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SHOULD WE ABOLISH CHAPTER 11? THE EVIDENCE FROM JAPAN

THEODORE EISENBERG and SHOICHI TAGASHIRA*

OPTIMIZING reorganization proceedings for small and mid-sized businesses is an important issue in every industrial country. But little information exists about the actual operation of such proceedings. Recent U.S. bankruptcy studies focus either on consumer bankruptcies¹ or on large Chapter 11 cases involving publicly listed firms.² This article presents the results of a comprehensive empirical study of Japan's most frequently used business bankruptcy reorganization provision.

Small and mid-sized reorganizations have become important for several reasons. First, unlike large firms,³ the vast majority of small businesses fail to obtain confirmation of a Chapter 11 plan and end up in liquidation,⁴

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¹ Teresa A. Sullivan, Elizabeth Warren, & Jay Lawrence Westbrook, *As We Forgive Our Debtors* (1989).

² Stuart C. Gilson, Kose John, & Larry H. P. Lang, *Troubled Debt Restructurings: An Empirical Study of Private Reorganization of Firms in Default*, 27 J. Fin. Econ. 315 (1990); Lynn M. LoPucki & William C. Whitford, *Venue Choice and Forum Shopping in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 1991 Wis. L. Rev. 11; Lynn M. LoPucki & William C. Whitford, *Bargaining over Equity's Share in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 139 U. Pa. L. Rev. 125 (1990); Lawrence A. Weiss, *Bankruptcy Resolution: Direct Costs and Violation of Priority of Claims*, 27 J. Fin. Econ. 285 (1990).

³ LoPucki & Whitford, *Venue Choice*, *supra* note 2, at 41 n.105; Weiss, *supra* note 2, at 291 (high confirmation rate).

⁴ See, for example, Douglas G. Baird, *Revisiting Auctions in Chapter 11*, 36 J. Law & [Journal of Legal Studies, vol. XXIII (January 1994)]

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thus suggesting the possible need for reform. Second, while failure dominates small Chapter 11 cases, small cases make up the bulk of Chapter 11 filings. The vast majority of business bankruptcies involve small and mid-sized firms. Only 20 percent of Chapter 11 cases filed since 1979 involved assets of \$1 million or more.⁵ Much of the concern about Chapter 11 focuses on its operation in such cases. Third, empirical data suggest that violations of absolute priority occur in small business reorganizations and that unsecured creditors are in a weak negotiating position with the debtor.⁶ These findings raise the question whether most small or mid-sized businesses should be routed to Chapter 7, without a wasteful pause in Chapter 11. Even in the case of large firms, academics propose abolishing Chapter 11.⁷

Econ. 633 (1993); Hon. Edith H. Jones, Chapter 11: A Death Penalty for Debtor and Creditor Interests, 77 Cornell L. Rev. 1088, 1089 (1992); Elizabeth Warren, "Why Have a Federal Bankruptcy System?" 77 Cornell L. Rev. 1093, 1097 (1992); Tom Furlong, Many Firms Don't Survive Filings for Bankruptcy, L.A. Times, January 13, 1992, pt. A, at 1, col. 1 (home ed.); Mary Graham, Bankrupt and Bullish, Atlantic, March 1992, at 28; After the Recession: Bankruptcy Practice Boon Escalates through 1990s, Ill. Leg. Times, March 1991, at 1; Kentucky Study Shows: Chapter 11 Confirmations May Be Higher than Previously Thought, 24 Bankr. Ct. Dec., No. 7, at A1, A12 (May 27, 1993) (17 percent plan confirmation rate, 58 percent confirmed plan consummation rate in the Southern District of New York; 24-40 percent plan confirmation rate in the Western District of Kentucky).

