A NEW APPROACH TO CORPORATE REORGANIZATION*

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A New Approach to Corporate Reorganization

L. A. Bebchuk

Abstract

This paper puts forward a new method of dividing the reorganization pie among the participants in corporate reorganizations. This method can address the substantial efficiency and fairness problems that afflict the existing process of division. Under the proposed method, participants in a reorganization would receive a set of rights with respect to the reorganized company's securities; these rights would be designed so that, whatever the reorganization value is, no participant would have a basis for complaining that he is receiving less than the value to which he is entitled. Although the method is put forward as a basis for law reform, it also can be used under the existing reorganization rules.
The concern of this paper is the way in which corporate reorganizations divide the reorganization pie. The paper puts forward a new method for making the necessary division. This method can address some major efficiency and fairness problems long thought to be inherent to corporate reorganizations. Although the method is proposed as a basis for a law reform, it can also be used under the existing rules.

Reorganization is one of the two routes that a corporation in bankruptcy might take. When a corporation becomes insolvent and bankruptcy proceedings are commenced, the corporation is either liquidated or reorganized. In a liquidation, which is governed by Chapter 7 of the Bankruptcy Code,\textsuperscript{1} the assets of the corporation are sold, either piecemeal or as a going concern. The proceeds from this sale are then divided among those who have claims against the corporation, with the division being done according to the ranking of these claims.

Reorganization, which is governed by chapter 11 of the Bankruptcy Code,\textsuperscript{2} is an alternative to liquidation. A reorganization is essentially a sale of the company to the existing "participants" -- all those who hold claims against or interests in the company. This "sale" is of course an hypothetical one. The participants pay for the company with their existing claims and interests; in exchange they receive in return "tickets" in the reorganized company -- that is, claims against or interests in this new entity.

\textsuperscript{1} 11 U.S.C. \textsuperscript{c} 701 - 786 (1982 & Supp IV 1986).

Why is the reorganization alternative to liquidation necessary? The rationale commonly offered is that a reorganization might enable the participants to capture a greater value than that obtainable in a liquidation.\(^3\) In particular, reorganization has been argued to be especially valuable when (i) the company's assets are worth much more as a going concern than if sold piecemeal, and (ii) there are few or even no outside buyers with accurate information about the company and sufficient resources to acquire it. In such situations, liquidation might well leave the participants with less than the going-concern-value of the company's assets; consequently, the participants will have more value to split if they retain the enterprise and divide it among themselves.

The development of U.S. Bankruptcy law in this century suggests that public officials have long believed that enabling a reorganization is indeed desirable in an important set of cases. In 1938 Congress adopted Chapter X of the Chandler Act to provide a detailed set of rules to govern reorganizations.\(^4\) Chapter 11 of the Bankruptcy Code replaced these rules in 1978.\(^5\) Throughout this period, many corporations in financial distress, including major fortune-500 corporations, have taken the reorganization

\(^3\) See, e.g., Clark, The Interdisciplinary Study of Legal Evolution, 90 Yale L. J. 1238, 1250-54 (1981).


route.6

This paper takes as given the existence (and significant use) of the reorganization alternative to liquidation. Professors Baird and Jackson have recently challenged the conventional wisdom that it is desirable to have the corporate reorganization route; on their view, it might well be desirable to eliminate the reorganization alternative and resort to liquidation in the case of each insolvent corporation.7 This paper does not enter this debate. Thus, although the paper seeks to improve the reorganization process, it does not advance, or indeed take any position on, the proposition that having reorganizations is desirable. Rather, it advances only the proposition that, as long as reorganizations remain, the best method for dividing the reorganization pie is the one put forward below.

Section I of this paper describes briefly the familiar problems that have long afflicted the division process in corporate reorganization. Because no objective figure is generally available for the value of the reorganized enterprise, the law has consigned the division of the reorganization pie to a process of bargaining and litigation among the various classes of participants. This process of bargaining and litigation frequently results in substantial deviations from participants'

6. See, e.g., "LTV Corp. Files for Bankruptcy: Debt is $4 Billion," N.Y. Times, July 18, 1986, at A1, col. 1. At the time of filing LTV was ranked the 43rd largest industrial company in the U.S., according to Fortune.

contractual entitlements, commonly involves undesirable delay and significant litigation costs, and often produces an inefficient choice of capital structure for the reorganized company.

Section II describes the proposed new method of dividing the reorganization pie. The new method involves no bargaining or litigation, nor does it require identifying the value of the reorganized company. Under the method, the participants in a reorganization would receive a set of rights with respect to the securities of the reorganized company. These rights would be designed so that, whatever the reorganization value is, the participants would never end up getting less than the value to which their contractual rights entitle them.

Section III demonstrates the perfect consistency of the method's outcome with the contractual entitlements of all participants. In particular, I show that the method would be effective even if the market is inaccurate in pricing the value of the rights distributed to the participants. Whether or not the market's pricing is accurate, no participant would have a justifiable basis for complaining about the outcome of the proposed method.

Sections IV discusses the implementation of the proposed method. The method is proposed as a basis for a law reform, facilitating and requiring the use of the method in every corporate reorganization. Under such a regime, the division process would be effected swiftly, fairly, and efficiently. Moreover, the proposed method can be used even under the existing rules. Some participants will likely find it in their interest to
use the method as a basis for reorganization plans filed for confirmation under the existing rules.

In describing the operation and effectiveness of the proposed method, Sections I and II use a simple example for convenience of exposition. Section V shows how the proposed method could be adapted to deal with complex real-world features that are not present in that example.

Finally, the paper includes a short Appendix. The Appendix presents a mathematical derivation of all the elements of the paper's analysis.

I. THE DIVISION PROBLEM IN CORPORATE REORGANIZATION

The division problem in corporate reorganization, on which this paper focusses, may be briefly stated as follows. Given the set of all claims by the participants, each claim defined by its size and relative priority, how should the reorganization pie (i.e., the value of the reorganized company) be divided among the participants?

While this issue of division is a central element in corporate reorganizations, it is not the only element. A reorganization must inevitably include also the preliminary process of determining the size and relative priority of the participants' claims. For example, it might be necessary to determine the amount the company owes to the holders of a given bonds issue or to given business partners, as well as the relative priorities of these debts. Although the process of determining the size and ranking of claims often involves
significant delay and litigation costs, I shall not seek to address these problems. Rather, I shall focus on the division problem, and to this end I shall largely assume that the size and ranking of the participants' claims are already known.

As explained below, the existing reorganization process resolves the question of division in a way that suffers from substantial imperfections. These imperfections are all rooted in a problem of valuation. It is generally impossible to place an objective and indisputable figure on the value that the reorganized company would have (the "reorganization value"). The availability of such a figure would make it easy to determine the distribution of tickets in the reorganized company. Without such a figure, however, it is difficult to decide where, down the contractually created rank of creditors and preferred shareholders, it is necessary to stop issuing tickets in the newly reorganized entity.

This problem of valuation obviously does not exist in a liquidation, where 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 the monetary value of the total pie available for distribution. The receiver running the liquidation thus can start by paying creditors that are contractually most senior until no money is left or their claims

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are paid in full; the then receiver would pay money to creditors in the next tier, again until no money is left or their claims are paid in full; and the receiver would continue in this fashion until all the money runs out.

In contrast to liquidation, the sale of the company's assets in a reorganization is fictional. Consequently, no objective figure is available for the total monetary value to be distributed (and thus also for the monetary value of the various tickets in the reorganized company). While achieving agreement over this reorganization value would be hard even among impartial observers, it is made much harder still by the clear conflict of interest among the participants. 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.9 For a similar reason, equityholders have an incentive to advance a high valuation.10 It is of course possible to ask courts to estimate the reorganization value, and courts indeed must sometimes make such estimates. But no one suggests that we could rely on such judicial estimates as being

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9. Suppose, for example, that the senior creditors are owed $100 and that the reorganized company is going to have 100 common shares. Then, if the value of the reorganized company is determined to be $100, the senior creditors will be entitled to all of the reorganized company's shares; but if the value is determined to be $1000, then the senior creditors will be entitled only to 10% of the company's shares.

