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THE ECONOMICS OF BANKRUPTCY REFORM

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ABSTRACT

We propose a new bankruptcy procedure. Initially, a firm's debts are cancelled, and cash and non-cash bids are solicited for the "new" (all-equity) firm. Former claimants are given shares, or options to buy shares, in the new firm on the basis of absolute priority. Options are exercised once the bids are in. Finally, a shareholder vote is taken to select one of the bids.

In essence, our procedure is a *variant on the U.S. Chapter 7, in which non-cash bids are possible;* this allows for reorganization. We believe our scheme is superior to Chapter 11 since it is simpler, quicker, market-based, avoids conflicts, and places appropriate discipline on management.

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1. Introduction

Following the rapid demise of socialism, Eastern European countries have been grappling with the question of what kind of market economy is best suited to their future needs.[1] Should they incorporate capitalism whole-sale, and, if so, which kind: American, European, Japanese, or some new version? How should problems of the transition be handled? What kinds of institutional structures and laws are most appropriate for their situation?

This paper is concerned with an aspect of this last question: the choice of bankruptcy law. The decision facing Eastern European countries on this question is both important and far from straightforward. It is generally recognized by economists and lawyers in the West that bankruptcy law has an important role to play in ensuring a timely resolution of the problems of insolvent or financially distressed firms and a socially efficient disposition of such firms' assets. Yet both practitioners and academics are dissatisfied with current Western procedures, which are regarded either as favoring the piece-meal liquidation of healthy firms (in the case of Chapter 7 of the U.S. Bankruptcy Code, or the receivership system in the U.K.) or as being administratively very inefficient and costly (in the case of Chapter 11 reorganizations in the U.S.). Nor is there any consensus about how to improve these procedures. Thus it is far from obvious that Eastern European countries should simply pick "the best available Western procedure" (whatever that may be).

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[1] Throughout the paper, "Eastern Europe" will be a short-hand for "Eastern Europe and the former Soviet Union".

In this paper, we propose a new bankruptcy procedure which we believe avoids some of the main pitfalls of existing procedures. The procedure is a simple one. First, when a firm goes bankrupt, all of the firm's debts are cancelled; and an individual -- a judge, say -- is appointed to supervise the procedure. The judge has two immediate tasks. (A) He (or she) must solicit cash and non-cash bids for all or part of the "new" firm. (B) He must allocate rights to the shares in this new firm: each former claim-holder is either allocated equity in the new company (in the case of senior creditors) or given an option to buy equity (in the case of junior creditors or shareholders), according to the amount or priority of his (or her) claim.[2] These two tasks could be carried out in parallel, and completed within a prespecified period of time: e.g., three months. After this, in the light of the bids received, there is a further short period (of a month, say) in which people can exercise (and even trade) their options. Finally, the shareholders (recall that all claim-holders are now shareholders) vote on whether to select one of the cash bids or to maintain the company as a going concern (either under existing management or under some alternative management team). The firm then exits from bankruptcy.

In essence, our proposed scheme is a decentralized variant on Chapter 7, in which *non-cash* (as well as cash) *bids are allowed*; and *ownership of the firm is homogenized* (to all equity), so that *the owners can decide* (by vote) *which of the bids to accept*. What is less essential to our scheme is the precise mechanism by which equity is allocated; in Section 8 below we present

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[2]The precise allocation scheme -- which preserves absolute priority -- is based on an idea of Lucian Bebchuk (1988).

some alternative mechanisms for allocating equity which are simpler than using options.

We believe that this procedure is relatively easy to implement and avoids the main disadvantages of existing procedures. First, it eliminates costly bargaining between various creditor groups, and the large legal fees and expensive use of court time which are the feature of many Chapter 11 proceedings. Second, the mechanism is not biased in favor of maintaining the firm as a going concern under incumbent management, again as many commentators feel that Chapter 11 is. In fact, we believe that, in practice, if an attractive outside offer is made for part or all of the company, it is likely that shareholders will vote to sell or liquidate the company. Third, however, the procedure gives claim-holders the option of maintaining the firm as a going concern if the company's bad fortunes are the result of bad luck rather than bad management.

It should be noted that our procedure is designed to be effective in the new post-transition-to-capitalism Eastern Europe, rather than being concerned directly with the transitional process itself. However, we will argue in Section 10 that in certain cases it may help to bring about this transition. Also, while the stimulus for this proposal comes from the current situation of Eastern European countries, we should emphasize that the proposal is potentially just as relevant for Western countries which are trying to improve existing procedures.

The paper is organized as follows. In Section 2, we examine the need for a statutory bankruptcy procedure. Section 3, which may be skipped on first reading, looks at how existing procedures operate, with particular

reference to Chapters 7 and 11 of the U.S. Bankruptcy Code (amended in the Bankruptcy Reform Act of 1978) and to the 1986 U.K. Insolvency Act. Section 4 sets out a number of desiderata for a bankrupcty procedure, which, it is argued, are not satisfied by the existing rules. In Section 5, we propose a new procedure which does meet the goals prescribed in Section 4. Some simple examples are given in Section 6. We make an assessment of our scheme in Section 7. Section 8 presents some simpler, alternative mechanisms that might be used for allocating equity. We discuss in Section 9 certain key ancilliary issues, such as claims disputes, the treatment of secured creditors, and the need for debtor-in-possession financing. Section 10 raises some basic questions concerning the feasibility of our scheme in the current environment of Eastern Europe. In an Appendix, we briefly survey what is happening now in certain East European countries.

2. The Role of Bankruptcy Procedure

It is generally accepted by lawyers and economists that the state has an important role in enforcing private contracts. The point is that while, ex-ante, parties may find a contractual arrangement mutually beneficial, ex-post one party may have an incentive to breach. Thus, it is in the ex-ante interest of all parties that a third party, e.g. the state, has the power to enforce contractual performance or to compel the breaching party to compensate the victim by paying money damages.

A debt contract is a particular kind of contract where one party, the debtor D, borrows money from another party, the creditor C, and, in return, promises C a (typically larger) payment in the future. If D defaults (i.e.

breaches), C has two main remedies at his disposal (outside bankruptcy). First, in the case of a secured loan, C can seize the assets which serve as collateral for the loan. Second, in the case of an unsecured loan, C can sue D and can call on the clerk of the court and others (such as the sheriff) to enforce the court's judgment. Enforcement of the judgment may involve foreclosing on real property, physically seizing (or "levying upon") personal property, or requiring some third party (such as an employer) to pay part of what it owes the debtor directly to the creditor.[3]

This method of debt collection seems fairly uncontroversial when there is only a small number of creditors or when the debtor has sufficient assets to cover his liabilities.[4] However, problems arise if there are many creditors and the debtor's assets are less than his liabilities (i.e. he is insolvent). Under these conditions, as Jackson (1986) among others has emphasized, uncoordinated debt collection by the various creditors can be very costly. First, creditors will expend resources trying to be first to seize their collateral or to obtain a judgment against the debtor. Second, this race by creditors to be first may lead to the dismantlement of the firm's assets, and to a loss of value for all creditors if the firm is worth more as a whole than as a collection of pieces.

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[3]See p. 2 of Baird and Jackson (1985).

[4]An exception should be mentioned. This is where the debtor is an individual whose wealth would be reduced to close to zero if creditors could seize his assets. Part of (personal) bankruptcy law is concerned with providing such individuals with protection from their creditors. In this paper we will be interested in the debts of firms not individuals and so will not deal with this issue directly.

Given this, it is in the collective interest of creditors -- and society too -- that the disposition of the debtor's assets should be carried out in an orderly manner, via a centralized bankruptcy procedure.

Of course, in an ideal world, there would be no need for the state to set up its own bankruptcy procedure: individuals could do it by themselves via a contract. That is, a debtor who borrows from a creditor could specify as part of the debt contract how his assets will be divided between various creditors (and the debtor himself) in the event of a default or insolvency, who will supervise the division process, etc. Writing such contracts is likely to be very difficult and costly, however, particularly since the debtor may acquire different types of assets and new creditors as time passes, and it may be very hard to specify how the division process should change as a function of such developments. Moreover, in practice contracts like this are not written.[5] Thus it seems likely that many parties will choose to take advantage of the bankruptcy mechanism provided by the state; moreover, even if, by some chance, a substantial number of parties choose to make their own arrangements, society must still deal with those parties who make no arrangements at all.[6]

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[5]Of course, this may partly be because current laws do not allow parties to opt out of the state's bankruptcy procedure.

[6]Of course, it does not follow from this that the costs of providing a bankruptcy mechanism for firms in financial distress should be paid for out of general taxation; arguably firms which want to take advantage of such a mechanism should be forced to pay a fee (presumably before they get into financial distress!).

3. Existing Bankruptcy Procedure

Having analyzed the rationale for a bankruptcy procedure, we next discuss how existing bankruptcy procedures operate. (Readers who are primarily interested in learning about our proposal may wish to turn directly to Section 4.) In the main, we shall focus our discussion on Western law (in particular, on U.S. and U.K. law). But in the Appendix we briefly survey what is happening now in certain of the countries of Eastern Europe; we shall argue that their actual and proposed new procedures fall foul of the same criticisms that we level against the present arrangements in the West.

