Strategic Management Journal, Vol. 14, 125–135 (1993)

BANKRUPTCY AS A DELIBERATE STRATEGY: THEORETICAL CONSIDERATIONS AND EMPIRICAL EVIDENCE

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Bankruptcy and bankruptcy reorganizations have been identified as remedies for financial distress, but there is little agreement on their value to firms, managers, and the general economy. This paper provides a brief review of proposed bankruptcy strategies and some alternative views about their costs and benefits followed by an empirical study of the outcomes of 73 bankruptcies and subsequent reorganization efforts. The evidence suggests that there are few successful reorganizations, bankruptcy is a costly response to financial distress, and managerial choice in bankrupt firms is highly constrained by forces external to the firm. The diversity of stakeholder interests limits the value of global judgements about success or failure of bankruptcy strategies. Firm size dominates all other factors in predicting success in completing the reorganization process. Delayed filings primarily reflect failed efforts to avoid bankruptcy, not deliberate strategies. Reasons for the use of bankruptcy in spite of its high costs are discussed.

Over the past decade, since the implementation of the Bankruptcy Reform Act of 1978, there has been a growing perception that deliberate bankruptcy can be used by managers as an effective strategy for dealing with financial distress. In a recent article in this Journal by Flynn and Farid (1991: 73) state 'Chapter XI (sic) can be used as a strategic alternative to realign the organization with its strategic competencies with a higher probability of reemerging from bankruptcy as a revitalized organization.' We believe that this view is oversimplistic and overoptimistic.[1] In this paper we will present evidence that bankruptcy reorganizations are not a simple matter, and that the probability of successful outcomes is low. A critical difference between Flynn and Farid's view and ours revolves around the issue of managerial control. The complexity of the bank-

Key words: Bankruptcy, business failure, financial distress, reorganization

[1] The article by Flynn and Farid (1991) also suffers from their use of titles and provisions of the old Bankruptcy Act, which was replaced by a new Bankruptcy Code under the Bankruptcy Reform Act of 1978. A standard source for legal information on the Bankruptcy Code and Rules is the *Collier Bankruptcy Manual* (King, 1981). A good source for financial and accounting information is *Bankruptcy and Insolvency Accounting*, 3rd ed. (Newton, 1985 and Supplements).

0143–2095/93/020125–11$10.50

Received 6 June 1991
Final revision received 18 October 1992

ruptcy process severely limits managerial control, which in turn makes the achievement of reorganization objectives difficult.

The first part of this paper will deal with the costs and benefits of bankruptcy process, the second part will provide empirical data on the extent to which bankruptcy reorganizations are successful, and the final part will use materials from the first two parts to reflect on the possibilities and limitations of bankruptcy as a deliberate strategy. In presenting our views we will not attempt to make a point-by-point critique of Flynn and Farid, but rather we will attempt to identify important points on which we share their views and those on which we differ.

Much of the following discussion is directed toward providing a counterpoint to the bankruptcy propositions of Flynn and Farid (1991), but it is not limited to that particular point of view. Our conclusions are based in part on our own empirical research, and in part on the pioneering work on bankruptcy by D'Aveni (1989a, 1989b), Hambrick and D'Aveni (1988), and more recent work by Bradley and Rosenzweig (1992), Gilson (1989, 1990), Weiss (1990), White (1989), Wruck (1990), and others. We also want to stress that our conclusions are based on studies of bankruptcy and reorganization of relatively large, publicly-traded firms, and may have limited applicability to small businesses or entrepreneurial ventures.

BANKRUPTCY AS A DELIBERATE STRATEGY

It is not possible to evaluate the benefits of any public policy or business strategy without explicitly or implicitly defining the objectives of the policy or strategy, and in the case of conflicting objectives, without setting priorities among the objectives. The primary purposes of bankruptcy are the rehabilitation of debtors, the protection of creditors, and the promotion of the general welfare. These are worthy purposes, and bankruptcy has stood the test of time as a useful public policy in the United States and around the world. It is difficult to evaluate the magnitude and distribution of the costs and benefits of the bankruptcy process, but in the following sections we highlight some important issues for a diverse set of stakeholders.