10. Suppose, for example, that the company owes $100 to all the creditors, and that the reorganized company is going to have 100 common shares. Then, if the value of the reorganized company is determined to be $100, the equityholders will be entitled to nothing; but if the value is determined to be $1000, then the equityholders will be entitled to 90% of the company's shares.
generally accurate.\textsuperscript{11}

The law has always dealt with this valuation problem by leaving the division of tickets in the reorganized company to a process of bargaining among the participants.\textsuperscript{12} The law has sought to provide only a set-up for this bargaining and to establish constraints within which the bargaining's outcome must take place. Under existing rules, a plan of reorganization will generally obtain judicial confirmation if all the classes of participants approve it.\textsuperscript{13} The legal rules governing this approval process prescribe how participants may be grouped into classes, how their votes are to be solicited, and which fraction of votes would count as class approval.\textsuperscript{14} The rules constrain the bargaining process by prescribing the limits within which the classes can bargain. In particular, the rules limit the concessions that a class may elect to make: the class may vote to make concessions but it cannot, without unanimous agreement among the members of the class, concede to receive less than the class

\textsuperscript{11} The difficulties involved in judicial estimates of a reorganized company's value are apparent to any reader of cases in which judges have to make such estimates. See, e.g., In Re Merrimack Valley Oil Co., 32 Bankr. 485 (Bankr. D. Mass. 1983); In Re Landmark At Plaza Park, 7 Bankr. 653 (Bankr. D.N.J. 1980).

\textsuperscript{12} For a description of the evolution of reorganization law in the last fifty years, see Coogan, Confirmation of a Plan under the Bankruptcy Code, 32 Case W. Res. L. Rev. 301 (1982).


\textsuperscript{14} See 11 U.S.C. @1122, @1125, @1126 (1978); Coogan, supra note 12, at 328-336.
would get in a liquidation.\textsuperscript{15} Similarly, the rules also limit the amount that a class can hope to extract in concessions from other classes: a plan will be confirmed in spite of the objection of a class if it can be shown that the class is receiving no less than a certain standard.\textsuperscript{16}

This process of bargaining and litigation is very imperfect. First, and most important, the reorganization process often produces a division that substantially deviates from the participants' entitlements. Sometimes the deviation is unintentional, the result of inaccurate valuation. Sometimes the deviation is deliberate: participants might use their power to delay to extract a reorganization plan which gives them more than that to which they are entitled. For example, equityholders, it is generally believed, often use their power to delay to extract a substantial value even when the creditors are entitled to all the reorganization value.\textsuperscript{17}

Second, the reorganization process often results in the choice of an inefficient capital structure for the reorganized company. The company's capital structure should be chosen solely to maximize the reorganized company's value. But under the

\textsuperscript{15} This limitation arises from the "best interest of the creditors" test established by 11 U.S.C. \textsection 1129 (a)(7) (1978). See Coogan, supra note 12, at 344-345.

\textsuperscript{16} A plan will be approved over the objection of a class if the value given to the class satisfies the "absolute priority" standard. This is established by the "cramdown" provision of 11 U.S.C. \textsection 1129 (b)(1)(1978). See Coogan ,supra note 12, at 352-357.

\textsuperscript{17} See, e.g., Trost, Corporate Bankruptcy Reorganizations: For the Benefit of Creditors or Stockholders? , 21 U.C.L.A Law Rev. 540 (1973).
existing system, the choice of the capital structure is often substantially affected by various strategic factors.\textsuperscript{18}

Third, putting aside the severe shortcomings of the outcome of the division process, the process itself has substantial costs. The process usually involves significant litigation costs and frequently produces delay (beyond the time necessary to determine the size and ranking of the participants' claims). This delay might result from a genuine failure of the participants to reach an agreement, but it might also be caused deliberately by some participants whose interest a postponement would serve.\textsuperscript{19} The resulting delay commonly involves significant costs, some obvious and some subtle. For one thing, during the reorganization period the company often cannot function efficiently.\textsuperscript{20}

Observers of the corporate reorganization process have long

\textsuperscript{18} For a discussion of the ways in which strategic factors shape the choice of the capital structure, see Roe, supra note 8, at 536-545.

\textsuperscript{19} In particular, a delay might be often in the interest of the equityholders. When the value of the reorganized company is lower than the total value of creditors' claims, the equityholders might have nothing to lose and something to gain from a delay.

\textsuperscript{20} In particular, potential business partners might be reluctant to do business with the company or might be willing to conduct business only on some special terms. Furthermore, the management of the company during the reorganization period is afflicted with serious conflict-of-interest problems. The company is usually run by the pre-reorganization management which represents the equityholders, and the interests of the equityholders in an insolvent corporation are likely to be served by different courses of action than those which would be value-maximizing. For example, it likely will be in the interest of the equityholders that the company take risks, even if taking such risk would not be value-maximizing. Taking a risky course of action will benefit the equityholders of an insolvent corporation because they likely have little to lose from a downward turn in the company's fortunes and more to gain from an upward trend.
been painfully aware of its substantial imperfections.\textsuperscript{21} In 1978, Congress tried to alleviate some of the widely perceived problems by making significant changes in reorganization law. The 1978 changes, for example, sought to provide more room for bargaining by giving classes the power to make greater concessions to each other.\textsuperscript{22} It is unclear, however, whether the changes have made things better or worse. Whether or not the new law is an improvement, there seems to be a consensus on one thing: that although the reorganization process might be (and perhaps has been) improved, it is bound to remain significantly imperfect--because of the impossibility of accurate judicial valuation and the inevitable shortcomings of bargaining and litigation.\textsuperscript{23}

Indeed, this perception concerning the inherent imperfection of the division process in reorganizations has been the main basis for the view, recently expressed by Baird and Jackson, that it might be desirable to eliminate the reorganization alternative altogether and resort only to liquidation.\textsuperscript{24} As explained below,

\textsuperscript{21}. See, e.g., D. Baird & T. Jackson, Cases, Problems, and Materials on Bankruptcy (1985), Ch. 9; Blum, The Law and Language of Corporate Reorganization, 17 University of Chicago Law review 565 (1950); Brudney, The Investment-Value Doctrine and Corporate Readjustments, 72 Harv. L. Rev. 645 (1959); Roe, supra note 8.

\textsuperscript{22}. For a discussion and assessment of the 1978 changes, see Coogan, supra note 12; Trost, supra note 13.

\textsuperscript{23}. Indeed, the perception that the division process is bound to remain imperfect is even held by Professor Roe, who has put forward an important proposal for reforming the division process. See Roe, supra note 8. Although his proposal would in my view produce a substantial improvement over the existing process, it would not perform as well as the method proposed in this Article. See infra Section III.A.

\textsuperscript{24}. See Baird, supra note 7, Jackson, supra note 7.
however, this perception is wrong: the reorganization process can be greatly improved.

II. THE PROPOSED METHOD

A. The Example

To describe and assess the proposed method, it will be useful to consider it in the context of a concrete and simple example. Consider a publicly-traded company that has three classes of participants. Class A includes 100 senior creditors, each owed $1. Class B includes 100 junior creditors, each owed $1. And class C includes 100 equityholders, each holding one unit of equity.  

The company is now in bankruptcy proceedings and is to be reorganized. The reorganized company, which I shall call RC, is going to have a capital structure which for now I shall assume to be given. For any chosen capital structure, it is of course possible to divide the securities of RC into 100 equal units. For example, if RC is going to have 100 shares of common stock and 50 shares of preferred stock, then each of the 100 RC units will consist of 1 common share and 1/2 preferred share. The question for the reorganization process is how to divide the 100 units of RC among the three classes of participants.

25. As will be apparent, the method would apply well also to companies that are not publicly traded, for the method's effectiveness would not hinge on the presence of market trading. Similarly, the other simplifying features of the example are not essential for the method's effectiveness. In particular, Section V will show how the method might be adapted to situations in which the company has more than three classes of participants, and/or has secured creditors, and/or has a class whose claims are substantially concentrated in one hand.
B. Dividing the Pie Supposing its Size is Known

Let us denote the value of the reorganized company RC by V per unit. Thus, \(100 \times V\) is the total size of the pie to be distributed. As already noted, the division of the pie would be a straightforward matter if we could measure its size exactly (that is, if we could estimate \(V\) with precision). In such a case, we simply would proceed according to the contractual rights of the various classes involved.

Consider first the case in which the figure placed on \(V\) is lower than \$1. In this case, the total pie is less than \$100, which is the full value of class A's claims. Therefore, as the value of RC is insufficient to pay the senior creditors in full, all the 100 units of RC should be given to them (and divided among them prorata).