If the only problem with a standard debt collection scheme were that it led to inefficient "grab" behavior by creditors, then the obvious solution would be for a trustee or receiver to supervise the sale of the firm's assets and distribute the proceeds according to the priority of creditors' claims. This is essentially a description of Chapter 7 in the U.S. code, and of U.K. bankruptcy law prior to the 1986 Insolvency Act (the 1986 Act allows for reorganization, but this possibility has not been used very much).[7]

A widespread concern with a Chapter 7 type proceeding, however, is that viable companies will be sold off at a substantial discount in a piece-meal liquidation. Some law and economics scholars (e.g. Baird (1986)) have argued that this concern is misplaced because there is nothing to stop someone

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[7] The German bankruptcy code also has the flavor of Chapter 7, in that it favors liquidation over reorganization. A debtor firm can avoid liquidation only if at least 35% of its creditors can be repaid in cash and the reorganization plan is approved by 3/4 (in value terms) of the unsecured creditors. See, for example, Mitchell (1990).

bidding for the company as a going concern: if the whole is really worth more than the parts, then a bid for the whole will dominate a set of independent bids for the parts. These scholars have gone on to argue that because of this Chapter 7 is indeed the best bankruptcy procedure: it is simple, it avoids protracted bargaining and litigation, and it leads to an efficient outcome.

While the argument of these scholars has some merit, the conclusion that a competitive auction will inevitably lead a firm to be sold to the highest willingness-to-pay bidder at its (maximized) value is extreme. Auctions work well if raising cash for bids is easy and there is plenty of competition among several well-informed bidders. However, even in the most advanced Western economies, these conditions will often not be met, and they are even less likely to be satisfied in Eastern Europe.[8]

Consider first what we shall call the "financing problem". Imagine that a huge company like IBM were put on the block. Say that the expected present value of IBM's earnings is $100 billion. Would any bidder be prepared to bid this much for the company? The answer to this question might well be no for two reasons. First, it may be very difficult and costly for a bidder to raise $100 billion in a short time. Second, even if a few

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[8]One might ask why it matters how much shareholders and creditors receive in an auction as long as the firm's assets end up in their highest value use. There are two reasons why shareholder and creditor receipts do matter. First, the more the firm's claimants receive in bankruptcy states, the more the firm's claims will sell for initially and the greater the incentive the firm's founders will have in setting up the firm. Second, in the absence of a competitive auction, the winning bidder may not be the highest value user of the firm's assets, i.e. a competitive auction serves an important screening role in ensuring that the assets are indeed transferred to their best use.

incredibly rich people, say, could get together and put their hands on $100 billion, making a bid for the company at this price would be very risky. This is clear if the individuals hold on to the stock themselves since their portfolios would be undiversified. However, it is also true if they plan to sell their shares back to the public at a later date. By this time, IBM's prospects might have changed for the worse and these individuals might suffer a large capital loss.[9]

One way to reduce this financing problem is to allow bidders to pay for the firm in kind, i.e. to offer the firm's old claimants (creditors and shareholders) securities in the post-bankruptcy firm rather than cash. This is not allowed for in current Chapter 7, but is a key feature of the procedure we propose in Section 5.

Of course, few companies are as big as IBM and, for a smaller company, bidders may be prepared to offer something much closer to the "true" value of the company in cash. However, particularly in countries whose capital markets are still developing, such as those of Eastern Europe, a firm may not have to be that big for the kinds of imperfections described above to become an issue.[10]

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[9]The costs of financing a cash bid are presumably akin to the costs of a firm initially going public, which can be significant. For example, Ritter (1987) investigates two quantifiable components of the costs of going public: direct expenses and underpricing. From a sample of 1028 firms that were taken public by investor bankers in the U.S. during 1977-1982, he finds that these two costs together averaged between 21% and 32% of the realized market value of the securities issued.

[10]Of course, it is possible that the piece-meal liquidation value of a company like IBM exceeds its going concern value. This could happen if IBM is inefficiently large, but incumbent managment has been unwilling to split up the company, possibly because it enjoys the perquisites of power. Under these conditions, a Chapter 7 auction is an extremely efficient way of

A second reason for doubting the efficiency of a Chapter 7 proceeding concerns what we shall call the "absence of competition problem". Imagine that there are many potential bidders who can raise the funds for a bid. Preparing a bid is a time-consuming process: the company concerned must be studied, information must be acquired about how to run it efficiently, the financial structure for the post-bid firm must be decided on, funds must be raised, lawyers must be consulted, etc. The cost of all this activity is considerable, particularly to the extent that incumbent management is not available to provide information about the firm's operations (it may be part of a rival bidding team or not part of any team at all).[11]

Unfortunately, only one bidder is going to be successful in its bid for the firm. Thus at most one bidder will recoup its bidding costs -- the rest will make losses. This fact limits the number of bidders who will enter the bidding process in the first place. In fact in extreme cases it may be an equilibrium for just one bidder to enter the auction and win with a low price, with other bidders being deterred from entry by the fact that entry would cause such a fierce competition that all bidders would make losses.[12]

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realizing value for creditors and shareholders.

[11]For a compelling discussion of the cost of a bidding process, see Burrough and Helyar (1990) on the RJR Nabisco leveraged buy-out.

[12]As Shleifer and Vishny (1991) have recently pointed out, both the "financing problem" and the "absence of competition problem" are likely to be exacerbated to the extent that the natural bidders for a bankrupt firm are other firms in the same industry; these firms may also be suffering financial distress and may therefore find it hard to raise capital. Their point is supported by evidence from Section IV of LoPucki and Whitford (1992), who find that in the forty three largest Chapter 11 bankruptcy cases between 1979 and 1988, all asset sales were to existing companies, usually within the same line of business; there were no new companies formed.

There is another reason why a competitive auction may fail to extract the full value of the company for security-holders: management (or workers) can use any specific skills it has, or special information it has about how the firm is or should be run, to extract rents. For example, suppose the going concern value of the firm is $100 billion, and its piece-meal liquidation value is $50 billion. Assume that incumbent management is essential to realize the additional $50 billion in value. Then management, in cooperation with an investment bank, say, can make an offer for the firm at (just over) $50 billion, and keep the extra $50 billion for themselves. This leads to a socially efficient outcome -- the firm is maintained as a going concern rather than being liquidated -- but shareholders and creditors between them receive only the firm's liquidation value.[13]

A final theoretical point should be borne in mind when assessing Chapter 7. In the case of a private company, the idea that a default or bankruptcy should trigger a forced sale of assets has some attractions (even if it is not always optimal): if the assets were not transferred to the creditors, the debtor would have little incentive to pay his debts. However, the idea is much less persuasive in the case of a public company. In the typical U.S. or U.K. - style public company, the group running the company -- management -- has only a small ownership stake in the company even outside bankruptcy. Thus, the company is effectively up for sale at all times:

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[13]Of course, one could ask why, if management is so crucial to the firm's operations, it cannot extract a large part of the surplus outside bankruptcy, i.e. why the going concern value is not $50 billion in the first place. One answer is that if management paid itself 1/2 of the firm's value, it would be subject to law suits by shareholders for breach of fiduciary duty.

someone can take over the company by making a bid for the firm's shares and votes. Why then should a new method of putting the firm up for sale -- an auction for the firm's assets -- be appropriate in bankruptcy? To put it slightly differently, if an auction for the firm's assets were such a good way of realizing value for security-holders, we might expect firms' corporate charters to dictate that they should be put on the block periodically (every one, two or five years, say), regardless of whether they have defaulted on their debts. As far as we know, however, no company is set up in this way, suggesting that owners of firms are less confident of the efficacy of auctions than are some scholars.

It is important to realize that the fact that Chapter 7 can lead to a suboptimal outcome does not by itself prove that it is a bad bankruptcy mechanism. After all, if Chapter 7 is inefficient, there is nothing in principle to stop the interested parties from renegotiating to avoid it. In fact, this is exactly what we see in pre-bankruptcy work-outs between firms and their creditors. However, such work-outs fail more often than they succeed, particularly in the case of public firms with many creditors.[14] Since these firms are also the ones where the "financing problem" discussed above is likely to be particularly serious, there is some reason to believe that Chapter 7 is particularly inappropriate for large, public companies.

If Chapter 7 cannot be relied on, what are the other possibilities?

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[14]See, for example, Gilson, John and Lang (1990), who studied a sample of 189 exchange-listed companies that were in severe financial distress during 1978-1987. They find that firms are more likely to restructure their debt privately if they owe more of their debt to banks, and have fewer creditors. (Also see Gilson (1991), for an attractive overview.)