⁵ Gordon Bermant, Patricia A. Lombard, & Elizabeth C. Wiggins, A Day in the Life: The Federal Judicial Center's 1988-1989 Bankruptcy Court Time Study, 65 Am. Bankr. L. J. 491, 497 (1991). The 20 percent figure is based on cases for which data about assets are available. A report by the Bankruptcy Division of the Administrative Office of the U.S. Courts summarizes the results of a study by Ernst & Young, Inc., commissioned by the Administrative Office, of 2,395 confirmed Chapter 11 cases in fifteen districts and in which confirmation occurred before 1987. Ed Flynn, Statistical Analysis of Chapter 11, at 9-10 (October 1989). The Ernst & Young study found mean Chapter 11 assets exceeded \$1 million in 41.8 percent of the cases. The cases studied did not constitute a random sample of Chapter 11 filings. In particular, the study included only confirmed cases and intentionally included five districts selected due to the potentially unique characteristics of the Chapter 11 caseloads. These districts were S.D.N.Y. (Manhattan), N.D. Ill. (Chicago), N.J., S.D. Tex. (Houston), and C.D. Cal. (Los Angeles). Mean assets showed substantial interdistrict variation, with six districts having mean assets of less than \$2 million and six districts having mean assets of more than \$5 million. *Id.* at 17.

⁶ Lynn M. LoPucki, The Debtor in Full Control—Systems Failure under Chapter 11 of the Bankruptcy Code? (pts. 1 & 2), 57 Am. Bankr. L. J. 99, 247 (1983).

⁷ Barry E. Adler, Bankruptcy and Risk Allocation, 77 Cornell L. Rev. 439 (1992); Michael Bradley & Michael Rosenzweig, The Untenable Case for Chapter 11, 101 Yale L. J. 1043 (1992); Douglas G. Baird, The Uneasy Case for Corporate Reorganizations, 15 J. Legal Stud. 127 (1986). These proposals have generated substantial commentary and criticism. For example, Theodore Eisenberg, Baseline Problems in Assessing Chapter 11, 43 U. Toronto L. J. 633 (1993); Lynn M. LoPucki, Strange Visions in a Strange World: A Reply to Professors Bradley and Rosenzweig, 91 Mich. L. Rev. 79 (1992); Leonard M. Rosen, Book, Chapter and Worse, 1 Bus. Law Today 47 (July/August 1992); Elizabeth Warren, The Untenable Case for Repeal of Chapter 11, 102 Yale L. J. 437 (1992).

Before proposing reforms, it is important to understand how reorganizations function for small and mid-sized firms. Analysis of the Japanese data yields several important results. The data allow the first quantitative estimate of the rate of successful reorganizations⁸ necessary to yield a gain to creditors in filed cases. The obvious alternative, advocated by abolition proposals, is to have some form of forced liquidation be the exclusive business bankruptcy mechanism. Based on the Japanese data, a surprisingly low reorganization success rate, under 30 percent, can yield a gain to creditors over liquidation in filed cases. Fees absorb some of this gain, but a substantial aggregate going-concern surplus may remain. The observed success rate suggests that, in filed cases, Japan's reorganization system generates net gains to creditors and others. The current U.S. success rate may be too low to yield a gain in small cases. Our findings suggest, however, that reorganization for some small or mid-sized businesses is a viable concept.

The surprisingly low reorganization success rate needed to yield a gain in filed cases has direct implications for reorganization of larger firms and for proposals to modify or eliminate Chapter 11. Our data show that the reorganization of small firms, even in the face of a substantial failure rate, yields a net surplus over liquidation. For larger firms, administrative costs are likely to be a smaller percentage of assets, and the surplus from reorganizing over liquidating should, in general, be larger than for smaller firms. In addition, larger firms successfully reorganize at a higher rate than smaller firms.⁹ Therefore, the surplus we detect for small and mid-sized firms is likely to be higher for larger firms. Proposals to abolish or reform Chapter 11 ought to be rethought in light of these data.

This article also presents the first detailed empirical study of several important features of any reorganization law. First, it examines the best-interests-of-creditors test (creditors in reorganization proceedings must receive at least what they would receive in liquidation), the fundamental protection afforded creditors in any nonliquidating bankruptcy proceeding in both Japan and the United States. Some violations of the requirement exist.

Second, we analyze the factors that influence liquidation value estimates and proposed repayment percentages. Estimates of liquidation value reveal substantial regional variation across Japanese judicial districts. Other influential factors include measures of the debtor's financial health and the career status of the examiner who, in composition proceed-

⁸ We use the term reorganization to include U.S. Chapter 11 cases as well as the Japanese composition cases that are the subject of this study.