Consider next the case in which the figure placed on \(V\) is higher than \$1 but lower than \$2. In this case, there is enough to pay class A in full but not enough to pay also class B in full. As there is enough to pay the senior creditors in full, they should receive a value of \$100. This would be accomplished by giving them \((100/V)\) units. Dividing these units among the senior creditors prorata, each senior creditor would receive \((1/V)\) units worth \$1. The junior creditors should receive the remaining value of \((100 \times V - \$100)\). This would be accomplished by giving them the remaining \([100 - (100/V)]\) units. Dividing these units among the junior creditors, each junior creditor would end
up with \([1-(1/V)]\) units.\(^{26}\)

Finally, consider the case in which the figure placed on \(V\) is higher than \(\$2\). In this case, there is enough to pay both class A and class B in full. To be paid in full, the senior creditors should receive \(100/V\) units, each senior creditor getting \(1/V\) units. The junior creditors, also paid in full, should also receive \(100/V\) units or \(1/V\) units each. And the equityholders should receive the remaining value of \((100\times V - \$200)\). This would be accomplished by giving them (and dividing among them prorata) the remaining \([100-(200/V)]\) units (that is, \([1-(2/V)]\) units for each equityholder).\(^ {27}\)

The conclusions of the above analysis -- as to how the reorganization pie should be divided supposing we could measure \(V\) precisely -- are summarized in Table 1 below.\(^ {28}\)

\(^{26}\) For example, if \(V\) is \(\$1.25\), then class A should receive 80 shares \((1/1.25\) of the shares to be distributed), with each senior creditor receiving 0.8 shares; and class B should receive 20 shares, with each junior creditor receiving 0.2 shares.

\(^{27}\) For example, if \(V\) is \(\$2.50\), then the senior creditors should get 40 shares \((0.40\) shares each), the junior creditors should get 40 shares \((0.40\) each), and the equityholders should get 20 shares \((0.20\) shares each).

\(^{28}\) Another way of expressing participants' entitlements as a function of \(V\) is by using the mathematical notation of \(\min(.,.)\) and \(\max(.,.)\). [This notation has the following meaning: \(\min(x,y)\) denotes the smaller of the two values \(x\) and \(y\); similarly, \(\max(x,y)\) denotes the greater of the two values \(x\) and \(y\).]

As we have seen, a senior creditor is entitled to receive the smaller of these two values: (i) \(\$1\), the full value of his claim, and (ii) his prorata share of the reorganization value or \(V\). Thus, a senior creditor is entitled to \(\min(1, V)\).

A junior creditor is entitled to receive no less than the smaller of (i) \(\$1\), the full value of his claim, and (ii) his prorata share of the value left, if anything is left, after the senior creditors are paid in full, which is \(\max(0, V-1)\). Thus, the junior creditor is entitled to \(\min(1, \max(0, V-1))\).

Finally, An equityholder is entitled to get no less than his
### Table 1

<table>
<thead>
<tr>
<th>The Value of $V$</th>
<th>The distribution of Units</th>
</tr>
</thead>
</table>
| $V<1$           | Senior creditors: 1 unit each (worth $V$).  
          | Junior creditors: nothing.  
          | Equityholders: nothing. |
| $1<V<2$         | Senior creditors: $1/V$ unit each (worth $1$).  
          | Junior creditors: $1-(1/V)$ unit each (worth $V-1$).  
          | Equityholders: nothing. |
| $2<V$           | Senior Creditors: $1/V$ unit each (worth $1$).  
          | Junior Creditors: $1/V$ unit each (worth $1$).  
          | Equityholders: $1-(2/V)$ unit each (worth $V-2$). |

### C. Participants' Entitlements as a Function of Reorganization Value

Thus, the question of division would pose no problem if we could measure $V$ with precision. As already emphasized, however, it is not possible to determine with indisputable precision the value of $V$, and thus also the monetary value to which each participant is entitled. But even though we cannot precisely prorata share of the value left, if anything is, after the senior and junior creditors are paid in full. Thus, the equityholder is entitled to $\max(0, V-2)$.

To summarize, the participants' entitlements are as follows:

- **Senior Creditors:** $\min(1, V)$
- **Junior Creditors:** $\min(1, \max(0, V-1))$
- **Equityholders:** $\max(0, V-2)$
identify the value to which participants are entitled, we can precisely express this value as a function of V, the reorganized company's per unit value.

Consider first the senior creditors. As the analysis above has shown, a senior creditor is entitled to a value of $1 if V>1, and to a value of V if V<1. Alternatively put, a senior creditor is entitled to a value of $1 unless the reorganization value is less than $100, in which case the senior creditor is entitled to his prorata share of this value (that is, to one unit of RC).

Consider next the junior creditors. A junior creditor, we have seen, is entitled to nothing if V<1, to (V-1) if 1<V<2, and to $1 if V>2. Alternatively put, a junior creditor is entitled to a value of $1 unless the reorganization value is less than $200, in which case he is entitled to his pro rata share of the value that is left, if any is, after the senior creditors are paid in full.

Finally, an equityholder is entitled to nothing if V<2, and to (V-2) if V>2. That is, an equityholder is entitled to his prorata share of the value that is left, if anything, after the senior and junior creditors are paid in full.

Table 2 below summarizes the above conclusions concerning participants' entitlements as a function of the reorganization value.
Table 2

<table>
<thead>
<tr>
<th>Participants' Entitlements</th>
<th>V&lt;1</th>
<th>1&lt;V&lt;2</th>
<th>V&gt;2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Creditor</td>
<td>V</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Junior Creditor</td>
<td>0</td>
<td>V-1</td>
<td>1</td>
</tr>
<tr>
<td>Equityholder</td>
<td>0</td>
<td>0</td>
<td>V-2</td>
</tr>
</tbody>
</table>

D. The Proposed Approach

The idea underlying the proposed method is simple. Even though we do not know V and thus the value of participants' entitlements in terms of dollars or RC units, we do know precisely what participants are entitled to as a function of V. This knowledge makes it possible to design, and distribute to the participants, a set of rights concerning RC's units such that, for any value that V might take, these rights will provide participants with values perfectly consistent with their entitlements.

Before describing the proposed approach, a preliminary remark on implementation is in order. As will be seen presently, each of the rights distributed to the participants will have an
"option" component. In principle, the options should be for an immediate exercise. However, because the participants might need a little bit of time to understand the terms of the options given to them, it might well be desirable to provide them with such time. The exercise date of the options, then, will be shortly after the distribution of the rights. For concreteness, I shall assume below that the reorganized company is going to start its life and distribute the rights to participants on January 1; and that the exercise date for all the rights distributed will be four days later -- that is, on January 5.

Thus, on Jan. 1, the reorganized company will start its life. But, under the proposed method, the units of RC will not be distributed at this point but rather will be retained by the company until Jan. 5. Instead of RC units, the participants will on Jan. 1 get the following rights with respect to RC units.

(i) Senior Creditors. Each senior creditor will receive one type-A right. A type-A right may be redeemed by the company on Jan. 5 for $1. If the right is not redeemed, its holder will be entitled to receive on Jan. 5 one unit of RC.30

To get already at this stage some sense of how receiving a type-A right will treat senior creditors, consider a creditor

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29. As economists have recognized, it is often useful to break a security into its option components. Many securities can be usefully be described as a set of certain options with respect to the assets of the issuing firm. See, e.g., R. Brealey & S. Myers, Principles of Corporate Finance (2nd ed., 1984), Ch. 20,23.

30. In the terminology of options, having a type-A right is equivalent to holding the following position: having one (call) option on one RC unit with an exercise price of 0; plus being short one (call) option on one RC unit with an exercise price of $1.
that holds his type-A right until Jan. 5. If the right is redeemed, then the creditor will be paid in full. If the right is not redeemed, then the senior creditor will receive a value of $V$. And the senior creditor is indeed never entitled to receive more than either $1$ or $V$ (see Table 2).

(ii) Junior Creditors. Each junior creditor will receive a type-B right. The company may redeem a type-B right on Jan. 5 for $1$. If the right is not redeemed, its holder on Jan. 5 will have the option to purchase on that date one unit of RC for $1$. If the holder wishes to exercise his option in the event that his right would not be redeemed, then he would have to submit the right by Jan. 5 to the company accompanied by a payment of the $1$ exercise price.\(^{31}\)

Again, it might be worthwhile at this stage to describe briefly how receiving a type-B right would provide a junior creditor with the value to which he is entitled. If the creditor holds on to the received type-B right and the right is redeemed, then the creditor will be paid in full. If the right is not redeemed, exercising it will provide the creditor with a value of ($V$-$1$). The creditor is indeed never entitled to receive a value higher than both $1$ and ($V$-$1$) (see Table 2).