The leading alternative to Chapter 7 in the West is Chapter 11 of the U.S. bankruptcy code. Chapter 11 is an attempt to encourage the maintenance of firms as going concerns. The details of the procedure are complicated, but the basic idea is that there is an automatic stay on debt repayments, creditors are grouped into classes according to the type of claim they have (secured or unsecured, senior or junior, etc.), shareholders are grouped into another class, committees or trustees are appointed to represent each class, and then a process of bargaining among the committees begins to determine how the firm's value should be divided up between the classes. This process, which sometimes lasts for a period of years, is supervised by a bankruptcy judge. During it, incumbent management usually runs the firm, and incumbent management is also usually given the exclusive right to make reorganization proposals for a period of time (120 - 180 days, but this is often extended). For a plan to be agreed to, it must in usual circumstances receive approval by a two-thirds majority in value terms, and a simple majority in number terms, of each debt class, and a two-thirds majority of equity -- although under certain circumstances a plan can be forced on a class (the cram-down provision). Any creditor who can establish that he would receive more in a Chapter 7 liquidation than in a proposed plan can veto the plan. Note that there is nothing to stop the firm's security-holders from eventually agreeing to liquidate the firm; and in fact a significant number of Chapter 11 bankruptcies do end up in this way.[15]

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[15]According to Flynn (1989), only 17% of Chapter 11 bankruptcies filed prior to 1987 resulted in a confirmed plan; and of these, some were liquidation plans rather than reorganizations. LoPucki (1983) finds a somewhat higher figure: from a study of the fifty seven Chapter 11 cases filed in the Western District of Missouri during the first year (1979/1980) of the new Bankruptcy Code, he concluded that about a third of the firms were still in business some 2-3 years after bankruptcy.

It appears that for large firms, the picture is quite different. LoPucki and

There are many well-known problems with Chapter 11. To mention a few: first, the procedure involves significant legal and administrative costs.[16] Second, the procedure can take a great deal of time[17] -- not least because management has so much de facto power over creditors, and it is not in management's interest to hasten proceedings if they are likely to end in liquidation.[18] During this time, there can be a serious loss in value --

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Whitford (1991) look at the seventy four largest Chapter 11 reorganizations filed between 1979 and 1988, and find that around 90% of them resulted in confirmation of a plan. It must be pointed out, though, that there is a great deal of liquidation under the guise of a "successful reorganization". LoPucki and Whitford (1992) estimate that on average up to half of the assets were in fact liquidated in the forty three largest Chapter 11 bankruptcy cases between 1979 and 1988 -- viz., those worth $100 million or more in publicly traded securities.

[16]Perhaps the best available current estimates of these (direct) costs are those made by Weiss (1990); he found that in a sample of thirty seven New York and American Stock Exchange firms that filed for bankruptcy between 1979 and 1986, direct costs averaged 3.1% of the book value of debt plus market value of equity measured at the fiscal year-end prior to the bankruptcy filing. (See also White (1983), Altman (1984), Eisenberg (1987) and James (1991).)

Although these direct costs appear low, three points should be borne in mind. First, ratios of only 3% can actually correspond to very large sums of money, given the size of the firms. Second, the denominator (pre-bankruptcy value) may be misleadingly large. Third, and most importantly, these administrative/legal costs may be only a small part of the overall costs; see below.

[17]Flynn (1989) finds that nearly two-thirds of Chapter 11 confirmations occur in the second and third years after filing. LoPucki and Whitford (1992) find that the largest bankruptcy cases ($100 million plus) spend an average of between two and three years in Chapter 11. Gilson, John and Lang (1990) report a similar figure for 89 exchange-listed companies in Chapter 11 between 1978 and 1987. For much smaller firms, the average period is just under a year; see LoPucki (1983) and Kerkman (1987).

[18]LoPucki (1983), from his analysis of (relatively small) Chapter 11 bankruptcy cases in Missouri, concluded that "the debtors studied were almost invariably able to continue to operate in business as long as they chose to do so and were able to pay current expenses. Creditors were powerless to end the debtor's operations."

because of managerial distraction, incompetence or negligence; foregone investment opportunities; or a drop in demand (either because competitors behave more aggressively or because customers lose confidence).[19] Also, suppliers may be unwilling to extend credit.[20] Third, since individuals on shareholder and creditor committees own only a small fraction of the equity and debt themselves, they are unlikely to devote the socially efficient level of resources to figuring out what a good reorganization plan is (including what the post-bankruptcy financial structure of the firm should be).[21] Given that management is already better informed, this incentive problem serves only to tilt the balance of power still further towards management. Fourth,

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Weiss (1991), in a study of the Eastern Airlines bankruptcy case, quotes a creditor lawyer who complained of management's ability to extend the exclusive period of 120 days in which only it can make reorganization proposals: "Extending the exclusive period makes it almost impossible to negotiate with a debtor. The time value of money will bring creditors to their knees, forcing them to capitulate."

[19]A spectacular example of loss in value is provided by Eastern Airlines, which suffered losses of around $1.6 billion while in Chapter 11 from March 1989 until being finally wound up in January 1991. Weiss (1991) concluded that "Eastern is a prime example of a bankruptcy gone wrong". Cutler and Summers (1988), in examining the Texaco Chapter 11 bankruptcy (resulting from the Texaco-Pennzoil litigation), discovered losses of over $3 billion, which may be attributable to the costs of financial distress. Other studies of the (indirect) costs of financial distress include Baldwin and Mason (1983), Altman (1984), White (1983) and Wruck (1990).

[20]Roe (1983), footnote 2, cites the cases of Food Fair Inc., Wickes, and AM International, in which customers and, particularly, suppliers, refused to trade with the companies after they had filed for bankruptcy, causing serious revenue losses.

However, the opposite can be argued: Chapter 11 plays an important role in facilitating debtor-in-possession financing, whereby suppliers' credit is placed ahead of existing senior debt. (For more on debtor-in-possession financing, see Section 9(iv) below.)

[21]Weiss (1991) argues that in the case of Eastern Airlines, many of the creditors' representatives had vested interests in maintaining the airline as a going concern.

Chapter 11 places considerable discretion in the hands of the judge, who may misuse it.[22] Finally, it should be borne in mind that even an apparently efficient Chapter 11 proceeding -- one that is fast and cheap -- may in fact be highly inefficient because the firm may emerge with an inappropriate financial structure.[23]

For all these reasons, Chapter 11 is thought by many to be a wasteful process, which biases the bargaining against creditors, favors reorganization rather than liquidation, and is at least in relative terms a soft option for

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[22]Weiss (1991) persuasively argues that the presiding judge in the case of Eastern Airlines was quite determined to maintain the company in business (despite huge losses incurred while in Chapter 11), and, moreover, to keep Eastern's CEO, Frank Lorenzo, in control. LoPucki and Whitford (1992, Section II.C) cite the Chapter 11 bankruptcy cases of Johns-Manville and Evans Products to demonstrate the exercise of judicial power at the extreme.

[23]For example, suppose it emerged as an all-equity company, under old management. This could be bad for the disciplining of management both in ex ante and ex post terms: management has not been penalized for bringing the firm into bankruptcy in the first place; and, since there is no debt left outstanding, management is not under any discipline from the threat of future bankruptcy. We discuss the importance of these disciplining effects further in Section 4.

management.[24,25,26]

An alternative to Chapter 11 is to put an administrator in charge of the firm during the bankruptcy process and give him authority to decide (in consultation with creditors) which parts of the firm should be sold off and which parts (if any) maintained as a going concern. This is roughly the way

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[24]Gilson (1989) provides evidence that a Chapter 11 bankruptcy can have serious consequences for management. In a sample of 381 exchange-listed firms that experienced extreme stock price declines during the period 1979-1984, he finds that 52% of these firms experience a senior-level management change (i.e., a change in CEO, President, and/or Chairman of the Board) during the period of financial distress, as evidenced by a default, bankruptcy or debt restructuring outside bankruptcy. (He finds that the corresponding turnover rate when firms are not distressed is only 19%.) Moreover, even though the average age of departing managers is only 52, none of them holds a senior management position at another exchange-listed firm during the next three years. See also Gilson (1990); Gilson and Vetsypens (1992); LoPucki and Whitford (1992, Section III.B.1); and Betker (1992).

It should be noted that although these figures suggest that Chapter 11 bankruptcy is not a soft option for management, the real comparison should be between how these managers are treated in Chapter 11 and how they would have been treated in Chapter 7. In the latter, one can safely presume that far more of them would have lost their jobs (and far more quickly). So, relative to Chapter 7, Chapter 11 may indeed be a soft option.

[25]In the last few years, "pre-packaged" bankruptcies have emerged as a new hybrid form. These informal reorganizations -- agreed on before entering into bankruptcy -- avoid some of the costs of Chapter 11, but take advantage of the fact that within Chapter 11 a reorganization plan can be ratified by a smaller fraction of creditors than would be needed outside bankruptcy. (Hence a pre-packaged bankruptcy may be easier to implement than a workout.) However, by no means all financially distressed firms can be rescued this way; as McConnell and Servaes (1991) conclude, "A pre-packaged bankruptcy ... is not likely to be useful in resolving complex, litigious disputes among hundreds of creditor groups with sharply divergent interests -- the kind we often see in a traditional, highly contentious Chapter 11 reorganization."

[26]The Japanese bankruptcy system also has the flavor of Chapter 11. Reorganization plans are drafted by a trustee appointed by the court; the court can amend the plan in consultation with the interested parties; for a plan to be ratified, it must receive 4/5 of secured creditors' approval and 2/3 of unsecured creditor's approval (shareholders cannot veto); if the plan is not ratified, the company is liquidated. See, for example, Mitchell (1990).

the British system has operated since 1986.[27] This approach avoids many of the costs of Chapter 11 and is far less likely to be a soft option for management. However, it puts a huge amount of power in the hands of an individual (the administrator) who may have little or no background or expertise in the firm's operations, and who has little financial incentive to make the right decisions about the firm's future. The administration system is sufficiently new that we cannot yet judge its success in empirical terms. However, there are certainly theoretical reasons for being skeptical about it.[28]

The conclusion of this section is that existing procedures in the West are far from perfect. The same is true in Eastern Europe (in the Appendix we briefly look at what is happening now in Hungary and Poland). Thus it seems desirable to consider alternatives. We will propose a new procedure in Section 5 below -- having first laid out in Section 4 what we consider to be the main desiderata of any scheme.