⁹ LoPucki & Whitford, *Bargaining over Equity's Share*, *supra* note 2.

ings, estimates liquidation value.¹⁰ Examiners estimate higher liquidation values for retail firms than for other firms. Substantial regional effects also emerge in evaluating proposed repayment percentages. The repayment percentage also proves to be a function of plan length, the length of any grace period, and the estimated liquidation value. As a group, construction firms promise higher payments than other firms.

Third, we explore the factors that influence whether a proposed plan will be confirmed or rejected. Surprisingly, the debtor's economic health seems to play a minor role. The most important financial factor influencing confirmation is not some measure of the debtor's finances, such as asset/debt ratios or the availability of liquid assets. Rather, it is the average size of creditor claims against the debtor. Where the average claim is relatively high, creditors may have the incentive to organize to resist the debtor's effort to confirm a plan that does not satisfy them. Smaller average claims supply creditors with less incentive to invest to oppose the debtor's proposed plan.

Separating two issues assists in isolating what our study does and does not show. The question whether reorganization law generates a net social gain is distinct from the question whether, in filed reorganization cases, creditors receive more than they would were the debtor liquidated. The net social gain issue is not within our reach. Our data do not include the effect of reorganization law on debtors who never initiate reorganization proceedings, on their creditors, and on society as a whole. Nor can our data reveal what debtors and creditors would have done had there been no reorganization law. One cannot measure an insolvency law's effect by studying only firms that invoke it.¹¹

Inability to answer the ultimate social welfare question should not unduly detract from our findings' importance. Criticisms of Japanese and U.S. reorganization law go beyond allegations of net social welfare losses. Serious allegations exist that reorganization systems, even when limited to filed cases, do not work. Creditors in filed cases emerge with less than they would in liquidation; debtors use the proceedings to stall, remain in control, and capture value for themselves or insiders.

These allegations are particularly damning because they do not involve rejection of the premises of a reorganization system. Those who think that a going-concern value in excess of liquidation value is an oxymoron are unlikely to be impressed by findings supporting a reorganization sys-

¹⁰ Several officials in Japanese reorganization proceedings might be called "examiners" in English. We use the term "examiner" to mean *Seiri-in* (examiner in composition proceedings).

¹¹ Eisenberg, *supra* note 7, at 655-56.

tem. Findings that undermine the system would not surprise them. But those who accept the underlying premise of reorganization—the existence of a separable going-concern value—should be troubled if, in filed cases, creditors end up with less than liquidation value. Studying this concern about filed cases can be accomplished in a study limited to such cases.

That we can study concerns about filed cases without addressing the net social welfare issue does not mean the questions are unrelated. The social gain question and our narrower inquiry are linked in an important manner. If the reorganization system failed to pass scrutiny in filed cases, that would be a significant weakness. We would also count it as strong, if not conclusive, evidence bearing on the social welfare issue. A system that cannot even deliver what it purports to deliver in filed cases, a gain for creditors, is seriously flawed. Put another way, the reorganization system's generation of higher returns to creditors is probably a necessary but not sufficient condition for concluding that the system works.

With these limitations in mind, Section I describes the Japanese business reorganization system and narrows the focus to the most frequently used branch of that system, compositions. Section II describes the data, presents summary statistics of important variables, and states the research questions addressed in the empirical analysis. Section III explores liquidation value estimates and repayment percentages and identifies the factors that influence them. Section IV supplies a similar analysis of plan confirmation, denial, and case withdrawal. Section V analyzes the net gain to creditors of composition proceedings. Section VI develops some possible implications for the U.S. reorganization system.

I. JAPANESE BUSINESS REORGANIZATION PROCEEDINGS

Understanding our findings requires some knowledge of Japanese reorganization proceedings. Japan has three kinds of in-court reorganization proceedings: corporate reorganization under the Corporate Reorganization Act¹² (“corporate reorganization”), corporate composition under the Commercial Code¹³ (“corporate composition”), and composition under the Composition Act¹⁴ (“composition”). Corporate reorganization, based

¹² Kaisha Kōseihō (Corporate reorganization act), Law No. 172 of 1952.

¹³ Shōhō (Commercial code), Law No. 48 of 1899, §§ 381 ff.