(iii) Equityholders. Each equityholder will receive one type-C right. The company may not redeem type-C rights. The holder of a type-C right on Jan. 5 will have the option to

\(^{31}\) In the terminology of options, having one type-B right is equivalent to holding the following position: having one (call) option on one RC unit with an exercise price of $1$; plus being short one (call) option on one RC unit with an exercise price of $2$.  

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purchase one RC unit on Jan. 5 for $2. To exercise this option, the holder of the right will have to submit it to the company by Jan. 5 accompanied by a payment of the $2 exercise price.\footnote{32}

Note that if an equityholder holds on to his right until Jan. 5 and then chooses to exercise it, he will get a value \((V-\$2)\). And indeed the equityholder is never entitled to a positive value exceeding \((V-\$2)\) (see Table 2).

The three types of rights will all be transferrable. Thus, between Jan. 1 and Jan. 5, there will presumably be public trading in the rights. Any participant will have a choice between selling his right on the market and retaining it until the exercise date of Jan. 5.

Table 3 below summarizes the terms of the rights to be distributed to the participants.

<table>
<thead>
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<th>Table 3</th>
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<tbody>
<tr>
<td>The Distribution of Rights</td>
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</table>

One Type-A Right to Each Senior Creditor

A type-A right may be redeemed by the company on Jan. 5 for $1. If the right is not redeemed, its holder will be entitled to receive on Jan. 5 one unit of RC.

One Type-B Right to Each Junior Creditor

A type-B right may be redeemed by the company on Jan. 5 for $1. If the right is not redeemed, its holder will have the option to purchase one unit of RC for $1.

\footnote{32. In the terminology of options, having one type-C right is equivalent to holding one (call) option on one RC unit with an exercise price of $2.}
One Type-C Right to Each Equityholder

A type-C right may not be redeemed by the company. The holder of such a right on Jan. 5 will have the option to purchase one unit of RC for $2.

E. The Exercise of Rights

Adding up the obligations that RC will have toward the holders of type-A, type-B, and type-C rights shows that the net obligation of RC toward all right holders is to distribute 100 RC units on Jan. 5, which is exactly what is available for distribution. Thus, RC should have no problem meeting all the obligations towards the holders of the three types of rights. Nonetheless, it is worth going through the mechanics of the process in detail.

Suppose first that all the holders of type-C rights wish to exercise their options to buy RC units and submit a total of $200 to the company. Then RC will provide them with all the 100 units of RC (one unit for each right submitted), and it will use the $200 received from them to redeem all the type-A and type-B rights.

Suppose now that no type-C rights are submitted for exercise, but that all the holders of type-B rights wish to exercise their option to buy RC units at $1 and therefore submit a total of $100 to the company. In this case, RC will give all the units to the holders of these type-B rights, and it will use the $100 received from them to redeem all the type-A rights.

Next, suppose that no type-B or type-C rights are submitted for exercise. The mechanics this case will be simpler still: the
100 units of RC will be distributed to the holders of type-A rights (one RC unit per right of course).

Finally, it remains to consider situations in which only a fraction of the type-B or type-C rights are submitted for exercise. Such situations are highly unlikely to arise if there is public trading in the rights. But in any event, given the right's design -- in particular, the fact that the total net obligation of the company toward all right holders is to distribute 100 units of RC -- such situations would present no special problem for the execution process.

For example, suppose that only 50 type-B rights (and presumably no type-C rights) are submitted for exercise. Then those who submitted type-B rights will receive 50 units of RC

33. To see why such situations are unlikely, imagine for example that, as Jan. 5 arrives, some holders of type-B rights (the "optimists") submit them for exercise while some other holders of such rights (the "pessimists") do not submit their rights. The optimists' behavior indicates that they believe that \( V \) exceeds $1. As to the pessimists, as long as they are not going to use their rights in any way, they should be happy to sell them for any negligible positive price. Thus, as long as some shares are held by pessimists who are not going to use them, the market price of the rights must be negligible. But at such a market price, the optimists would buy the rights and submit them to the company for exercise. Alternatively put, if the optimists, but not the pessimists, view the rights as having some value and use, then, in the presence of market trading, the right should all end up at the hands of the optimists who would use them; no rights would remain idle at the hands of pessimists to whom the rights are of no use.

34. If some type-B rights are not submitted for exercise, then the market price of such rights must be negligible. In such a case, no holder of a type-C right would have a reason to submit it. Submitting a type-C right, the holder would pay $2 to get one RC unit. Even if the holder does believe that \( V \) exceeds $2, he would still be better off not using his type-C right but instead purchasing a type-B right for the negligible market price, and then using this right to purchase a RC unit for only $1.
(one unit per submitted right). The $50 submitted by them will be
used for pro rata redemption of type-A rights. Thus, each holder
of a type-A right will end up with $0.50 and 0.50 units of RC.

More generally, the way in which RC would proceed in
situations of partial submission of rights would be as follows.
The money received from the exercise of type-C rights would be
used half for prorata redemption of type-A rights and half for
prorata redemption of type-B rights. The money received from the
exercise of (unredeemed and submitted) type-B rights would be
used for a prorata redemption of type-A rights. The 100 RC units
would be given to those submitting type-C rights, those
submitting type-B rights which are not going to be redeemed, and
those holding type-A rights which are not going to be redeemed.35

III. CONSISTENCY WITH PARTICIPANTS' ENTITLEMENTS

This section demonstrates that the outcome of the proposed
method of division will be perfectly consistent with the
entitlements of the participants. As emphasized earlier, the
problems of the division process arise from the difficulties

35. To consider a more complex example that the one above,
suppose that only 50 type-C rights and all of the type-B rights
are submitted for exercise. Those who submitted type--C rights
would receive 50 RC units. The $100 receive from them would be
used for a prorata redemption of 50 type-A and 50 type-B rights:
each holder of type-B and type-A right would have half of his
right redeemed. The 50 remaining RC units would be divided among
the holders of the 50 unredeemed, submitted type-B rights. The
50$ received by the company from the exercise of these 50 type-B
rights would be used to redeem the remaining 50 type-A rights. In
sum, the units of RC would end up half in the hands of those who
submitted type-C rights and half in the hands of those who
holding type-B rights.
involved in determining the monetary value of the reorganized company. The proposed method, however, makes no attempt to estimate this monetary value, nor does it require even a rough sense of the monetary value of the rights that the participants will receive under the method. Although we may not know how much these rights are worth, we can be confident that, whatever their worth is, they will provide the receiving participants with no less than the value to which they are entitled.

A. The Significance of not Relying on Accurate Market Pricing

The rights given to participants will be traded in the market in the brief period between the issue date and the exercise date. As the analysis below will indicate, if the market estimates the reorganized company's value precisely, then the market price of any type of right will be equal to the value to which the participants receiving the right are entitled; and consequently the participants will be able to capture the value of their entitlement by immediately selling their rights on the market. Thus, the conclusion concerning the method's effectiveness would follow immediately if one assumes that the market's pricing of the rights is going to be accurate. As this Section will show, however, such an assumption is not necessary to reach this conclusion: the method's effectiveness does not hinge on the accuracy or even presence of market trading in the rights.

This feature of the method is very important. Many might believe that capital markets prices are efficient not only in
general but also in the particular case of companies in financial distress in particular. But whatever one's view on the merits of the question, one must recognize that many public officials and commentators believe that the market often err (and usually in the direction of undervaluation) in appraising the value of companies in financial distress.\(^{36}\) Indeed, the main rationale for the very existence of the reorganization alternative to liquidation is the concern that the market often undervalues such companies; for if the market could be relied on to price such companies perfectly, then there would be no reason to expect that a reorganization would ever provide the participants with a greater value than they would get from a going-concern sale effected through a Chapter 7 liquidation proceedings. Thus, any examination of the best reorganization method should take into account the concern that the market's estimate might be inaccurate. Therefore, it is a significant virtue of the proposed method that an inaccurate market pricing of the right would not provide participants with a basis for complaining about the method's outcome.