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[27]More specifically, the court issues an administrative order outlining particular goals to be achieved, and appoints an administrator who takes control of the firm and, within three months, prepares a reorganization plan. (The administrator may dispose of any of the firm's assets, including secured assets.) The firm may also submit its own plan, which can be modified by the creditors. Ratification of a plan requires approval by at least half (in value terms) of the claimants. However, under certain circumstances, the court may bypass a negative vote and proceed with the administrative order at its own discretion; under other circumstances, a significant creditor can insist on liquidation. See, for example, Mitchell (1990) and Webb (1991).

[28]The new French bankruptcy law (enacted in 1985) suffers from a similar kind of criticism: considerable power is placed in the hands of the court. For example, the court can accept a reorganization plan without the approval of creditors (or workers), provided it best ensures the maintenance of employment and the repayment of creditors. (Note of course that these two objectives may be in conflict!) See, for example, Mitchell (1990).

4. Desiderata for a Bankruptcy Procedure

In the search for a better bankruptcy procedure, it is useful to recognize that existing procedures are unsatisfactory on two counts. First, as we have argued in the last section, it is not obvious that they work very well. Second, it is not clear what their intellectual foundation is. This is particularly so in the case of the Chapter 11, which consists of a complex and seemingly arbitrary process for settling the firm's claims and deciding on its financial structure -- a process that is entirely different from anything ever seen outside bankruptcy. However, it is also true of Chapter 7, which causes a forced sale of public companies that (in some sense) are already for sale.

An ideal analysis of bankruptcy would derive optimal bankruptcy procedure from first principles. Unfortunately, this is an extraordinarily difficult task, not least because, as noted previously, in a perfect world there would be no need for a state procedure at all: debtors and creditors would choose their own bankruptcy procedure as part of an optimal debt contract. Thus while, in what follows, we will try to provide some foundations for our proposed bankruptcy procedure, they must be seen as quite tentative.

A useful starting point is to consider why debt is an important financial instrument for firms in the first place. In particular, why can't all firms raise money by issuing equity? For an individual or a small (private) company, the answer is (roughly) that debt is a good compromise between giving investors voting equity, which may provide them with too much

control over the firm's operations, and non-voting equity, which provides them with no control at all. With debt, the owner-manager retains control over the firm's operations in non-default states, but the investor has some protection: if he doesn't receive what he was promised, he can foreclose on the firm's assets.[29]

For a large public company, the answer is a bit more complex, since, as we have already noted, typically no individual -- or small set of individuals -- has (voting) control over such a company. The finance literature has emphasized two main advantages of debt over equity. First, interest payments on debt are tax-deductible at the corporate level (this feature can also be important for private companies). Second, debt is an important bonding device.

The basis for the bonding role of debt is the notion that the management of an all-equity company is under little pressure to run the company well. If profits and dividends are low, shareholders can complain, but, because of collective action problems, it is unlikely that they will take any action (in the absence of a hostile takeover bid, which may be costly to organize).[30]

One way to put pressure on management to run the company well is to include debt in the firm's capital structure. The point is that a firm with a

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[29]See Aghion and Bolton (1992) and Hart and Moore (1989, 1991).

[30]Hostile takeovers, when they do occur, generate premia of the order of 30% for the shareholders of target firms (see Jensen and Ruback, 1983). These premia are consistent with the existence of large amounts of slack in target firms (and possibly also in non-target firms) prior to the takeover.

large amount of debt has an incentive to invest wisely and eliminate slack since, if not, it will go bankrupt -- an event which is taken to be bad for incumbent management.[31]

Note that the leveraging of the company might be carried out either by an outside investor who buys up the company, or by incumbent management, who faces the immediate, but temporary, pressure of a hostile takeover or who wishes to raise capital from the market on favorable terms. That is, in the former case, an outsider bonds management; in the latter case, management bonds itself.

It is clear from the above discussion that, if debt is to be a useful bonding device, those who are operating the firm (management in the case of a large, public company) must suffer a significant penalty for non-payment of debts. In particular, if bankruptcy procedure consisted of cancelling all the firm's debts and allowing the firm to continue with an all-equity security structure under existing management (as some people have advocated), then debt would no longer have any bonding role at all: management would have no incentive to pay their debts since they have nothing to lose from default. For similar reasons, a procedure like Chapter 11 which, arguably, biases the post-bankruptcy outcome in favor of reorganization under existing management may not be very effective in bonding terms.

Of course, if punishing management were the only issue, then there would be nothing wrong with a "nuke the firm" strategy: any firm that went

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[31]See Grossman and Hart (1982) and Jensen (1986).

bankrupt could simply be shut down. In ex-ante terms, such a scheme would be great since the threat of a disastrous outcome would keep management on its toes and reduce slack. However, in ex-post terms, the procedure would be terrible. Given the presence of uncertainty, even well-run firms will sometimes go bankrupt and it would obviously be very inefficient to close them all down. A good bankruptcy procedure is one that balances the ex-ante and ex-post objectives. To be a little (but only a little) more precise, one might say that a good bankruptcy procedure is one that maximizes the ex-post value of the firm's operations subject to the constraint that management is penalized adequately.

A further issue in assessing a bankruptcy procedure should be mentioned. It is sometimes argued that penalizing management and/or equity-holders too much in bankruptcy may be counter-productive since it causes management of financially distressed firms to delay filing for bankruptcy, or to "go for broke", i.e. to engage in risky, but inefficient, behavior to stave off bankruptcy. People who take this position often go on to argue in favor of a "soft" procedure like Chapter 11, which treats management and shareholders relatively well.[32]

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[32]As we have noted, although there is a significant danger that managers will lose their jobs in Chapter 11, the danger is presumably less than in Chapter 7. Also there is considerable evidence that Chapter 11 does not respect absolute priority, i.e. shareholders receive something even when creditors are not fully paid -- see, e.g., Franks and Torous (1989); Weiss (1990); and Eberhart, Moore and Roenfeldt (1990). This can be attributed partly to the fact that Chapter 11 gives shareholders veto power over a reorganization plan (outside cram-down, which is expensive), and partly because management may use its bargaining power to favor equity.

We are not persuaded by this argument for the following reason. If the state-provided bankruptcy mechanism is "harsh", it seems relatively easy for managers and/or security-holders to soften it. That is, if those people choosing the corporation's financial structure wish to protect managers and shareholders from the unpleasantness of bankruptcy, they can do so in a variety of ways: by choosing a low debt-equity ratio; by bundling debt with equity so that shareholders receive something in bankruptcy states; or by issuing debt to managers so that they too receive something in bankruptcy states.[33]

In contrast, it seems much more difficult for security-holders and managers to harden a soft procedure. Suppose, for example, that the state's bankruptcy procedure ensures a minimum payoff for managers and shareholders in bankruptcy (e.g., by not respecting absolute priority), but this is inefficient for a particular firm. To make it credible that its own managers and shareholders will be treated badly in bankruptcy states, it will not be enough for the firm to fine-tune the existing procedure, since any attempt to impose absolute priority, say, will, by assumption, not be respected by the courts. Rather it will be necessary for the firm to opt out of existing bankruptcy procedure altogether.

The costs of doing this are arguably great: apart from the difficulty of informing all present and future creditors that it is opting out, there is also the fact that few people may understand the firm's own procedure or know

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[33]Also if a "harsh" procedure causes management to delay filing for bankruptcy for too long, then this problem can be mitigated by giving creditors greater powers to push a firm into bankruptcy on their own accord (e.g. if the firm has violated some covenant).

how the courts will interpret it in the event of a dispute; the absence of case law concerning this procedure will be a particularly serious issue here. In fact, if the cost of opting out were not large, there would be little reason for the state to provide a bankruptcy procedure in the first place.

Given this asymmetry -- it is easier for a firm to soften a hard mechanism than to harden a soft one -- our conclusion is that the state's procedure should err on the hard side rather than the soft one.[34]

We now introduce a procedure which satisfies the criteria for a good procedure outlined above. It is a compromise between Chapter 7 and Chapter 11, although much simpler than Chapter 11.

5. The Proposed Procedure

At the outset, after the firm has declared (or been pushed into) bankruptcy, the firm's debts are cancelled. The firm's creditors do not go away empty-handed, however; as described in (B) below, they may well become significant shareholders. What matters is that the firm starts out life in bankruptcy essentially as a new firm with a clean slate, i.e. as an all-equity company.

An individual -- a judge, say -- is appointed to supervise the process.

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[34]It should also be stressed that the procedure which we will introduce in the next section is in an important sense "softer" on management than Chapter 7, because management -- along with anyone else -- is free to make a non-cash bid in our scheme (which they cannot under Chapter 7).

He has two immediate tasks: (A) soliciting cash and non-cash bids for the new all-equity firm; and (B) allocating rights to the shares in this new firm. We anticipate that these tasks could be carried out in parallel, and completed within a prespecified period of time: three months might be reasonable.