Benefits of the bankruptcy process

Flynn and Farid (1991: 64) never explicitly define the objectives they urge managers to pursue, but they seem to implicitly equate organizational survival with success. For example, they write: 'The expectation is that these firms emerge from this protection to fulfill contractual relationships.' Similarly, Bradley and Rosenzweig (1992) and many other lawyers (*ABI Newsletter,* 1992) contend that Congress, in writing the Bankruptcy Reform Act of 1978, believed that in cases of financial distress the general welfare was usually best served by corporate reorganizations under the control of incumbent managers. This belief was based on the assumptions that the causes of financial distress were largely exogenous, and that corporate assets and employment tended to be firm-specific. On this basis the primary benefits of bankruptcy should be organizational survival and asset preservation. However, a statement of intent provides no assurance that the objectives will be achieved. In the empirical section of this paper we present evidence that these objectives are frequently not achieved.

Neither the protection of creditors nor the promotion of the general welfare is recognized as a benefit of bankruptcy in Flynn and Farid (1991), although others (Jackson, 1986; Bradley and Rosenzweig, 1992) give both objectives high priority. In fact the advantages to owners and managers which Flynn and Farid seek to achieve can come only at the expense of others.

Costs of the bankruptcy process

If bankruptcy provides the benefits attributed to it, it would be unrealistic to assume that those benefits are costless. A major weakness in the Flynn and Farid (1991) study is the lack of any consideration of bankruptcy costs. While the authors do recognize that an attempted reorganization may not succeed, or the firm may emerge with diminished assets, their primary emphasis is on organizational survival.

Bankruptcy has both direct and indirect costs. Direct costs are primarily administrative and include such items as professional fees, court costs, document preparation, and communications with investors and creditors. Existing research estimates of the direct costs of the debtor firms are in the range from 3 percent of liabilities for large firms that were reorganized to more than 20 percent for small firms that were liquidated (Weiss, 1990; White, 1983).

The indirect bankruptcy costs for both debtors and creditors are almost certainly larger than direct costs, but they are much more difficult to estimate. Increases in the costs of doing business may arise from reduced bargaining power over suppliers, higher interest rates for lines of credit, and an inability to enter into long-term commitments of any sort.

Bankruptcy costs are not limited to financial costs. Bankruptcy has always had a stigma associated with it (Sutton and Callahan, 1987), although some contend that the stigma has been diminished in the current environment (Sherman, 1991). In his study of management turnover in 69 bankrupt firms Gilson (1989) found that 71 percent of the senior managers turned over during the 4-year period centered on the bankruptcy filing date, and every senior executive departing a bankrupt firm either left the executive labor market or moved to a subordinate position in another firm. Much of the Flynn and Farid (1991) agenda focuses on reducing stigma effects, but again the evidence suggests that those efforts will not be very successful.

Intentional or strategic bankruptcies

The Bankruptcy Code clearly distinguishes between voluntary bankruptcies initiated by the debtor and involuntary bankruptcies initiated by creditors, but any other classification is a matter of perception. Any voluntary bankruptcy is by definition 'intentional', although the action may be taken to avoid any involuntary petition by creditors. It has been popular for a number of years to label certain bankruptcies as 'strategic', but there is no generally accepted definition of 'strategic bankruptcies.' The general implication is that a bankruptcy is strategic if it is initiated by one stakeholder at the expense of others (Delaney, 1992). D'Aveni's (1989a) and Flynn and Farid's (1991) 'intentional bankruptcies' fit this description, but they focus rather narrowly on managerially-initiated bankruptcies. As Delaney points out, strategic bankruptcies can also be initiated by creditors. The common element in most examples of 'strategic bankruptcies' is at least the perception that they are invoked to deal with a single problem, such as labor contracts or product liability claims. Alternately a creditor may initiate bankruptcy to protect an individual claim at the expense of other creditors. However, in any case a single large claim can severely affect the interests of a wide variety of stakeholders as the firm seeks to allocate the costs of a settlement of that large claim.