This feature of the method is the main reason why it is superior to the method of division put forward by Professor Roe five years ago.\(^{37}\) Roe was the first to seek, as I do in this

\(^{36}\) See e.g., Citibank, N.A. v. Baer, 651 F. 2d 1341, 1347-48 (10th Cir. 1980); In re Interstate Stores, Inc., SEC Corporate Reorganization Release No. 322 (Nov. 29, 1977), in 13 S.E.C. Docket 757, 786-87; Brudney, supra note 21, at 673-75; Blum, supra note 21, at 566-67.

\(^{37}\) See Roe, supra note 8.
paper, a method of division that would not be based on the problematic process of bargaining among the various classes of participants. He proposed to estimate the value of the reorganized company by selling ten percent of the reorganized company's securities on the market and then extrapolating the reorganized company's value form the sale price obtained for these securities. Although Roe's method is in my view superior to the existing process of bargaining among classes, the method's reliance on market pricing makes it, as Roe himself recognized, substantially imperfect. First, the method does not address the concerns of those who believe that the market might not accurately perceive the value of companies in reorganization. Second, even if the market's perceptions are accurate, selling a sample of the company's securities might produce an inaccurate figure, because some participants will have an incentive to manipulate the sale's price. Third, the method is inapplicable to companies whose securities are not publicly traded. Because the method that I propose does no hinge on the existence of accurate market pricing, it does not suffer from any of the above problems.

Before proceeding to a detailed demonstration, it is worth stating briefly why accurate market pricing of the rights is not essential for the proposed method's effectiveness. While participants may sell their rights on the market, they can always choose to retain them until the exercise date. If they do so, then, as will be shown below, they will not end up with less than that to which they are entitled. Consequently, even assuming that
a given participant did not have, or attached no value to, the opportunity to sell his rights on the market, the participant would have no basis for complaining about the method's outcome.

B. The Outcome in the Example

To demonstrate the method's effectiveness, I wish first to show that, in the example used in the preceding section, no participant would have any basis for complaining about the method's outcome. Considering first the senior creditors, note that, if they retain the type-A rights given to them, they will end up in one of two positions. First, their rights might be redeemed for $100 (if the holders of the type-B or type-C rights choose to exercise them). In this case, the senior creditors surely cannot complain about the outcome, as their claims would be paid in full. Alternatively, the senior creditors' rights might not be redeemed, in which case they would end up holding all the 100 units of RC. Again, they would be unjustified in complaining, for they would be getting the whole reorganization pie: there is nothing more that could be given to them. Now, the senior creditors surely might be unhappy about the way in which the market might assess the value of RC units and therefore also the value of their type-A rights. Suppose that the senior creditors believe that \( V \) is $0.90, but that the market believes that the value of \( V \) is only $0.50. In this case, the senior creditors would not be able to sell their type-A rights for more than $0.50. Similarly, if and when they get the units of RC, they will be able to sell them only for $0.50. But the fact that others are unwilling to pay them more than $0.50 for what in
their view is worth $0.90 would not provide the senior creditors with a basis for complaining that the reorganization's outcome deprives them of the value to which they are entitled; for they have received from the reorganization process all that there was to distribute. Thus, they might complain about the market ("oh, the market is not what it is supposed to be") but not about the method's way of dividing the RC units among the participants.

Consider now the junior creditors. If the junior creditors do not sell their type B-rights, they could end up in one of two positions. First, their rights might be redeemed by the company at $1 per right (if the type-C rights are submitted for exercise). In this case, the junior creditors would be paid in full and clearly would have no reason to complain. Alternatively, the junior creditors might end up with options to purchase RC units at $1 per unit. The value of these options is by definition not lower than the value to which the junior creditors are entitled. For the junior creditors are entitled to no more than the value that is left, if any, after the senior creditors are paid in full. And having the option to receive all of the reorganization pie by paying the senior creditors' prior $100 claim makes the above value accessible to the junior creditors.

Another way to see that the junior creditors are appropriately treated is as follows. For the junior creditors to assert that they are getting too little, they must assert either that those below them in priority are getting too much or that those above them in priority are getting too much (or both). The junior creditors cannot complain that those below are getting too
much. For those below them would get something only in the event that the junior creditors' type B-rights are redeemed, in which case the junior creditors would be paid in full. As to those above them, the junior creditors can complain only if the senior creditors receive more than the full value of their claims. But the junior creditors' options ensure that the senior creditors would not receive more than the full value of their claims. For the junior creditors have the option to pay the senior creditors their full claims of $100 and thereby get all that would be otherwise given to the senior creditors. Thus, given the junior creditors' option, they cannot assert that the senior creditors are getting more than $100.

Again, the junior creditors might be unhappy about the way in which the market might assess the value of RC units and thus also the value of their type-B rights. Suppose for example that the junior creditors believe that $V$ is $1.90 and that the value to which they are entitled is thus $90 (the reorganization value of $190 minus the senior creditors' claims of $100); and suppose further that the market estimates $V$ at $1.50 and thus prices the junior creditors' type-B rights at $0.50. Would the junior creditors have basis for complaining that the rights given to them have a value of $50 which is less than the $90 to which they are entitled? They would not. It would be inconsistent for them to assert that (i) $V$ is $1.90 and they are thus entitled to $0.90 each, and that (ii) the value of their options is only $0.50 each. For if $V$ is $1.90, then the value of an option to buy an RC unit at $1 is $0.90: this value could be realized simply by
exercising the option. The junior creditors thus should not sell their type-B rights to the unappreciative market; and if they do sell, they will have only themselves to blame.

Finally, consider the equityholders. If they do not sell their type-C rights, they would on the exercise date have options to purchase RC units at $2. Having these options would make accessible to them the very value to which they are entitled— which is all that is left, if anything, after the claims of the senior and junior creditors are paid in full.

Again, the equityholders might claim that the market undervalues the value of RC units and thus the value of their type-C rights. But then they should not sell their rights but rather retain and exercise them. Their perception (whether accurate or not) that such undervaluation takes place would provide them with no basis for complaining about the method’s outcome -- for similar reasons to those that have been discussed above with respect to the junior creditors.

C. A More General Defense

Having examined the method's outcome in our example, I now wish to state in general terms why any given participant would never have any basis for complaining that the method's outcome is inconsistent with his entitlement. Suppose first that a given participant retains the right distributed to him until the exercise date. For him to assert that he has received less than the value to which he is entitled, he has to assert either (i) that those above him in priority (or those who bought their rights) have received too much, or (ii) that those below him in
priority (or those who bought their rights) have received too much.

Those below the participant (or those who bought their rights) would be able to capture any value only if they pay in full all the claims of those above them -- including the participant's claim. Thus, the participant would never have basis for complaining that he is receiving too little because those below are getting too much.

Similarly, the participant would be unable to complain that those above him (or those who bought their rights) are getting too much -- that is, that they are paid more than in full. By exercising the option given to him, the participant can ensure that, as far as his prorata share of the company is concerned, those above him will not get more than the full value of their claims. Having the option automatically makes accessible to him his prorata share of the value left after the preceding claims are paid in full -- and he is not entitled to more than that.

Thus, assuming that the right given to the participant would not be transferrable, the participant would not end up with less than the value to which he is entitled. And, clearly, he would not be made worse off by receiving the ability to sell his right, if he so wishes, in the interim period preceding the exercise date. The ability to sell may only improve the participant's situation: if the market accurately prices his right, he would be able to cash his position early. And the ability to sell cannot worsen his situation: if the market undervalues his right, he need not sell; retaining his right until the exercise date, he
would receive, as we have seen, a value that is in perfect accordance with his entitlement.

D. Addressing the Problem of Differing Estimates

An alternative way of explaining the proposed method's effectiveness is by showing how it would address the valuation problem, which might be referred to as the problem of divergent estimates. Because no objective, indisputable figure is available for the reorganized company's value, participants might advance different estimates of this value. If the participants could all be expected to advance the same estimate, the question of division would be straightforward: their common estimate could be used to divide the reorganized company's securities. The division question is difficult only because participants might well differ in the estimates they advance. Such difference might result from either strategic manipulation or genuine subjective disagreement.

(1) Strategic Manipulation

Even supposing that the participants all actually share the same estimate of the reorganized company's value, under the existing method of division they might well have strategic reasons for advancing different estimates. In the bargaining between any class and the classes preceding it, the preceding classes have an interest to advance a low estimate whereas the junior class has the opposite interest.