Task (A): Soliciting bids

The judge solicits bids for the firm's assets and proposals for the firm's continuing operations. That is, over the three month period, individuals are encouraged to make cash bids for all or parts of the firm's operations; and in addition management teams (including the incumbent) are encouraged to make proposals for how to run the firm as a continuing entity.

In fact, it turns out that in a formal sense there is no real difference between a bid for the firm and a proposal to run the firm as a continuing entity, once we allow for non-cash bids. For example, if incumbent management, say, proposes to maintain the firm as a going concern with an all-equity financial structure, this is equivalent to their making the following "bid" for the firm: "We are prepared to buy each share of the present firm for no cash down and one share in the new (identical) firm." Similarly, if management wishes to deviate from an all-equity financed structure for (future) tax or bonding reasons, it can arrange to borrow $D in the capital market and offer to buy each of the N shares of the present firm for $\$\frac{D}{N}$ down and one share in the new (levered) firm. Another way for management to obtain leverage is to offer each shareholder a share and a bond in the new firm.

Thus it may be useful to think of the judge simply soliciting a variety of cash and non-cash bids, rather than a set of bids for the firm's assets on the one hand and a set of restructuring plans on the other hand.

Task (B): Allocating rights

Before the judge can allocate rights to the shares of the new firm, he must first determine who the firm's claimants were and what were the amounts and priority of their claims. For example, if the firm owed taxes to the government, is this claim senior or junior to a claim by workers for unpaid wages or for pension benefits? How do these claims compare in priority to a claim by a secured or senior debt-holder? Where do trade creditors or future tort claimants fit into the picture? If the firm recently borrowed \$1000 for one year at a rate of interest of 10%, but the rate of interest has now fallen to 5%, is this creditor owed \$1000 or $\$\frac{1100}{1.05}$?

These are complicated questions, which have to be answered currently in both a Chapter 7 and a Chapter 11 bankruptcy.[35] Since we have nothing new to say about the answers, we shall simply assume that some procedure is adopted (possibly existing U.S. or U.K. procedure) for determining the amount and priority of all claims.

Thus we suppose that the judge's deliberations will lead to the identification of n classes of creditors who were owed (in total) the amounts $D_1,\ldots,D_n$, respectively, with class 1 having the most senior claim, class 2

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[35] See Baird and Jackson (1985) for a good discussion.

the next most senior claim and so on. The firm's shareholders form the (n+1)th class, with a claim junior to all others.

Having identified these classes, the judge can proceed to allocate rights to shares in the new (all-equity) firm. If the "true" value, V say, of the firm were publicly known (i.e. were verifiable), then it would be easy to figure out the total amount S_i each class i should get based on absolute priority. The most senior creditors, class 1, should receive the smaller of the amount they are owed, D_1, and the total amount available, V; i.e.,

$$S_1 = \text{Min } (D_1, V).$$

The next most senior class, class 2, should receive the smaller of the total amount they are owed, D_2, and the total amount available after class 1 has been paid, $V - S_1$; i.e.,

$$S_2 = \text{Min } (D_2, V-S_1).$$

Class i (i=3,...,n) should receive the smaller of the total amount they are owed, D_i, and the total amount available after class (i-1) has been paid off; i.e.,

$$S_i = \text{Min } (D_i, V-S_1-S_2-\ldots-S_{i-1}).$$

Finally, the equity-holders should receive anything that is left over; i.e.,

$$S_{n+1} = V - (S_1+\ldots+S_n).$$

Unfortunately, V is typically not known. However, Bebchuk (1988) has constructed an ingenious scheme which achieves absolute priority in spite of this drawback.[36]

Bebchuk's scheme works as follows: The most senior class (class 1) is allocated 100% of the firm's equity (so if an individual creditor in that class is owed d_1, he receives a fraction d_1/D_1 of the firm's shares); however, the firm has the right to "redeem" this claim (i.e. buy back the equity) at a price of D_1 per 100%, i.e. for the amount this class is owed. Investors in the next most senior class (class 2) are given the option to buy equity at a price of D_1 per 100%; however, the firm has the right to redeem this claim at the price of D_2 per 100%, i.e. for the amount this class is owed.[37] Class 3 investors are given the option to buy equity at a price of $(D_1 + D_2)$ per 100% (the total amount owed to classes more senior than it); however, the firm has the right to redeem this option at the price of D_3 per 100%, i.e. for the amount this class is owed. More generally, class i investors ($2 \leq i \leq n$) have the option to buy equity at a price of $(D_1 + D_2 + \ldots + D_{i-1})$ per 100%, but the firm can redeem this right at the price of D_i per 100%. Finally, shareholders (class (n+1)) are given the option to buy equity at a price of $(D_1 + \ldots + D_n)$ per 100%.

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[36]Note that although we propose adopting Bebchuk's scheme for the particular purpose of allocating rights in the new all-equity firm, our proposal is different from his. In his paper, he implicitly assumes that the firm always reorganizes under existing management; an outcome which we argued above is very undesirable because it provides no bonding role for debt. As we shall see, the merit of our scheme is that it combines Bebchuk's reallocation mechanism with a vote, which may well result in the firm's liquidation. (There are in fact simpler alternatives to using Bebchuk's scheme -- see Section 8 below.)

[37]In the next paragraph, we explain when these options, and buy-back rights, can be exercised.

Note that we will shortly be giving some examples, in section 6.

This completes the judge's second task, Task (B).

Once the three months are up, the judge reveals the bids, and everyone can make an assessment of their worth.[38] At this point, option-holders are given some period of time -- a further month, say -- to exercise their options. (During this period, there can be trade in equity and options, although the process does not depend on this.) At the end of this fourth month, some options will have been exercised and others will not. The firm (i.e. the judge) uses the receipts from the options exercised to make redemptions -- starting with the most senior claimants, and working down the seniority until the receipts have been used up. These redemptions balance the options exercised in such a way that exactly 100% of the firm's equity is allocated at all times.

The final step in the process is that the firm's equity holders vote on the various proposals and whichever plan commands most support is adopted (in the election, each shareholder would have votes proportional to the number of shares in his possession). In effect, there will be three broad choices, depending on what bids have been received:

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[38] Possibly with the help of some outside expert, such as an investment bank; see Section 7 below.

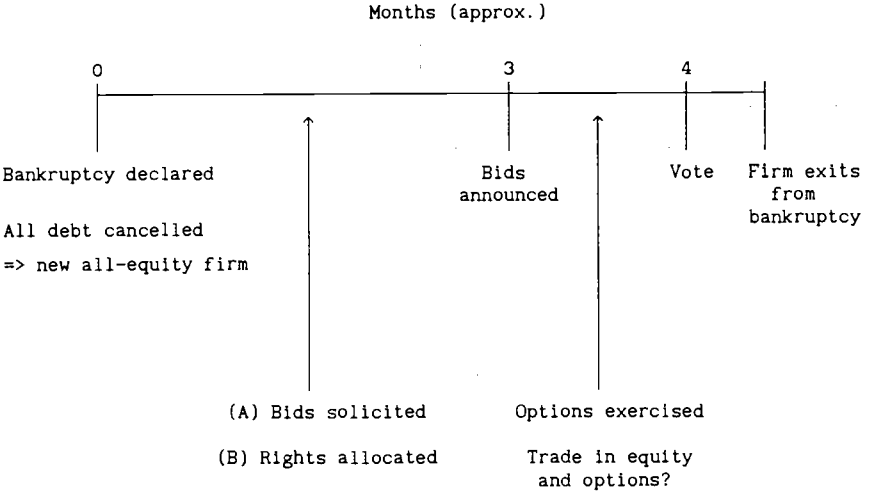
(1) Sell off the firm for cash;

(2) Maintain the firm as a going concern under existing management;

(3) Hire new management to run the firm.

Once the vote is completed, the firm emerges from the bankruptcy process.[39]

The following time-line summarises the sequence of events:



[39]Our procedure differs in an important way from the recent bankruptcy proposal of Bradley and Rosenzweig (1992). They suggest that in the event of bankruptcy the firm's equity should be transferred to creditors (unless the equity holders are prepared to buy out the creditors for what is owed), but they do not discuss how this leads to better management (or liquidation) of the firm. By contrast, in our scheme, the solicitation of cash and non-cash bids, together with an automatic vote, provides a mechanism by which management can be removed.

6. Some Examples

The only part of our proposal that may not be immediately transparent is Bebchuk's scheme, so it will help to give some simple examples. Let $n = 1$ and $D_1 = 100$, say; i.e. there is a single class of creditors who were owed \$100 altogether. Assume for simplicity that there are 100 creditors, 100 shareholders and 100 outstanding shares. Then, according to Bebchuk's scheme, each creditor is initially given 1 share and each shareholder is given the option to buy 1 share at the price of \$1 each.

Suppose first that, on the basis of the bids announced by the judge, the firm is generally perceived to be worth more than \$100. Then each shareholder will choose to exercise his option to buy a share for \$1. The judge receives \$100, which he uses to redeem all the creditors' shares. Thus creditors' debts are fully paid and initial shareholders end up with all the equity.

Next, suppose the firm is generally perceived to be worth less than \$100. Then no shareholder chooses to exercise his option. In this case, the creditors end up as shareholders, and the initial shareholders neither pay nor receive anything.