The enthusiasm for strategic bankruptcy has developed with little evidence to its value, even as a survival mechanism. Not only is there a lack of systematic data, but the anecdotal evidence is largely limited to a few cases, most notably the 1983 Continental Airlines bankruptcy. Continental Airlines did use bankruptcy to unilaterally reject its labor contracts, but that occurred before the Bankruptcy Act was amended in 1984 to provide more protection for employees. Manville and A. H. Robins, both of which were driven into bankruptcy by product liability claims, have also been cited as additional cases of strategic bankruptcies. As we will discuss in greater detail in the results section of this paper, both met with limited success.

Timing of bankruptcy filings

Discussions about the effect of the timing of bankruptcy presents problems equally difficult as those about intentionality. Flynn and Farid (1991) conclude on the basis of theory and anecdotal data that accelerated filing is generally preferred to delayed filings under conditions of high adversity and low slack, conditions which make bankruptcy imminent.

Sirower (1991) has shown, using event studies, that bankruptcy filing increases shareholder returns, at least in the short run, and he concludes that bankruptcy can be an effective strategy for troubled firms. However, no information was provided about how long the firms had been in decline or how critical their financial condition had become, so one cannot say whether the filings were early or late. All of which is to suggest that in an efficient market investors are aware of the firm's decline, and the primary uncertainty is the timing of the managerial response. The results are consistent with the general observation that in most adverse circumstances (such as divestments and accounting adjustments) the market values action over inaction. However, it should be noted that the market does not always reward bankruptcy filings. In the case of the Texaco–Pennzoil dispute, the market value of Texaco and Pennzoil both declined by over 10 percent the day after Texaco filed for bankruptcy.

The question of whether to accelerate or delay bankruptcy filing obscures a more fundamental dilemma. Bankruptcy is a costly and painful experience, which any rational firm would prefer to avoid, but like many curative processes, if the action is inevitable, prompt action is preferable to delay. As D'Aveni (1989b; 1135) writes, 'Using tactics to delay bankruptcy may be a useful strategy if there is any hope for improvement in any of the regulatory, economic or competitive conditions facing the firm.' The circumstances under which Flynn and Farid (1991) recommend delayed filings can be seen as circumstances in which there is still a possibility that bankruptcy can be avoided. What are seen by outside observers as delayed filings are probably failed attempts to avoid bankruptcy. Although the situation is complicated by the diversity of their interests, the same conclusion can be drawn about involuntary filings by creditors.

Our discussion about the timing of bankruptcy filing to this point has been based on an overall firm perspective, but, in practice, timing may be determined more by stakeholder preferences than by concern for the firm's wealth maximization. Stakeholder preferences will be determined not only by their wealth calculations, but also by their risk preferences. Well-secured creditors, whom one would expect to be risk-averse, may well prefer early bankruptcy, and perhaps even liquidation. However, managers, whose interests may be only marginally affected by the extent of overall firm wealth preservation, may prefer high-risk survival strategies to early bankruptcies (Kahneman and Tversky, 1979). Given managers' control over both information and action, delayed filings may represent opportunistic behavior on their part rather than pursuit of firm wealth preservation.

Now that we have addressed the conceptual problems in Flynn and Farid, the validity of their analysis and recommendations remains to be questioned. To that end, we next present the results of an empirical study of 73 bankruptcy reorganization cases.

EMPIRICAL EVIDENCE

Data collection

As part of a continuing research project on business failure we have collected data on the reorganization attempts of a sample of 73 publicly-traded firms which filed for bankruptcy under Chapter 11 of the Bankruptcy Code in the period from 1980 through 1986. Financial and other service companies (SIC Code 6000 and higher) and regulated public utilities were excluded from the sample. In selecting the sample, two additional requirements were (1) that the firm was on the Compustat files with complete annual report data for 6 years prior to filing for bankruptcy, and (2) that the firm had entered formal bankruptcy proceedings after January 1, 1980, the first full year after the effective date of the Bankruptcy Reform Act of 1978. All of the firms were listed on national stock exchanges prior to their bankruptcy: 24 on the NYSE, 23 on the ASE, and 26 on NASDAQ. All 73 cases were voluntary bankruptcies filed as Chapter 11 Reorganizations. Some, but not all, of the reported liquidations followed conversion to Chapter 7 Liquidation cases. No known bankruptcy within the study period was excluded on any basis other than not meeting the data requirements described above.