Suppose, for instance, that the junior creditors and the senior creditors in our example all have the same estimate of $V,
and consider what estimates they will find in their interest to advance during bargaining and litigation under the existing method of division. The senior creditors will generally find it in their interest to advance an estimate exceeding the participants' common estimate; for a high value of $V$ would entitle them to a larger fraction of RC's securities. The junior creditors would generally find it in their interest to advance an estimate exceeding the participants' common estimate; for a high value of $V$ would entitle them to a larger fraction of RC's securities. Such strategic manipulation of estimates might benefit the classes employing it in the bargaining and litigation that determine the outcome under the existing reorganization process.

Under the proposed method, however, no class would be able to benefit from strategic manipulation of estimates. The division of securities would in no way depend on what the participants or anyone else claim $V$ is. The division would depend only on what the participants elect to do with their rights. And the participants' decision whether to exercise their rights would necessarily reflect their true judgment concerning $V$. In particular, the junior creditors would not be able to get any value simply by asserting that $V$ exceeds $\$1$. The only way for them to get any value would be by exercising their rights (which they would of course do only if they indeed estimate $V$ to exceed $\$1$). Similarly, the senior creditors would not be able to get a higher value by strategically advancing a low estimate of $V$; what they would end up with depends only on what the junior creditors
elect to do with their rights.

(2) **Genuine Disagreement**

The different estimates that parties might advance under the existing reorganization process might be due not only to strategic manipulation but also to genuine disagreement. Such difference in estimates might exist not only among classes but also among the participants in any given class.

The proposed method addresses the possibility of different subjective estimates by enabling each participant to decide individually, based on his own estimate of the reorganized company's value, whether to exercise his rights. Consequently, each participant would get no less, and might indeed get more, than the value he believes he is entitled to based on his own estimate of the reorganization value.

Consider, for instance, a junior creditor in our example. If the creditor believes that $V$ is below $1$, then the value of his entitlement based on his own estimate of $V$ is zero. If the creditor keeps his right, which he will have to do if the right's market price is zero, he will not exercise it and indeed will end up with no value. But if others are more optimistic and believe that $V$ exceeds $1$, then the market price of type-B rights will be positive, and the creditor will be able to sell his right for this positive market price.

Next suppose that the creditor believes that $V$ is between $1$ and $2$, $1.50$ for instance, and that he thus believes that the value of his entitlement is $0.50$. By retaining and exercising his right, the junior creditor will be able to capture a value
which in his own eyes will be equal to his entitlement. If other parties are more optimistic and have higher estimates of $V$, however, the creditor will be able to capture a value that exceeds in his eyes the value of his entitlement. For if other parties are more optimistic, the market price of type-B rights will exceed $0.50, and the creditor will be able to sell his right, which has a value of $0.50 to him, for this higher market price.

Finally, if the junior creditor believes that $V$ exceeds $2$, then the value of his entitlement based on his own estimate of $V$ will be $1$ (a payment in full of his claim). If others also believe that $V$ exceed $2$, then, because type-C rights will be exercised, type-B rights will be redeemed at $1$ (and will trade at $1$ beforehand). In such a case, the creditor will end up with a value that equals in his eyes the value of his entitlement. But if others are more pessimistic and believe that $V$ is below $2$, then the participant's type-B right will not be redeemed; by exercising it, he will end up with a value exceeding in his own eyes the value of his entitlement.

E. **Note on Participants' Information and Financial Resources**

A question that some might raise, and which requires consideration, is whether one could object to the proposed method by arguing that participants lack sufficient information or financial resources.

(1) **Information**

Under the proposed method, as well as under the existing
process of division, participants must make decisions on the basis of whatever information they have concerning the reorganized company's value. Therefore, it is necessary to examine whether, in comparison to the existing process, the proposed method would raise the amount of information that participants need or would decrease the amount of information that they have.

The proposed method does not increase the participants' need for information. Under the existing process, each class of participants must make its bargaining and litigation decisions on the basis of whatever estimate of the reorganized company's value it happens to have. Assuming that participants will not have less information under the proposed method than under the existing process, they will be able to use the same estimate to make their decisions as to what to do with their rights.

Indeed, under the proposed method, participants will not even need to make a judgment, as they need to do under the existing process, concerning their best estimate of the reorganized company's value. They would just have to make the much more limited judgment of whether or not the reorganized company's value exceeds the estimate that is implicit in the market price of their rights (i.e., whether or not the value of their rights exceeds their market price).

Finally, there is no reason to assume that participants would have less information under the proposed method than under the existing process. Indeed, the proposed method would provide
an important additional source of information -- the market pricing of rights. To be sure, the proposed method could still reduce the amount of information that participants have if it would substantially decrease the extent to which participants take advantage of the available sources of information. Such a decrease might arguably take place because of collective action problems: since under the proposed method participants act individually rather than as a class, they may have less incentive or ability to look for information. But when there are some advantages to information acquisition by a class rather than individual participants, the proposed method does not prevent the utilization of such advantages: in such a case, the committee representing the class will likely engage in such information acquisition (say, by hiring an investment banker to do the job) and disseminate its conclusions to individual class members.

(2) Financial Resources and Willingness to Invest

Another possible objection to the method arises from the fact that the method will require some participants to invest in the enterprise in order to capture the value to which they are entitled. Participants in an insolvent company, so the argument might go, might reasonably be reluctant to make such an investment or might lack the financial resources needed to do so.

It should initially be noted that most participants would not need to put in any money to capture the value of their entitlements. For one thing, many participants will have their rights redeemed by the company. Furthermore, participants whose rights are not redeemed by the company still would not have to
put in any money if they believe that the market does not underestimate the reorganized company's value; for they would be able to capture the value to which they are entitled by selling their rights on the market. Thus, a given participant will need to invest money to capture the value of his entitlement only when the company does not redeem his rights and he believes that the market underestimated the reorganized company's value.

Consider a junior creditor in our example who believes that \( V \) is $1.50 (i.e., that buying an RC unit at $1.50 would provide an "adequate" rate of return) -- and who thus believes that he is entitled to $0.50. Suppose also that the market estimates \( V \) to be only $1.30 and thus prices the creditor's type-B right at $0.30. The creditor would be able to capture the value to which he is entitled only if he puts out the $1 necessary to exercise his right.

Let us first suppose that the amount at stake would constitute a small fraction of the creditor's wealth. In such a case, the creditor's need to put in a $1 would not provide him with a basis for complaining. For if \( V \) is equal to $1.50, then, from his perspective, purchasing a unit worth \( V \) for $1 must be equivalent to getting $0.50. Purchasing a unit for $1 is equivalent to receiving $0.50 plus being required to purchase an RC unit for $1.50. And given that the amount at stake is small, and that the creditor values the RC unit by $1.50, the participant should be indifferent to being required to purchase a unit for $1.50.

Thus, if the amounts that participants need to invest to
exercise their rights are small relative to their wealth, which I suspect is the case for most participants in reorganizations of publicly traded corporations, then the need to invest would pose no problem. If participants' wealth is not sufficiently large relative to the amount at stake, however, problems might arise. Suppose, for instance, that the junior creditor in the example discussed above does not have the $1 necessary to exercise his right. In such a situation, the creditor might complain that his lack of funds might force him to sell his type-B right and, given the undervaluation of RC's units by the market, he would end up with only $0.30 rather than the $0.50 to which he believes he is entitled.

Even when such a problem does arise, it can be eliminated or much alleviated by the creditor's ability to borrow. In a well-functioning capital market, the creditor's borrowing power would be augmented by his ability to use as a collateral the very RC unit that he would buy. In the example under consideration, if the market estimates the value of an RC unit at $1.30, then a junior creditor would still be able to borrow the $1 necessary to exercise his option by pledging the purchased RC unit as a collateral.38

In sum, although the need to invest funds does pose some problem to the effectiveness of the proposed method, this problem

38. Lack of sufficient financial resources, then, might pose a problem only if the market's estimate of V is lower not only than the creditor's estimate but also than the $1 that the creditor would need to exercise his right. For if the market estimates V at $0.80, then the junior creditor will not be able to borrow the full amount necessary to exercise his right by pledging the unit as a collateral.
appears to be quite limited. Most participants will not need to invest any amount to capture the value to which they are entitled, because their rights will be either redeemed or sufficiently valued by the market. Furthermore, those who will need to invest will have no basis for complaining as long as the amount at stake is small relative to their wealth. Finally, as to those whose rights will be neither redeemed nor sufficiently valued by the market and whose wealth is not sufficiently large relative to the amount at stake, any problem resulting from the need to invest will be mitigated by their ability to borrow.