¹⁴ Wagihō (Composition act), Law No. 72 of 1922. There are actually two possible uses of composition under the Composition Act. They can be used not only to reorganize but also to achieve a smooth liquidation. An orderly liquidation under the Composition Act avoids the compulsory and immediate scrapping of the debtor's business under bankruptcy (liquidation) proceedings. Despite some possible counterarguments, such liquidating com-

on old Chapter X of the U.S. Bankruptcy Act, is a rigid proceeding for large publicly held stock corporations and almost always entails a change of management. The other two reorganization proceedings are simplified reorganization proceedings for smaller businesses.¹⁵ They normally provide only for a reduction and extension of debts. Composition has been the most frequently used restructuring forum of the three. According to Japanese supreme court statistics, about 100–700 reorganization petitions were filed per year for the last decade, and more than three-fourths of them were compositions.¹⁶

A. *Composition Proceedings*

Filing the Petition. Unlike other insolvency proceedings, only debtors may file composition proceedings.¹⁷ Any entity or natural person, including a financial institution, is eligible to file a composition proceeding.¹⁸ Debtors must file a composition plan at the time of the filing peti-

positions should be viewed as authorized by the Composition Act because compositions were created to avoid the stigma of liquidating bankruptcies. Composition Act § 1. See Shoichi Tagashira, *Wagi tetsuzuki no kinō ni tsuite: Shitekiseiri tonō dōshitsusei, renzokusei no kanten kara* (2) (Functions of composition proceedings: From the viewpoints of consecutiveness and similarity between compositions and out-of-court workouts, pt. 2), 100 *Mins-hōhō zasshi* 249, 255 (1989). Compulsory Compositions (*Kyōsei wagi*) under the Bankruptcy Act (Law No. 71 of 1922) §§ 290 ff. (which are different from what we refer to as compositions), in which a plan is proposed after a bankruptcy adjudication, can be used as reorganization proceedings. But because it is virtually impossible to file a feasible reorganization plan after a bankruptcy adjudication, compulsory compositions are very rare. For example, in 1990 there were only four cases of compulsory composition of stock corporations out of 12,634 concluded bankruptcy cases. *Saikōsaibansho jimusōkyoku hen, Shihōtōkeinenpō, Minji gyōsei hen* (Administrative Office of the Supreme Court, Annual report of judicial statistics, Vol. 1, Civil cases) (1990), table 200-1.

¹⁵ Only stock corporations may file corporate composition proceedings. Commercial Code § 381.

¹⁶ For example, in 1990 there were 102 filings under the three kinds of reorganization proceedings, and seventy-seven (75 percent) of the filings were compositions. In 1985, 575 of 680 (85 percent) reorganization filings were compositions. *Saikōsaibansho jimusōkyoku hen*, *supra* note 14, table 200-1. Just as in the United States, many insolvency cases are handled out of court (“*Shitekiseiri*”), although it is almost impossible to ascertain the exact number. Note that “*Shitekiseiri*” is a term which also comprehends out-of-court liquidation. Data on insolvencies (including, but not limited to, suspension of banking transactions and filing of judicial bankruptcy proceedings) of enterprises with liabilities of ¥10 million or more are available in reports compiled by credit bureaus such as Tokyo Shōkō Research, Ltd., and Teikoku Data Bank.

¹⁷ Composition Act § 12.

¹⁸ Although compositions are available to consumers, almost all composition debtors are business entities. Since Japan has no proceeding similar to U.S. Chapter 13 (repayment

tion. The plan may be amended after filing as the result of negotiations with creditors.

Some compositions are believed to be filed simply to obtain breathing space for the debtor. Debtors usually bring motions for what are called “preservative measures” simultaneously with or immediately after the composition filing. Typical preservative measures include prohibitions against payment of debts, disposition of debtors’ properties, and borrowing money. Courts may not stay secured creditor foreclosure proceedings¹⁹ (although some commentators contend otherwise).²⁰ The most important preservative measure is the prohibition against payment of antecedent debts by the debtor. This prohibits noteholders from submitting them for collection. This has the effect of preventing the dishonor of promissory notes (a common method of debt payment in Japan). Dishonor of two promissory notes within six months leads to a suspension of business transactions with banks. In Japan, such a suspension means the death of a debtor as a business entity.