Consider finally an intermediate case where twenty shareholders, say, think the firm is worth more than \$100 and exercise their options and eighty do not. (We ignore the possibility that the twenty optimists purchase the options of the eighty pessimists.) Then the judge uses the \$20 he receives to buy back 20% of each creditor's shareholdings, and transfers the 20 shares purchased to those exercising the options.

To take a slightly more complicated example, let n = 2 and D_1 = 100, D_2 = 200; i.e. there are two classes of creditors who were owed $100 and $200, respectively. Let there be 100 people in each class, and also 100 shareholders and 100 shares of the firm outstanding. Then the first class of creditors is given 1 share each, each member of the second class is given the option to buy 1 share for $1, and each shareholder is given the option to buy a share for $3.

Suppose that, on the basis of the bids announced by the judge, the firm is generally perceived to be worth more than $300, so that each shareholder chooses to exercise his option to buy a share for $3. Then the judge takes their $300 and uses it to redeem the senior creditors' rights (for $1 a piece) and the junior creditors' rights (for $2 a piece). He then transfers the shares obtained to the initial shareholders. Thus at the end of the process, all the equity is in the original shareholders' hands and all the creditors have been fully paid off.

On the other hand, suppose the firm is generally perceived to be worth between $100 and $300. Then no shareholders will exercise their options, but all junior creditors will exercise theirs. The judge takes the receipts of $100 and uses it to redeem the senior creditors' rights for $1 each, transferring their shares to the junior creditors. At the end of the process, all the equity is in the junior creditors' hands and all the senior creditors have been fully paid off. The shareholders neither pay nor receive anything.

As a third case, suppose that everyone thinks that the firm is worth less than $300, but half of the junior creditors think that it's worth more than $100 and half less. Then half of the junior creditors will choose to exercise their rights, but no shareholders will (we again ignore the possibility of trading in options). The judge will use the $50 received to redeem half of the senior creditors' rights. At the end of the process, half of the equity will be in junior creditors' hands and half in senior creditors' hands.[40]

It should be clear from these examples that Bebchuk's scheme preserves absolute priority in the following sense. If class i creditors ($1 \leq i \leq n$) are fully paid off, then this must mean that some lower class exercised their options. But then all creditors senior to class i are also fully paid off.

In addition, the scheme has the desirable property that nobody can really "complain" about their allocation, at least if capital markets function reasonably well. If a class i creditor's option is not redeemed (i.e. he is not fully paid), where $2 \leq i \leq n$, then he always has the option to buy a share in the firm himself at the price of $(D_1 + \ldots + D_{i-1})$ per 100%. If he does not do so, it must be either because he thinks the firm is worth less than $(D_1 + \ldots + D_{i-1})$, in which case according to the absolute priority rule he is entitled to nothing anyway; or because he does not have enough cash to exercise the option. In the latter case, however, (at least

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[40] One can extend this example to consider cases where some (but not all) shareholders think that the firm is worth more than $300 and exercise their options, and some (but not all) junior creditors think that the firm is worth more than $100 and exercise their options. These cases are a little more complex, but the procedure works in basically the same way. The reader is referred to Bebchuk (1988) for details.

if capital markets are well-functioning), he ought to be able to sell the option on favorable terms unless the firm is generally perceived by the market to be worth less than $(D_1 + \ldots + D_{i-1})$; this possibility is examined further in Section 8.

7. An Assessment

In assessing our proposal, it first may be helpful to make clear what we consider are its essential ingredients. The scheme can be viewed as a variant on Chapter 7, in which

(a) *non-cash* (as well as cash) *bids are allowed*; and

(b) *ownership of the firm is homogenized* (to all equity),

so that

(c) *the owners can decide* (by vote) *which of the* (heterogeneous) *bids to accept*.

Notice that the scheme is quite decentralized: no discretion is left in the hands of, say, a judge/trustee/expert, or of a committee of representatives.[41]

What is less essential to our scheme is the precise mechanism by which equity is allocated. We have proposed adopting Bebchuk's mechanism because it has the advantage of preserving absolute priority. But there are other, simpler, mechanisms that might be used -- see Section 8 below.

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[41]Except, of course, for the crucial role of the bankruptcy judge in deciding who is owed what, and the relative seniorities of these claims.

It is worth spelling out how our proposal overcomes some of the problems with Chapter 7 noted in Section 3. The principal advantage of our proposal is that, by permitting non-cash bids, it reduces (or even eliminates) what we called "the financing problem". The reason is that a bidder who is cash-constrained or does not want to bear the risk of holding a large fraction of the company shares himself, even in the short-term, can offer shares (and/or bonds) in the new company directly to the old claimants. In other words, our procedure takes advantage of the fact that the firm's old claimants may be the most natural group to hold securities in -- or to put it another way, to be risk-bearers for -- the new firm. In contrast, Chapter 7 introduces an extra stage in the transaction: the bidder must first raise cash from the market and then, possibly through a public offering, find individual investors with whom to share risks.[42]

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[42]Of course, although it is true that the old claimants may be the most natural providers of capital for the new company, it does not follow that they will all want to hold the same types of claims. We would argue, however, that there is no strong reason to think that a former, small public bond holder will be significantly less willing to hold equity in the new company than debt in the old company.

The same is not necessarily true of large claimants. For example, one of the firm's previous creditors might be a large bank, which has a comparative advantage in monitoring the lower tail of the firm's cash earnings, or which for some other reason does not wish to bear too much risk. It may be very inefficient for this creditor to be allocated a large amount of equity in the new company. There is a simple way round this problem, however. Management could propose a reorganization plan in which the bank becomes a large creditor of the firm after it emerges from bankruptcy, in return for selling back its equity to the firm. The only difficulty with this is that it can raise a conflict of interest: the bank, as a former creditor, will be able to vote on a deal from which it may well be benefitting substantially. We discuss ways of dealing with this kind of conflict in Section 9(ii) below.

Note that although non-cash bids mitigate the "financing problem", they do not directly affect the "lack of competition problem". It is still true that parties may be deterred from bidding for the company given that they may not recover the sunk costs of making a bid, and also that a management team can use its specific skills or knowledge to extract some of the rents from the auction. However, non-cash bids are likely to help indirectly simply by making it easier for cash-constrained, risk averse parties to bid. This is likely to raise the number of eventual bidders, and therefore also to increase the competitiveness of the auction and the value of the winning bid to claimants.

Some people might question why it is necessary, following a bankruptcy, to put the firm up for auction (that is, why bids should be solicited and a vote taken). Why not simply let the firm emerge with an all-equity structure, and allow those who want to buy the firm to do so by making a take-over bid? The answer is that there are good reasons for doubting the efficiency of the takeover mechanism. As has been analyzed at length in the literature (see, for example, Grossman and Hart, 1980), a bidder must share a considerable fraction of his takeover gains with free-riding minority shareholders, or with competing bidders. In addition, management can often thwart a bidder either by engaging in various defensive measures (law suits, poison pills, ESOP's etc.) or, at the last moment, by carrying out the actions the bidder was planning to. Finally, management can finance much of its resistance using shareholder money.

The scheme we have proposed is quite different in nature from a takeover. No free-riding by shareholders is possible; management cannot undertake defensive measures or react to what outside bidders propose; and

management cannot use corporate resources to stay in power. In other words, in contrast to a take-over playing field which is (perhaps with reason) tilted in favor of management, the bankruptcy playing field that we have advocated is at most flat, and, we suspect, more typically, tilted in favor of outsiders (see below).

Our proposal might be criticized on the grounds that shareholders may not have the knowledge or incentive to vote for the best offer. It is one thing for (possibly quite dispersed) shareholders to vote among cash offers for the firm (presumably they will all choose the largest); it is quite another to expect them to decide between a cash offer and a non-cash offer. To reduce this problem, it may be useful for the judge to hire an agent like an investment bank to value the various proposals. (Someone also needs to check whether the financing for each proposal is secure.) The investment bank's fees might be paid out of the firm's future receipts (i.e. the firm would start off life with some (senior) debt outstanding to the investment bank) or by giving the bank some equity in the new firm (in which case the bank would presumably also get to vote on the various proposals it has vetted).

Note also that the fact that shareholders have difficulty assessing non-cash bids may simply mean that they will vote for a cash bid. This is not a disaster: for the purpose of convincing earlier investors that management will endeavour to avoid bankruptcy, it is a useful bonding device that, in the event of bankrupcty, management will (probably) be voted out office. Also, in many cases it may be efficient for the firm to be sold off, and, even if it is inefficient, it will often not be grossly so.

Our main concern is that the firm should be reorganized when this is a clearly superior alternative -- e.g., because the bankruptcy is clearly due to events outside management's control. Our feeling is that in such clear-cut situations even a relatively uninformed shareholder should be able to make the right choice.[43]

8. Simpler methods of allocating equity

We have advocated using Bebchuk's relatively sophisticated -- although conceptually not at all difficult -- mechanism for allocating equity. Some people may argue that this mechanism is too complicated for practical purposes, and that a simpler scheme should be found.