IV. IMPLEMENTATION

A. Under a New Reorganization Regime

The proposed method of division is put forward as the basis for a recommended reform of reorganization law. The optimal reorganization regime, I suggest, is one that would require and facilitate the use of this method in every case of reorganization.

The new reorganization regime would of course include, as any reorganization regime must, a preliminary process of determining the size and ranking of participants' claims; this process might be straightforward some times but complex and time-consuming at other times. Once the participants' claims are identified, however, the process of division would proceed smoothly and quickly.

Although the process of division would largely follow automatically from the method's principles, a reorganization plan
would be necessary to determine some limited elements of the reorganized company's features. In particular, the plan would determine the capital structure that the reorganized company is going to have. 39 There are several possible parties who might be charged with putting forward the reorganization plan. Possible candidates include a trustee appointed by the supervising court, incumbent management (which presumably represents the equityholders), or the committee representing a certain class of creditors. Note that assigning the role of designing the plan to a given class of participants would not create a conflict-of-interest problem. Given how the proposed method operates, the choice of capital structure cannot be used to divert value from one class of participants to another. Therefore, in choosing the capital structure, the party charged with designing the plan, would aim solely at maximizing the value of the reorganized company.

Because of the limited elements that the reorganization plan would cover, designing it and receiving the court's confirmation of it would presumably take relatively little time. Once the capital structure is specified, the division would proceed automatically and swiftly: rights to the reorganized company's securities will be distributed to participants in accordance with the method, the securities will be distributed shortly afterwards, as the rights are exercised, and the company will be out of the reorganization process, hopefully on its way to a

39. As Section V will explain, the plan might also include few other elements such as the treatment of secured claims and the reinstatement of some contracts with favorable terms.
bright future.

This regime would best address the efficiency and fairness problems that have thus far afflicted the division process in corporate reorganizations. First, the outcome would be always in accordance with the entitlements of all the participants involved. Second, the choice of capital structure would be shaped solely by judgments concerning which structure would be value-maximizing. Third, the delay and litigation costs in the new regime would be the smallest possible under any reorganization regime (largely consisting only the unavoidable delay and costs involved in determining the size and ranking of claims).

B. Under Existing Law

The proposed method might be useful even under the existing reorganization rules. Some parties should find it in their interest to use the method as a basis for reorganization plans that they file.

Under the existing rules, the equityholders usually have for a specified period of time the exclusive right to file (and seek confirmation of) a reorganization plan.40 Subsequently, any participant may file a reorganization plan.41 To obtain confirmation of a reorganization plan, its proponents must achieve, for every class, either (i) acceptance of the plan by the class, or (ii) if the class objects, a judicial overruling of the objection on the grounds that the plan provides the class


with no less than its entitlement. Achieving either (i) or (ii) is often problematic or at least time-consuming: getting a class to accept a plan involves the complications of bargaining; and seeking a judicial determination that the plan provides a class with the value to which it is entitled involves the difficult problems of valuation.

Once the period in which the equityholders have exclusive right to propose plans has passed, it would be in the interest of the senior creditors to file a plan based on the proposed method. The proposed method would provide the senior creditors either with the full value of their claims or at least with all of the reorganized company's securities, and that is all they can hope for. Furthermore, they would be able to secure confirmation of such a plan relatively quickly; given the way in which the method is designed, they should face no difficulty in demonstrating to the court that their plan would provide all other classes with no less than that to which they are entitled.

Using the method would free the senior creditors from the threat of strategic behavior by participants junior to them. At present, juniors might seek to get more than the value to which they are entitled by threatening to oppose the plan create dragged-out litigation. Using the proposed method would eliminate this threat, because it would enable the senior creditors to demonstrate easily that their plan would provide all participants with a value consistent with their entitlements.

If parties do use the proposed method in their confirmation

42. See 11 U.S.C. 1129 (1978); Trost, supra note 13, 1328-1344.
plans, then some of the potential social benefits of the method will occur already under the existing rules. First, and most important, outcomes would come closer to those suggested by the participants' entitlements. Second, parties using the method as a basis for their reorganization plan will choose a capital structure solely on the basis of their judgment as to which structure would be value-maximizing. Third, delays and litigation costs will significantly decrease.

V. EXTENSIONS

The analysis in Sections II and III used for convenience of illustration an example with certain simple features. This Section drops the simplifying assumptions used in constructing that example and considers four important complications that are present in reorganizations. I first show how the method can be easily adjusted to apply to situations where there are more than three classes. I then discuss three issues that might arise and require treatment under any reorganization regime -- contracts with favorable terms that are worth reinstating, secured claims, and concentration of claims in one hand. As I will explain, the proposed method of division is consistent with any way that reorganization law might wish to treat these issues. Consequently, the potential presence of these problems does not undermine my earlier conclusion that the proposed method offers the best way of dividing the reorganization pie.

A. More than Three Classes

The example used has been of a company with three
consecutively ranked classes, each with 100 units of membership. The method, however, can be easily applied in the general case of a company with any number of consecutively ranked classes, each one with any number of membership units. Describing the operation of the method in general terms, applicable to any such case, the rights distributed to participants would be as follows.

Each unit of membership in the most senior class will entitle its holder to receive a right that may be redeemed by the company for the participant's prorata fraction of the class's total claim. If this right is not redeemed, it will entitle the holder to receive (without pay) his prorata fraction of the reorganized company's securities.\textsuperscript{43}

Each unit of membership in any intermediate class (any class below the most senior one and above the most junior one) will entitle its holder to a right which may be redeemed by the company for the participant's prorata fraction of the class's total claim. If the right is not redeemed, it will entitle its holder to purchase his prorata fraction of the company's securities for a price equal to his prorata fraction of the total claim of the classes above his class.\textsuperscript{44}

\textsuperscript{43}. For example, if the senior class includes 250 units and its total claim is for $1,000, then each member of the class will receive, per unit of membership, a right that may be redeemed by the company for $4 and, if not redeemed, will entitle the holder to receive 1/250 of the reorganized company's securities.

\textsuperscript{44}. Consider, for example, a situation in which the total claim of a given intermediate class of creditors is $200 and the total claim of the classes preceding it equals $540. In this case, any member of this intermediate class will receive, for each $1 debt that he is owed, a right that may be redeemed by the company for $1 and, if not redeemed, will entitle him to purchase 1/200 of the company's securities for a price equal to $2.70.
Finally, Each unit of membership in the class of residual claimants (the most junior class) will entitle its holder to receive a right that may not be redeemed by the company. This right will entitle the member to purchase his prorata fraction of the company's securities for a price equal to his prorata fraction of the total claim of all the classes preceding the residual claimants' class.\textsuperscript{45}

B. Contracts with Favorable Terms

Prior to entering the reorganization stage, a company presumably has a whole set of outstanding contracts. To the extent that such contracts are breached or discontinued by the reorganization process or by preceding events, the other parties to the contracts are likely to have claims against the company. Some of the contracts, however, might be at terms which appear favorable to the company, given the information available at the reorganization stage. The breach or discontinuation of these contracts will not be in the interest of any participants except the parties to the contracts; the pie available to other participants will be maximized by "reinstating" these contracts, that is, by having the reorganized company maintain them.

A typical case of a contract that is worth reinstating is one providing the company with a long term loan at an interest

\(\text{(1/200 of the total preceding claims of $540).}\)

\textsuperscript{45} For example, suppose that the total claims of the classes preceding the residual claimants' class are $2,000 and that the residual claimants class includes 200 units. Then, each unit in this class will entitle the holder to a right to purchase 1/200 of the reorganized company's securities for $10.
rate that at the time of reorganization appears favorable to the company. Consider a company that took from a bank a $100,000 long term loan with an interest rate of 5%, and suppose that by the time of the reorganization interest rates went up to %10. In this case, the bank might wish to have the loan declared in default and consequently get a claim of $100,000 against the reorganizing company. But the pie available to the other participants might well be maximized by reinstating the loan contract, because, with the 5% interest rate of the contract, the present value of the future installments on the loan will be much less than $100,000.