The reorganization data were collected from many publicly available sources, including *Compustat, Standard & Poor's Corporate Reports, Moody's Manuals, Ward's Directory, The Wall Street Journal*, and firm annual reports and 10-Ks. Postbankruptcy information was difficult to obtain for many of the firms, particularly the smaller ones. Many of the smaller firms were delisted by the stock exchanges when they filed for bankruptcy, and, in some cases, prior to the filing. When the firms were delisted, they were usually also dropped from the common reporting services, such as Standard and Poor's, and Moody's.

Bankruptcy reorganization outcomes

At the present time (September 1992) 72 of the 73 firms have completed the bankruptcy process, with only LTV Corporation still in bankruptcy.[2] The earliest reorganization was completed in 1980, the same year as the earliest bankruptcy. The time required for reorganization varied from 6 to 83 months with an average of 27 months.

[2] At the time this paper was written LTV Corporation was still in bankruptcy. Based on available reorganization plan projections the reorganization will meet our criteria for classification as successful, but the case was not used for any of the quantitative analyses.

The reorganization outcomes were classified according to the following four categories:

1. *Successful reorganizations*: firms which maintained their corporate identities, continued as publicly traded firms on national stock exchanges, and had postreorganization assets of more than 50 percent of prebankruptcy levels.
2. *Partially successful reorganizations*: firms which maintained their corporate identities, but which failed to meet one or more of the other qualifications stipulated for classification as successful reorganizations.
3. *Mergers or acquisitions*: firms which were publicly reported as being acquired by previously existing firms.
4. *Liquidations*: firms which were publicly reported as liquidated or which had no identifiable successor business.

Classifying the successful reorganizations was unambiguous, but classifications according to the other three categories were frequently problematic. Some of the reorganizations classified as partially successful were technically liquidations in which assets were transferred and the business continued by a new firm created for that purpose. In those cases in which there was a clearly identified new successor company, the outcome was classified as a reorganization.

The firms studied and their outcomes are listed in the Appendix. The outcome classifications were based on the circumstances surrounding the firms at the end of the reorganization process. Later events and current status, to the extent that they are known, are shown in the Notes section of the Appendix table. Of the 72 bankrupt firms, only 44 (61%) were reorganized, and of those 44 only 15 emerged with more than 50 percent of their prebankruptcy assets. Of the 15 that were reorganized with more than 50 percent of prebankruptcy assets, the postbankruptcy assets averaged 92 percent of prebankruptcy assets. Of the 29 that were reorganized with less than 50 percent of prebankruptcy assets the postbankruptcy assets averaged 24 percent of prebankruptcy assets. Three of the 15 firms whose reorganizations were classified as successful, and 6 of the 29 classified as partially successful, have suffered repeat bankruptcies. Only 6 of the 15 firms originally classified as successful reorganizations, and 12 of the 29 partially successful reorganizations, continued to meet the original success criteria in 1992.

Bankruptcy reorganization outcome predictors[3]

Given the outcome results, the next logical question is what factors determine those outcomes or can be used to predict the outcomes. Potential predictors of reorganization outcomes were identified using a number of variables and a range of statistical techniques including ANOVA with Tukey comparison of means and stepwise multidiscriminant analysis techniques. The variables which showed statistically significant mean differences were used as predictors in multivariate discriminant analysis. Among the variables tested only *size* and the *rate of decline* exhibited significant differences between outcome groups. Insignificant results were obtained using financial performance measures (both univariate ratios and multivariate bankruptcy prediction scores), length of time in bankruptcy, and other variables. The natural log of total assets at the end of the last fiscal year before bankruptcy proved to be the best measure of size with an overall ANOVA F value of 6.88 ($p < 0.001$). The liquidated firms with a mean of \$59 million in assets were significantly smaller than the firms in the other three groups, and there were no significant differences among those groups. Other size-related measures, such as sales, were closely correlated with total assets and gave significant, but slightly inferior, results.