A useful way to explore this matter further is to begin by considering what would happen in Bebchuk's mechanism if junior claimants (either junior creditors or shareholders) are cash constrained -- so that they are unable to exercise their options when they perceive that the firm is valuable, and the market for options is sufficiently underdeveloped that they cannot easily

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[43]The process of comparing bids (non-cash) that we have advocated is not completely unfamiliar in the corporate context. Firms which are undergoing leveraged buy-outs face something similar. There the incumbent management team typically makes a bid to take the firm private. Other groups often show an interest too, and a subset of the board's disinterested (or independent) directors is charged with conducting an auction. At the end of this auction the disinterested directors will approve one of the bids or decide that the status quo is better for shareholders (i.e. the company should remain public). See Burrough and Helyar (1990) for a fascinating account of this process.

The major difference between the LBO process and the one advocated here is that, in the LBO case, the bids are decided on by shareholder representatives, while in our case they are decided on by the shareholders directly. (Even in an LBO case, a decision to take the company private would have to be ratified by shareholders.)

sell them.[44]

At first glance, this may not appear to be a serious problem. For instance, if a junior security holder (say, an old equity holder) has the option to buy equity at a price below what he considers it is worth, but does not have the cash on hand to do so, then he could always borrow short-term, offering the equity as collateral for the loan, and then sell the equity (at a profit) once the firm emerges from bankruptcy. However this argument overlooks the fact that his perception of the future value of the firm's equity may not be shared by his potential creditors; if they are less optimistic than he is, and he cannot offer them anything else by way of collateral, then he will not be able to borrow the cash needed to exercise his option.

But does it matter if options cannot be exercised? The net effect of a failure in the options "market" is to leave more equity in the hands of senior creditors than is warranted by the face value of their debt. Arguably, this redistribution of the firm's value (disproportionately into the hands of senior creditors) does not matter since claims have still been homogenized so as to remove the scope for ex post bargaining, and the new equity holders (mainly comprising the old senior creditors) should therefore still vote for the best bid. Of course, there would appear to be some unfairness. But in principle this potential transfer of wealth from junior to senior claimants would be priced in the ex ante securities markets anyway; so the "unfairness" is more apparent than real.

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[44]This is likely to be a particular problem in Eastern Europe.

This is an intriguing argument, because it raises the larger question: why should one bother using Bebchuk's mechanism, when an even simpler rule could be used? Here are some possible alternatives:

(1) Once the bids (both cash and non-cash) have been assembled, one or more outside investment banks could be employed to assess them and to estimate the value, V^e say, of the best one. Shares could then be allocated according to absolute priority, taking V^e as if it were the true value of the firm (i.e., as in Chapter 7, except that it is equity, not cash, that is being distributed). Shareholders would then vote to choose what they consider to be the best bid, just as in Section 5 above.

(2) As in (1), except that the highest cash bid, V^c say -- which is an objective amount -- is used in lieu of V^e as a basis for distributing equity.

(3) Equity might be allocated in proportion to the face value of claims -- with, say, x%, reserved for old equity holders, where $x \geq 0$ is some prespecified number.

(4) An even cruder rule than (3) would be to allocate all the equity to senior creditors, regardless of the face value of their claims (indeed this would be the outcome of our proposed scheme in the extreme case where no options were exercised because of cash contraints).

These four alternative rules still meet the basic requirements of our proposal: first, non-cash as well as cash bids are allowed, so that reorganization is given a fair chance; second, a homogeneous group of new equity-holders is created, who get to vote on the future of the firm; and third, the old management faces the discipline of having to bid to keep their jobs. The sense in which these simple rules are inferior to our proposed scheme is that they may fail to preserve absolute priority: they typically give either too much or too little to junior claimants relative to senior. [In (1), for example, V^e may overestimate the true value, V, of the firm; in which case junior claimants receive too much. In (2), V^c may be well below the value, V, of the best non-cash bid; in which case junior claimants receive too little.] If cash constraints are not a problem, the strength of the Bebchuk scheme is that it is a market-based mechanism which preserves absolute priority. But if one suspects that in practice the scheme would not work (and hence fail to respect absolute priority), then it may be better to opt for something simpler, along the lines of one of the above alternatives.[45,46]

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[45]Even if one were to opt for one of the alternative rules (1)-(4), there would be strong argument for supplementing it with Bebchuk options: that is, class 2 creditors could be given the right to buy out the most senior (class 1) creditors at price D_1; class 3 could be given the right to buy out both classes 1 and 2 at price $D_1 + D_2$; etc. This would at least give some power of redress to aggrieved individual junior claimants who feel that senior claimants are getting more than they are owed.

[46]Readers may wonder why the preservation of absolute priority is important at all. Aside from the basic point that, ceteris paribus, it is always better to respect the provisions of private contracts, there are at least two other arguments. First, any discrepancy between what a class of claimants gets inside bankruptcy and what it gets outside bankruptcy could lead to inefficient rent-seeking ex post -- with some people bribing management into deliberately precipitating bankruptcy, and other people attempting to forestall bankruptcy. Second, as is shown in Hart and Moore (1990), the seniority structure of a firm's capital provides an important instrument for containing management's ability to raise fresh capital; any arbitrary

9. Further Considerations

There are of course many details of our proposal still to be sorted out. In this section, we briefly raise some ancilliary issues. We should stress that we do not have definite answers to a number of questions. There may be room for several answers, depending on the circumstances of the firm: indeed, one can imagine firms opting for different choices, ex ante.

(i) Claim disputes

We have taken the (optimistic) view that a judge could fairly quickly decide on who is owed what, and in what priority -- say within three months. This may be too optimistic.[47] It can be argued that one advantage of a Chapter 7 sell-off is that the receipts can be safely held in some (interest-bearing) escrow account until such time as the conflicting claims have been resolved. By contrast, if the firm is to survive as a going concern, such delays could be fatal.

In practice, it matters just how big a slice of the cake is in dispute. If, for example, 90% of the prior claims can be decided upon within three months, then the judge could proceed in the manner we have suggested, with these 90% of claimants being allocated equity/options, and then voting. Any cash that is generated -- either as part of the winning bid, or in the form

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tampering with seniority rules within bankruptcy will typically reduce the flexibility of this instrument.

[47]Douglas Baird suggests that much of a lengthy Chapter 11 proceeding can in fact be devoted to this issue; see Baird (1992).

of subsequent debt repayments/dividends -- is held in an escrow account by the judge pending a resolution of the outstanding 10% of claims. Once resolved, successful claimants could be issued equity in the firm according to the seniority and value of their claims, and the cash held in the escrow account could be distributed appropriately. In short, the fact that certain claims are in dispute need not hold up the bankruptcy proceeding.

(ii) Dominant voters

Left as it is, our proposal would be vulnerable to exploitation of the minority by a dominant shareholder. Suppose that, just prior to the vote being taken, someone ended up with more than half the shares. There are a number of ways in which this person could abuse his voting power. For example, he could vote to accept an artificially low cash offer from a second firm in which he had a large stake. Or he could vote himself into control, and sell the firm's assets cheaply to the second firm.

This problem is of course not new: it is a potential problem for any publicly traded company, and there exist laws to protect minority shareholders (boards of directors have fiduciary responsibilities). Indeed, under Chapter 11, minority creditors (within a class) need protection, in the form of equal treatment. However, it seems clear that existing law would not be able to protect minority interests under our bankruptcy procedure. The procedure would need to be amended in various ways -- for example, to disallow voting by someone who has an interest in a bidder's firm. Another possibility would be

(1) to grant a suitably-sized minority of the shareholders the power to veto any winning bid that is a non-cash bid (this would help prevent a dominant shareholder from voting in a bad non-cash bid);

and (2) to insist that a cash bid can only be accepted if it is the highest cash bid (this would help prevent a dominant shareholder from voting in a bad cash bid).

(iii) Secured creditors

The issue here is the following: in bankruptcy, should the secured creditors of a firm be allowed to seize collateralized property? At present, U.S. bankruptcy law basically prevents such seizure, and we would not favor it either, because it could lead to an inefficient dismantlement of the firm's assets through a "me-first" grab.[48]

We envisage that in our proposal a secured creditor might be treated much as he would be under present U.S. bankruptcy law. Namely, a trustee is appointed to appraise the value of the collateral; let this amount be $S. Suppose the level of secured debt is $D. On the one hand, if the debt is oversecured (S > D), then the creditor is granted his full $D in senior debt. On the other hand, if the debt is undersecured (S < D), then the creditor is given only $S of senior debt; the remainder, $(D-S), is treated as unsecured

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[48]Under present U.S. law, a secured creditor may be able to seize his collateral if he can demonstrate that the property is not necessary for the firm's reorganization and it is worth less than the amount he is owed; see Section 8C of Baird (1992). A comparable rule could be adopted under our procedure.

(junior) debt.

(iv) Debtor-in-possession financing

The viability of certain kinds of bankrupt firms (such as retail stores) can crucially depend on management being granted debtor-in-possession financing, whereby suppliers' credit is placed ahead of existing senior debt. (This is often mentioned as an important role played by Chapter 11.) There is no reason why a comparable arrangement could not be used during the "four months" of our proposed bankruptcy process, with the judge's approval. In addition, for the sake of continuity, it is probably desirable to allow management to run the company during the bankruptcy process, under the supervision of the judge (again, as in Chapter 11).

(v) Partial bids

We have tacitly assumed that the bids received are for the entire firm. In fact, bids may be for parts of the firm. The problem then arises as to how to deal with overlapping/inconsistent bids. Before a vote can be taken, a menu of coherent options has to be assembled.