Any reorganization regime must determine the extent to which, and the conditions under which, the reinstatement of contracts is allowed.46 Existing reorganization law, for example, includes a detailed arrangement concerning the possibility of reinstating some contracts; participants whose contracts with the company are reinstated do not need to approve the reorganization plan because their claims are "unimpaired."47

Whichever approach we wish reorganization law to take to the issue of reinstating contracts, the operation of the proposed method of division would be consistent with that approach. Given the regime's rules concerning which contracts can be reinstated, the reorganization plan filed under the proposed method would specify those contracts which the plans designers elected to reinstate (as well as the means of reinstating them). For the

46. For a discussion of some policy issues which are involved in this determination, see Jackson, supra note 7, at 35-44.

47. See the Bankruptcy Act, Sections 1124 & 1126(f).
reasons noted earlier, the designers of the plan would presumably choose to reinstate only those contracts whose reinstatement will maximize the reorganized company's value. The other parties to the reinstated contracts will thus have claims that are not impaired and they will therefore not participate in the division of rights; but the reorganized company will be subject to the reinstated contracts, and the value of its securities will be affected by this fact. The division of rights with respect to these securities among the participants whose claims are impaired would then proceed smoothly according to the proposed method.

C. Secured Claims

Thus far the analysis has assumed that a given priority of a claim over other claims is necessarily with respect to all the assets of the debtor company. Some claims, however, are secured claims, which means that their priority over other claims is with respect only to a specific subset of the reorganized company's assets. Secured claims are often present in reorganizations.

In the presence of secured claims, any reorganization regime (and indeed any liquidation regime as well) must resolve two issues. First, the regime must choose a method for deciding whether a claim secured by a given asset is fully secured (a method which might include estimating the asset's value) and it also must choose, for claims which are not fully secured, a method for dividing these claims into fully secured parts and

48. See supra Section IV.A.
unsecured parts. Second, the regime must make a decision as to whether the holder of a secured claim has an in rem right to have the asset sold to pay his claim or only a right to be paid the appraised value of the asset. The existing reorganization regime includes an arrangement governing these issues, and commentators have been debating the merits of this arrangement as well as possible reforms of it.

Whichever arrangement is chosen for identifying and treating those claims that are fully secured, the proposed method of division should be consistent with it. The arrangement would govern the identification of fully secured claims and the treatment that such claims may receive under the reorganization plan. The units of the reorganized company's securities which would be then available for distribution would be divided among the holders of unsecured claims and interests according to the proposed method of division.

49. See the Bankruptcy Act, sections 506 & 1111.


51. If the necessary treatment requires or suggests making some immediate payments to the holders of the secured claims, then the reorganization plan might include provisions for selling assets or raising funds in some other way. For the reasons noted earlier, see supra Section IV.A, the designers of the plan would be presumably seek to adopt that allowable method of treating secured claims which will maximize the pie available to all the other participants.
D. Concentration of Claims in One Hand

The last complication to be discussed, which appears less frequently than those discussed above, is the possibility of a concentration of claims in one hand. Suppose, for example, that 60% of the units in class A in our example (the class of senior creditors) are held by a given bank. Then, if the rights are not redeemed by the company, the bank will get 60% of the units of the company's securities while the other members of the class will get 40% of these securities. The rights given to the bank would be thus worth more per right than those given to the other senior creditors, because shares in a controlling block are worth more than minority shares. Consequently, the value given to the senior class would be divided disproportionately, with the bank getting more than the value of its entitlement and the other members of the class getting less than the value of their entitlement.

Such a problems might arise, however, in any reorganization regime which divides the reorganized company's securities among the participants. If a division proceeds under the assumption that any two shares of the reorganized company are worth the same amount, and a concentration of claims leads to a given participant receiving a control block, then this participant would end up with more than he is entitled to while others would receive less than the value of their entitlement. Because the

52. Thus, for example, Roe, in discussing the reorganization regime that he proposed, recognized the existence of this problem. See Roe, supra note 8, at 575-76. Roe's suggested way of dealing with the problem is that which I endorse below.
problem might arise and require solution under any reorganization regime, its potential presence cannot weaken my earlier conclusion that the proposed method is the best way for dividing the reorganization pie.

Although the problem is unlikely to arise frequently and is in no way unique to the proposed method, I do wish to note what appears to be the best method of addressing it. If the exercise of rights provides someone with a controlling block of the reorganized company's equity, then the holder of this control block should be required to dispose of its controlling position—by selling enough shares to go below a specified control threshold—within a specified period of time. Under such a rule, those who exercise rights will be able to count on receiving shares that, at least after a specified period of time, will not be minority shares.

VI. CONCLUSION

This paper has put forward a new method of division for corporate reorganizations. The use of this method would eliminate certain efficiency and fairness problems that have long been viewed as inherent to the reorganization process. Under the method, once the size and relative priority of the participants' claims are determined, the division of the reorganization pie could be resolved quickly and efficiently— and in perfect consistency with the entitlements of all the participants. The method is put forward as a basis for recommended law reform: the optimal reorganization regime is one that would require and
facilitate the application of the proposed method in every reorganization case. Furthermore, the method could be used even under the existing legal rules, as a basis for reorganization plans that participants may want to file. It is hoped that the method will indeed prove useful to public officials overseeing corporate reorganizations and to participants in such reorganizations.
APPENDIX

The General Case

* There are \( n \) classes. They are numbered in the order of their priority; that is, for each \( i \), class \( i \) has the contractual right to come ahead of class \( (i+1) \). Class \( i \) has \( \mathbf{m}_i \) units.

* \( d_i \) is the amount that is necessary to pay class \( i \) in full. For each \( i=1,2,...,n-1 \), \( d_i \) is a positive and finite number. Because class \( n \) is the class of residual claimants, \( d_n = \infty \). (That is, as long as there is money left, it belongs to that class -- its claims can never be satisfied in full.)

* \( D_i \) is the sum of the full claims that come ahead of \( i \)'s claims.\[ D_i = \sum_{j=1}^{i-1} d_j. \]

* The reorganized company is going to have a given capital structure. The value that the company will have is \( V \).

Participants' Entitlements

(A) Entitlement of the Class.

Let \( E_i \) be the value to which class \( i \) is entitled. Since the class is not entitled to be paid more than in full, we have: \[ A-1 \]
(1) \[ E_i \leq d_i. \]

The class is also not entitled to anything before prior classes are paid in full, that is

(2) \[ E_i \leq \max(0, V-D_i). \]

Since \( E_i \) must satisfy the constraints (1) and (2)

(3) \[ E_i = \min(d_i, \max(0, V-D_i)). \]

(B) **Entitlement of Class Members.**

Let \( e_i \) be the entitlement of each unit in class \( i \). Since the units in the class should be treated equally, we have

(4) \[ e_i = (1/m_i)E_i = (1/m_i)\min(d_i, \max(0, V-D_i)). \]

The **Proposed Method**

Under the proposed method, class \( i \) is to get:

(5) a (call) option on the securities of the company with an exercise price of \( D_i \), short a (call) option on the securities of the company at \( (D_i+d_i) \).

[Because \( D_i=0 \), the option on which class 1 is long is an option with an exercise price of 0, an option which is equivalent to receiving all the company's securities. Because \( d_n=\infty \), the option on which class \( n \) is short is an option with]
an exercise price of infinity, an option that can be practically disregarded.]

Further, the value provided to class i by the method is to be divided equally among the units of the class. Thus, each unit of class i is to get:

(6) a (call) option on $1/m_i$ of the company's securities at $(1/m_i)D_i$, short a (call) option on $1/m_i$ of the company's securities at $(1/m_i)(D_i+d_i)$.

Effectiveness of the Proposed Method

(A) Feasibility

It is clear that the options to be given and written by the reorganized company add up to its securities. For each i, the option on which class i is short is that on which class (i+1) is long. And the option on which class n is short is practically irrelevant.

(B) Consistency with Participants' Entitlements

The value of an option to buy the securities of the company at $D_i$ is equal to $\max(0, V-D_i)$.

The cost of being short an option on the company's securities at $(D_i+d_i)$ is $\max(V-D_i-d_i, 0)$.

Subtracting the latter figure from the former figure gives the value of the rights given to the class, which is
(7) \[ \min(d_i, \max(0, V-D_i)). \]

And (7) is also the value to which class \( i \) is entitled (see (3)).

Similarly, the value of the rights given to each unit of class \( i \) is equal to

(8) \[ \frac{1}{m_i} \min(d_i, \max(0, V-D_i)). \]

And (8) is also the value to which each unit of class \( i \) is entitled (see (4)).