The second significant predictor of bankruptcy outcomes was the *rate of decline of the failing firm*. The rate of decline was measured by counting the number of years in which the firm had a negative net income during the 6 years prior to bankruptcy, based on the assumption that the larger the number of losing years the slower the decline. The number of years ranged from zero to six. The overall ANOVA F value was 6.37 ($p < 0.001$). The Tukey comparison of means based on ANOVA indicated that firms which were liquidated had significantly more years of negative net income than firms in the other three groups, and there were no significant differences among those groups. What we have defined as rate of decline can also be seen as a

[3] Detailed information on the data and statistical analyses are available from the first author.

measure of lingering (Flynn and Farid, 1991) or downward spirals (Hambrick and D'Aveni, 1988). After identifying asset *size* and *rate of decline* as significant variables, we then used multiple discriminant analysis to predict outcomes. The overall prediction accuracy of 51.4 percent was not impressive, but the discriminant function was highly significant: Wilk's lambda = 0.66, F (6, 134) = 5.09 ($p < 0.0001$).

The results observed can be compared with broader based data reported by the Administrative Office of the United States Courts (American Bankruptcy Institute, 1991). Their report estimated that only 17 percent of the approximately 144,000 Chapter 11 filings from 1980 to 1987 would result in a confirmed reorganization plan. If those 17 percent suffer the same attrition rate after reorganization as the firms in our sample, the long-term success rate will fall below 10 percent. Their estimate of bankruptcy duration was 21.6 months compared to our finding of 26.6 months. In our study bankruptcy duration was significantly correlated with asset size ($r = 0.544$, $p < 0.0001$). Obviously, their large sample included many small firms, so the higher probability of reorganization and the longer duration of bankruptcy in our study of large firms is further evidence for our observed *size effects*.

DISCUSSION

The results clearly contradict Flynn and Farid's (1991) assumption that a firm which files for bankruptcy under Chapter 11 has a high probability of achieving the joint objectives of survival and asset preservation. Only 44 firms out of 72 were nominally successful in reorganizing, but two-thirds of those retained less than 50 percent of their assets on completion of the reorganization process. Furthermore, measuring success in the year a firm emerges from bankruptcy is only the beginning of the story. Reorganized firms remain weak and many continue to decline. Only 18 of the 44 reorganizations classified successful or partially successful have been able to continue to meet the success criteria after reorganization.

Large firms had a better chance of reorganizing than small firms for both positive and negative reasons. With their large and varied assets they are better able to survive substantial losses and decreases in size than small firms. Large firms are more likely to have some successful businesses that can serve as the core for the reorganized firm, and to have assets that can be sold to provide cash for operating continuing businesses. Also, their very size makes liquidation or acquisition less likely. Whereas some investors may be willing to risk acquiring small bankrupt firms or buying their assets, few investors have the resources to acquire billion-dollar bankrupt firms. Acquisitions and mergers of very large firms may also be constrained by antitrust considerations.

While we have no systematic information on the bankruptcy costs of the firms in our sample, low payouts to creditors and the decline in assets between filing and reorganization provide evidence that bankruptcy costs, both direct and indirect, are substantial. The worst case for indirect costs comes to firms that suspend their operations during the reorganization process. Braniff Airways conducted no flight operations during its reorganization and emerged with only 7 percent of its prebankruptcy assets. Continental Airlines, which was quite similar in size and bankruptcy performance, resumed operations within a week and increased its assets by 37 percent during reorganization. However, neither firm regained its financial health and both suffered repeat bankruptcies.