We think that there is no alternative but to leave the matter of assembling "whole" bids in the hands of the judge and his appointed agents. It may well be necessary to solicit supplementary bids for parts of the firm, in order to package a whole bid. Although this seems messy, it should be noted that a similar difficulty is faced in a Chapter 7 proceeding: how to bundle/unbundle the assets of the firm so as to maximize cash receipts.

10. Implementing the proposed procedure in Eastern Europe

In this section, we raise some basic questions concerning the implementation of the above scheme in the context of Eastern Europe. Let us stress the following: we envisage that our procedure would primarily apply to the case of (subsequent) bankruptcy of new private or newly-privatized firms. Nevertheless, as we shall argue at the end of this section, elements of our proposal might be of use for the purpose of debt-restructuring and privatization of large state-owned enterprises.

A first source of difficulty in implementing our (or any other) bankruptcy procedure in East European countries lies in the insufficient number of qualified lawyers and judges. However, unlike both Chapter 11 and other systems outside the U.S., our procedure attempts to minimise the need for lawyers by reducing the role of the courts to mainly supervisory functions. No decision or arbitration concerning a firm's future needs to be made by the courts as long as the bankruptcy procedure is followed by the firm's creditors and shareholders; and therefore no particular expertise in the firm's operations is required from either judges or lawyers.

In this respect, our procedure has the advantage of being potentially enforceable using the existing judiciary system -- that is, without having to introduce bankruptcy courts run by specialized judges. But it should be noted that the judge (or administrator) will need accounting skills in order to determine who had what claims, and of what seniority, in the insolvent firm. One solution during the transition phase could be for a well-established accounting firm not only to perform this task, but also to

allocate shares and options (Task B) and to supervise the process of exercising options. Foreign accounting firms which already operate in Eastern Europe could be used for this purpose.

As we have already noted in Section 7, outside experts could also be employed to evaluate competing bids on behalf of shareholders/voters. This may be particularly important in Eastern Europe, where, in the absence of smoothly operating capital markets, shareholders may have no other means of assessing non-cash bids. Without outside evaluations, incumbent management would enjoy a considerable advantage in being able to "sell" their own bids to shareholders. Incumbent management would have more difficulty preventing a nominated team of outside accountants from gathering information about the firm's assets than it would concealing the information from individual shareholders. Accountants could also have an important role in ensuring that outside bidders have access to information about the firm. And of course there is very little that management can do to stop third parties from putting up cash or non-cash bids.

In Section 8, we discussed some simpler alternatives to Bebchuk's scheme for allocating equity. In Eastern Europe, it might be highly desirable to dispense with using Bebchuk's options, given the poor capital markets. Our first alternative may be especially attractive: namely, once the bids have been assembled, an outside expert (again, a foreign accounting firm?) assesses them and estimates the value, V^e, of the best one; shares are then allocated according to absolute priority, taking V^e as if it were the true value of the firm; and finally a vote is taken among shareholders to decide which bid to accept.

One concern about the adoption of our procedure in Eastern Europe is that the scope for making non-cash offers might facilitate collusion among managers of mutually indebted firms. This is a particular worry in the current context, where inter-enterprise credits have substantially proliferated since 1988. In such a context one could easily imagine the possibility of several firms, with sizeable mutual debt obligations, becoming simultaneously insolvent. The managers of these firms could collude by making (and then voting in) non-cash offers which maintain the status quo -- thereby precluding potentially more efficient investors or management teams from winning. Incumbent managers would thus keep their jobs without any monetary transfer being made, in particular to compensate minority security holders. (The drawback here relative to a straight liquidation procedure like Chapter 7 is that in the latter managers would have to be party to a successful cash bid in order to keep their jobs. But, as we have argued, Chapter 7 has serious limitations.) The kinds of devices we put forward in Section 9(ii) to reduce the power of majority voters may help eliminate collusion too: for example, doubly-interested parties cannot participate in the vote; or non-cash offers can be vetoed by a suitably-sized minority of shareholders.

A further concern with implementating our procedure in the current environment of Eastern Europe is that it would burden state banks (which are the main creditors of most large enterprises in the East) with responsibilities in the reorganized companies, which they could hardly assume given their bureaucratic management structures and methods. (State banks are often unable to perform such operation as taking deposits, giving account balances, transfering money, etc., let alone evaluating projects and monitoring enterprises' managers.) We have little to say on this score. The

commercialization and/or privatization of state banks would of course help, as too would the setting up of adequate supervising instititions such as Banking Commissions. (These changes are urgently required as part of the transition reform package anyway.) In addition, state banks could be obliged to sell the bulk of their equity to the private sector within a limited time period, say five years -- in order to avoid the possibility that the implementation of our procedure in the case of newly-privatized firms with large state-bank creditors would merely lead to renationalization!

State owned enterprises

Although our proposal was not conceived to deal with the case of insolvent state-owned enterprises (SOEs), our work has spawned some further proposals (notably by Van Wijnbergen (1992)) to deal with the difficult problem of debt restructuring, commercialization and privatization of large SOEs. A high concentration of economic activity still takes place in these enterprises, which are frequently overburdened with debt obligations inherited from the socialist system. These debt obligations concern a small number of creditors, essentially one state-bank specialized in the corresponding branch or sector, and a few trade creditors, consisting mainly of other state-owned enterprises.

The case of SOEs with a unique creditor/owner (the state) is comparatively easy to deal with in the sense that the state itself can solicit cash and/or non-cash bids for such enterprises in order to privatize them.

The case of SOEs with multiple creditors is more delicate, as argued in Van Wijnbergen (1992). Writing off the outstanding debts of these enterprises would have the effect of decapitalizing their state-bank or trade creditors, thereby adding to the financial difficulties of these latter institutions; furthermore, such a debt write-off would leave no bonding device in place to restrain the future behavior of management.

Van Wijnbergen proposes a mechanism which has several elements borrowed from our procedure. The idea is first to determine a priority order of claims; for example with the Finance Ministry (tax-collector) as the most senior creditor, followed by the commercial banks, trade-creditors and workers. Then ownership of the SOE would be transferred to the Finance Ministry. The junior creditors would receive call options corresponding to the priority order of their claims, as described in Section 5 above. The new shareholders would then vote over cash and non-cash bids. Such a privatization procedure has the merit of avoiding both the complications and potential conflicts that might have otherwise arisen from the multiplicity and diversity of state-sector claims over SOEs.

Appendix

In this Appendix, we briefly look at what is happening now in two of the countries of Eastern Europe -- Hungary and Poland. Unfortunately, we think that the bankruptcy procedures these two countries have adopted are vulnerable to many of the criticisms that we have levelled against Chapter 11: e.g., bargaining among heterogeneous creditors is unlikely to be efficient (in terms of time, legal fees, foregone investment opportunities); the creditors' representatives may not have the correct incentives; incumbent management has too much power. Moreover, curtailing the length of the procedure may precipitate too many inefficient liquidations.

Hungary

The new Hungarian bankruptcy law (enacted in September 1991) obliges the leadership of an insolvent company[49] to design a rehabilitation program for restoring solvency. Within 60 days from the beginning of the bankruptcy proceedings, the debtor must convene a "compromise negotiation" meeting among representatives of the company's creditors. These representatives form a Board of Creditors which ultimately decides either to accept or reject the compromise agreement. Approval by all members of the Board who are present is required for the rehabilitation plan to be approved and then ratified by

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[49] In the case of state-owned enterprises, the leadership may consist of the general assembly of employees or the founding organization. In the case of private enterprises, it consists of the membership of the partnership or the general assemply of shareholders.

the court. In the absence of any agreement within 15 days, the court starts a liquidation procedure which is similar to Chapter 7.

Poland

Whereas the Hungarian procedure provides a unified framework for dealing with state-owned and private companies, in Poland there exist several procedures to deal with insolvent firms.

The Law of State Enterprises (enacted in 1990) prescribed that if a state owned enterprise sustained a substantial loss which exceeded its reserve fund, and at the same time the main creditor bank refused to extend credit, then the state owner/founding organization (local government, branch ministry, ...) could either liquidate the enterprise or appoint a new compulsory management. This new management is given two years to rehabilitate the enterprise and thereby avoid its liquidation. Note that such a procedure clearly discriminates against claimholders (banks, trade creditors, etc.) who do not control the enterprise's parent agency. Also, the criteria for deciding between liquidation and appointing new management are left unspecified.[50]

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[50] A modification of this procedure for insolvent state-owned enterprises has been adopted very recently by the Polish Parliament, allowing the enterprise itself to initiate a process whereby the creditors would decide (only by unanimous agreement) whether to restructure/reschedule the enterprise's debt or to let the enterprise be liquidated.

In addition to the above procedures, the new Polish privatisation law enacted in July 1990 provides for "liquidations" which amount to the state leasing the insolvent enterprise's assets to new companies.

For insolvent private firms, the Polish authorities have just rehabilitated the old Commercial Code of 1934. Upon declaring the firm insolvent, the relevant court appoints a trustee who supervises the property and management of the firm and also conducts settlement proceedings. To be enforceable, any settlement must be approved both by the court and by a majority of creditors representing at least 2/3 of the firm's debt obligations.

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