this is where the option scheme comes in.

Under the options approach, the units of RC will not be initially distributed to the participants but rather held by a clearing agent (CA), and the participants will be given instead rights (options) toward the clearing agent CA. Participants that wish to exercise their rights will have to do so by a date  $T$  that follows shortly the distribution of options - - say, a month following this distribution.

Specifically, in our example, each debtholder will get a type-A right. This right may be redeemed by CA for \$1, but if it is not redeemed it will entitle the right holder to get one unit of RC. Each equityholder will get a type-B right, which entitles its holder, if submitted by date  $T$ , to purchase one unit of RC for \$1.

At time T, all the options will be settled and all the units of RC will be distributed by the agent CA. If type-B rights are not submitted for exercise, then CA will give all the units of RC to the holders of type-A rights. If the holders of type-B rights do exercise them, CA will give the units of RC to these right holders, and CA will use the \$100 obtained from the exercise of type-B rights to redeem all the type-A rights.

We can now turn to consider whether any participants will have basis for complaining about the value received by them. As to debtholders, they will find themselves in one of two situations. Either they will have their rights redeemed for \$1 each (in case type-B rights are exercised), in which case they will be paid in full. Alternatively, if the type-B rights are not exercised, the debtholders will get all the units of RC (which is all the value there is to give) and thus will again be unable to complain. As to the equityholders, recall that, if they are entitled to any positive value, each equityholder will be entitled to a value of  $V-1$ ; and having the option to purchase one unit of RC for 1 will make this value accessible to each equityholder.

Note that between the distribution of the options and the date T, a trading in the options might take place and some rights might accordingly be passed from one hand to another. But, unlike the auctions method, the effectiveness of the options method does not depend on whether outside buyers acting in the market will value  $V$  correctly. Another related feature of the options approach, which might be viewed as attractive, is that it is decentralized. Each participant will be able to decide for itself how to go about using its rights, and no participants will be able to complain that they are getting less than their entitlement.

Having thus far dealt with the effects of the options approach on value division, let us now turn to its effect on the maximization of the value of the company's assets. To begin, the approach would shorten the reorganization process, though it would not do so as much as the auctions approach would. Once a company enters reorganization, it will be only necessary to determine all the claims outstanding against the company and to fix the capital structure that the reorganized company will have. After that, the division of the reorganized company's securities will follow automatically and swiftly from the option scheme's principles.

As to the question of how the capital structure and governance of the reorganized company will be chosen, Bebchuk (1988) noted several possible procedures for dealing with these issues. The contribution of Aghion, Hart and Moore (1992) to the options approach was their proposal to supplement the options scheme with an additional procedure ("solicitation of bids") for dealing with these issues. Under their proposal, once all of the reorganized company's tickets are divided using the options scheme, the choice of ultimate capital structure and course of operation will be determined by a vote among the company's shareholders among alternative proposals (bids) submitted to them. Both the procedures proposed in bebchuk (1988) and the additional procedure proposed in Aghion, Hart, and Moore (1992) should be able to ensure that, following the exercise of the options, the company's assets will likely operate in the most efficient way.

CONCLUDING NOTE ON THE DIVISION OF VALUE. There is another line of work that in closing would be worth noting. This work has sought to analyze the effects

that the distribution of value in Chapter 11 has on ex ante decisions.

Some of this work has shown that a sequential distribution of value -- that is, a distribution in which equityholders receive no value if the value of debt exceeds the value of the assets -- might have some negative ex ante effects. For example, such sequential distribution might lead to excessive risk-taking in financial distress prior to filing for bankruptcy (see Gertner and Scharfstein (1991)); discourage the initiation of bankruptcy proceedings when such initiation is desirable (see Baird (1991); and lead to excessive entrenchment of managers-owners (see Bebchuk and Picker (1996) and Berkovitz, Israel, and Zender (1996)). Thus, the question arises whether this work implies that the prevailing bargaining-based approach, which enables equityholders to extract some value even when debtholders are not paid in full, might be desirable after all.

Drawing such a conclusion from the above work is not warranted. To begin, while the work on ex ante effects has shown that sequential division might have some negative ex ante effects, it also has found that such division might have some beneficial ex ante effects. For example, deviations from sequential distribution have been shown to exacerbate the moral hazard problem between equity and debt prior to the onset of financial distress (see Bebchuk (1991)). Overall, our present state of knowledge does not enable us to conclude whether and when the optimal distribution of bankruptcy value is not sequential.

More importantly, under an auctions regime or an options regime, when a non-sequential division of value in the event of insolvency would be ex ante desirable, participants would be able to prescribe this division in their ex ante contract.

Accordingly, having a bargaining regime is not required to getting the division of value that would be optimal *ex ante*. Both the auctions approach and the options approach would seek to implement whatever distribution was agreed upon *ex ante*. And, in cases in which the participants would agree *ex ante* on a non-sequential distribution, it would be possible to implement such a distribution both under the auctions approach and under the options approach (see Bebchuk (1997) for a description of how the options approach can be adjusted to implement non-sequential distributions). Thus, whatever is the desirable division of value in insolvency, seeking to implement it through the costly and unpredictable process of bargaining is likely to be inferior, for the reasons discussed in this essay, to doing so through the auctions approach or the options approach.

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