As pointed out in the introductory part of this paper, the common element in most examples of 'strategic bankruptcies' is the perception that they are invoked to deal with a single problem, such as labor contracts or product liability claims. However, we found that firms that filed for bankruptcy to resolve a single problem had about as much difficulty in reorganizing as firms suffering more general distress. Continental Airlines used bankruptcy to unilaterally reject its labor contracts, but it had other serious financial problems. Although Continental was reorganized with its assets intact, repercussions of its bankruptcy strategy contributed to its continuing decline and its second bankruptcy four years later. While Frank Lorenzo retained control of Continental through the first bankruptcy, his reputation became a major factor in Continental's second bankruptcy, as well as in Eastern Airlines' bankruptcy following its acquisition by Continental, and he was ultimately driven from the industry. In at least two product liability cases, bankruptcy proved to be relatively unsuccessful. A. H. Robins, which had incurred huge product liabilities for the Dalkon Shield, was unable to reorganize and was acquired by American Home Products. Manville was reorganized only after its management was ousted and most of its ownership was transferred to the asbestos liability claimants. Manville is now undergoing a nonbankruptcy restructuring largely motivated by a desire to reduce its bankruptcy stigma.

The Flynn and Farid (1991) strategy recommendations are clearly debtor biased; they are recipes for maintaining managerial control. They are also consistent with the doctrine that the primary obligation of managers is to maximize shareholder wealth. We believe that is too narrow a view of managerial responsibility, especially for firms in which shareholder wealth has been extinguished before the bankruptcy filing. Even if the motivation were proper, we believe that the proposed strategies are based on unrealistic assumptions about the bankruptcy process. Most importantly they are overly optimistic about the probability of reorganization. They are also unrealistic about the extent of managerial control during bankruptcy. For example, it is unrealistic to expect that a firm could conceal a bankruptcy filing or that 'Chapter XI provides a business with an opportunity to solve a financial crisis with little intervention from the courts or creditors' (Flynn and Farid, 1991: 64). A very different perspective has been expressed by Sol Stein, founder and CEO of Stein and Day Publishers, who describes the bankruptcy of his firm in the following terms, 'For the leaders of business trapped in it, Chapter 11 is the twentieth-century equivalent of the eighteenth-century pillory, a dehumanizing, inefficient public spectacle' (Stein, 1989: 303). Fundamentally corporate bankruptcy is a legal process for ensuring that all claimants are treated fairly when the resources of the firm are inadequate to meet the claims on it in full, and when the individual claimants cannot reach a mutually satisfactory resolution of these claims. The Bankruptcy code provides that, once bankruptcy is declared, all actions by management and creditors are under the jurisdiction of the bankruptcy court, a matter of public record, and subject to review by all interested parties. As a result, managerial control may be severely limited, and the narrow objectives of strategic bankruptcy are unlikely to be achieved.

While our evidence clearly demonstrates the low success rate of bankruptcy, it provides little direct evidence on the question of bankruptcy timing. Flynn and Farid (1991) conclude, on the basis of theory and anecdotal data, that accelerated filing is generally preferred to delayed filing under conditions of high adversity and low slack, conditions which make bankruptcy imminent. In our study we found that firms with longer histories of decline were more likely to be liquidated than those with shorter periods of decline, but it is not clear that the timing of the filings was a critical factor. Slow declines appeared to be associated with environmental stress, while more rapid declines were associated with firm-specific events. This evidence, reinforced by the case evidence, suggests that the critical issue is not the relative advantages of early vs. delayed filing, but rather that bankruptcy is the strategy of last resort. The hope that bankruptcy can be avoided overrides the knowledge that delay will only make reorganization more difficult, if bankruptcy becomes inevitable.

If bankruptcy is a costly mechanism for resolving conflicts over the assets of financially distressed firms, then negotiated settlements should be less costly. In complex cases with multiple creditors, negotiated financial restructurings (Gilson, John, and Lang, 1990) and liquidations (Kim and Schatzberg, 1987) may be lower-cost alternatives, but they may be difficult to achieve. A recent development is the 'prepackaged bankruptcy,' in which the reorganization plan is negotiated with major creditors before the bankruptcy filing (Light, 1991; Morgenstern and Rubin, 1991; Saggese and Ranney-Marinelli, 1991). This reduces the cost and duration of the reorganization process and retains the advantages of legal bankruptcy. Bradley and Rosenzweig's (1992) widely discussed proposals for bankruptcy reform are designed to similarly shorten the process, but they take a much harsher position on limiting equityholders' control and on the early ousting of incumbent managers.

If there are less costly alternatives, the question becomes why do firms choose bankruptcy? The answers are the same as for any use of coercive action in conflict resolution: the threat must remain credible, the conflicting parties may misinterpret each other's intentions and actions, and psychological factors, such as pride, take precedence over economic rationality. These considerations would appear to be most pertinent in single-issue bankruptcies, such as the Texaco case. In complex cases with multiple stakeholders, the application of an external set of rules and procedures under the jurisdiction of a neutral third party, the Bankruptcy Court, facilitates conflict resolution and reduces opportunism. An important element of those rules is the freeze on all unilateral actions by creditors once bankruptcy is declared. After the bankruptcy declaration, reorganizations require a lower level of unanimity than voluntary restructurings, in which a minority claimant may be able to block an entire restructuring. They also require broader and more uniform distribution of information than voluntary restructurings. In addition, bankruptcy may have tax advantages, and it may allow the preservation of a corporate charter, which may have value even without a productive set of assets.

CONCLUSIONS

Every bankruptcy case represents some form of business failure that is costly to all stakeholders, although those losses are not evenly distributed. Legal bankruptcy is a settling-up process designed to equitably allocate those losses using a well-established and publicly-controlled process, but the process is costly and time-consuming with a relatively low probability of successfully rehabilitating the bankrupt firm. Cooperative settling-up processes, especially those that avoid legal bankruptcy, minimize the losses associated with failure, yet legal bankruptcy may remain the best defense against uncooperative, opportunistic stakeholders.

With regard to the timing of bankruptcy filing, we take the position that bankruptcy is a costly strategy and should be avoided whenever possible. However, if it cannot be avoided, accelerated filing is preferable to delayed filing. We believe these propositions are true for both debtors and creditors. The dilemma for decision makers is determining when the costs and risks of avoiding bankruptcy outweigh the costs of bankruptcy. Understanding the strategic decision in this way should encourage all stakeholders to accept more negotiated costs to avoid bankruptcy.

From a broader perspective, we believe that a proper understanding of the bankruptcy process and of the costs and benefits bankruptcy will assist all participants in the process of finding strategies that will maximize value preservation and reduce the pain for all. We believe that cooperative models are more socially responsible and, in the long run, more profitable than the adversarial model presented by Flynn and Farid (1991).

ACKNOWLEDGEMENTS

The authors thank William C. Bogner, Frederick R. Post, and Paul Ringer for comments on early drafts of this paper. We also gratefully acknowledge the contributions of two anonymous reviewers.

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APPENDIX: BANKRUPT FIRMS AND OUTCOMES

Successful reorganizations (n = 15)

Firm	Bankruptcy In	Bankruptcy Out	Present status
AM International Inc	1982	1984	NYSE
Continental Air lines Inc	1983	1986	ASE, bankrupt again 1990
Data Access Systems Inc	1983	1984	NASDAQ
Leisure Dynamics Inc	1983	1983	Acquired by Coleco 1986
Lionel Corp	1982	1985	ASE, bankrupt again 1991
Manville Corp	1982	1989	NYSE
Phoenix Steel Corp	1983	1985	Private
Poloron Products Inc	1981	1983	OTC
Revere Copper & Brass Inc	1982	1985	Private (Revere Copper Co.)
Robintech Inc	1983	1984	No record 1991
Salant Corp	1985	1987	NYSE, bankrupt again in 1990
Storage Technology Corp	1984	1987	NYSE
UNR Industries Inc	1982	1986	NASDAQ
Wheeling-Pittsburgh Steel	1985	1991	NYSE
Wickes Cos Inc	1982	1984	Private (WCI Holdings, Inc.)

Partially successful reorganizations (n = 29)

Firm	Bankruptcy In	Bankruptcy Out	Notes, Present status
Amfesco Industries Inc	1985	1988	Bankrupt again 1989 (New American Shoe Company)
Anglo Energy Ltd-cl A	1983	1986	ASE (Nabors Industries)

Argo Petroleum	1986	1987	NASDAQ (Fortune Petroleum Co.)
Berry Industries Corp	1984	1986	No record 1991
Bobbie Brooks Inc	1982	1983	NASDAQ
Braniff International Corp	1982	1983	Bankrupt again 1989 and 1991
CS Group Inc	1982	1983	Bankrupt again 1989
Charter Co	1984	1987	NYSE
Continental Steel Corp-Del	1980	1982	Bankrupt again 1985
Cook United Inc	1984	1986	Bankrupt again 1987
Eastmet Corp	1986	1988	No record 1991
Flame Industries Inc	1983	1985	No record 1991
Garland Corp-Cl a	1980	1980	Private
Gilman Services Inc	1982	1985	No record 1991
Global Marine Inc	1986	1988	NYSE
K-TEL International	1984	1986	OTC
Marion CORP	1983	1986	No record 1991
Mclouth Steel Corp	1981	1984	NASDAQ, (MLX Corp.)
MEGO International	1982	1983	OTC
Mesta Machine Co	1983	1984	NYSE, (Mestek Inc)
Mobile Home Industries	1984	1986	No record 1991
Morton Shoe Cos Inc	1982	1983	No record 1991
Nucorp Energy Inc	1982	1985	NASDAQ
Pathcom Inc	1981	1983	No record 1991
Richton International Corp	1980	1981	NASDAQ
Rusco Industries Inc	1982	1983	Bankrupt again 1983
Smith International Inc	1986	1987	NYSE
Tacoma Boatbuilding Inc	1985	1989	NYSE
White Motor Corp	1980	1983	NASDAQ, (EnviroSource Inc)

Acquired by other firms (n = 12)

Firm	Bankruptcy In	Out	Notes, Present Status
Altec Corp	1983	1985	Acquired by Gulton Industries
Beker Industries	1985	1988	Acquired by NuWest Industries
Commodore Corp	1985	1986	Acquired by Great American Mgt. and Invest Inc.
KDT Industries INC	1982	1984	Acquired by Ames Department Stores (also bankrupt)
MGF Oil Corp	1984	1987	Acquired by Southmark
National Shoes Inc	1980	1985	Acquired by Shoecliff Corp.
Robins (A.H.) CO	1985	1989	Acquired by American Home Products
Saxon Industries	1982	1985	Acquired by Paper Company of America
Solomon (SAM) Inc	1980	1982	Acquired by Service Merchandise Co.
Steelmet Inc	1983	1985	Acquired by Elg Haniel Metals Corp.
Stevcoknit Inc	1981	1983	Acquired by J. P. Stevens
Towle Manufacturing Co	1986	1987	Acquired by First Republic Corp.

Liquidations (n = 16)

Firm	Bankruptcy In	Bankruptcy Out
Advent Corp	1981	1982
Auto-Train Corp	1980	1981
Barclay Industries	1981	1984
Berven Carpets Corp	1983	1985
Branch Inds	1984	1986
Capitol Air Inc	1984	1985
Cooper-Jarrett Inc	1981	1985
Crompton Co Inc	1984	1987
Glover Inc	1980	1981
Good (L.S.) Co	1980	1980
Lynnwear Corp-cl A	1981	1983
Magic Marker Corp	1980	1981
Sambo's Restaurants	1981	1985
Tobin Packing Co Inc	1981	1984
Transcontinental Energy	1984	1985
Upson Co	1980	1984

Notes: Successful reorganizations: firms that emerged from bankruptcy with their original corporate identity, whose stocks were traded on the NYSE, ASE, or NASDAQ, and retained more than 50 percent of their bankruptcy assets. Partially successful reorganizations: firms that emerged from bankruptcy with their original corporate identity, whose stocks were traded on the NYSE, ASE, or NASDAQ, and retained less than 50 percent of their prebankruptcy assets. Unsuccessful reorganizations: all other firms. Present Status: Current stock exchange (OTC indicates local or regional stock exchanges) or as reported in Wards Directory (1991).