Commencement of the Case. Shortly after a petition is filed, the court appoints an examiner²¹ to investigate the debtor’s financial condition. Examiners scrutinize the debtor’s financial records and submit an opinion as to whether the case should be commenced. The decision to allow commencement is a substantive decision separate from the later decision whether to confirm a plan. Creditors may and do contest the commencement decision. Courts decide whether the case should be commenced with reference to the examiner’s opinion. Courts *must* deny commencement for the causes listed in § 18 of the Composition Act. These include unequal treatment of creditors under a plan and a plan under which creditors are to receive less than they would receive if the debtor were liquidated. Courts *may* deny commencement if the debtor has not satisfied one of the conditions specified in § 19 of the Act. These include the debtor’s failure to pay administrative fees in advance and prior denial of

plans for consumers), consumer bankruptcies are dealt with almost exclusively by way of bankruptcy (liquidation) proceedings.

¹⁹ See Composition Act § 43.

²⁰ Makoto Ito, Wagi tetsuzuki ni okeru tanpokensha no chii: Tanpoken no jikkō ni taisuru chūshimeirei ha yurusareruka (Legal position of secured creditors in composition proceedings: Is a preservative measure to suspend a repossession action allowed?), 423 Hanta 24, 424 Hanta 25, 425 Hanta 24 (1980); Aritoshi Fukunaga, Tōsanhō to tanpoken (Insolvency law and secured claims), in 1 Kinyūtanpohō kōza 356 (1985).

²¹ Composition Act § 21. In a few cases, more than one examiner is appointed. Examiners can appoint experts on their own responsibility. Composition Act § 21(2).

confirmation of a composition plan. A debtor may withdraw a petition at any time until an adjudication of commencement.²²

Case Administration. Concurrently with the commencement of the case, the court appoints a composition trustee. Unlike a trustee in corporate reorganization (and in U.S. Chapter 11 proceedings), composition trustees are not authorized to operate the debtor's business. They supervise the debtor and perform some administrative duties. For example, a debtor must obtain the trustee's consent to engage in transactions out of the ordinary course of business. In addition, the trustee must investigate filed claims and decide whether and to what extent each creditor has voting rights at the creditors' meeting.²³

At the creditors' meeting, the examiner and trustee report the results of their investigation of the debtor's business and creditor claims and state their opinions about the plan. A plan is considered to be accepted if approved by unsecured creditors holding at least three-fourths in amount of the allowed claims and more than one-half in number of unsecured creditors who attend the meeting.²⁴ If a plan is not accepted at the first meeting and there is room for further negotiation, courts may authorize a second meeting. If there is no hope that a plan will be accepted, courts order the termination of the composition and the case proceeds to liquidation.²⁵

Confirmation of Plan and Postconfirmation Matters. If a plan is accepted by creditors, courts, as a rule, must confirm the plan.²⁶ On confirmation of a plan, the debtor regains the unrestricted right to operate the business, and the relationships between the debtor and creditors are modified according to the plan. If the debtor does not make the payments required by a plan, creditors can revoke the composition either partly or totally.²⁷

²² Withdrawal sometimes means that the debtor gave up restructuring the business. In that case, the debtor would be liquidated either in or out of court.

²³ The composition trustee does not have avoiding powers comparable to those available to U.S. trustees and debtors-in-possession under 11 U.S.C. §§ 544-48.

²⁴ Composition Act § 49; Bankruptcy Act § 306. In most cases, many creditors give proxies and, therefore, only large creditors physically attend the meeting.

²⁵ Composition Act §§ 59, 9.

²⁶ However, courts may refuse confirmation if, for instance, a debtor or others commit fraud to obtain plan acceptance or if the plan does not treat creditors equally. Composition Act § 51.

²⁷ Composition Act §§ 62, 64; Bankruptcy Act §§ 330-32. These proceedings, however, are considered to be ineffective, troublesome (to set aside a composition totally, for example, the same numerical consent requirements as on confirmation apply), and, consequently, impractical.

B. Problems with Compositions

Like the U.S. system, the Japanese system of dealing with small and mid-sized business failures is under intense scrutiny and criticism.²⁸ Creditors complain that composition proceedings are too favorable to debtors and allow debtors to exploit the bankruptcy system to stall creditors, without any real prospect of repaying their debts. They voice many of the same objections heard in the United States about Chapter 11: too much debtor control, too slow, little prospect for rehabilitation, abuse of the system. It is said that some debtors file composition petitions to obtain preservative measures²⁹ (in particular, the prohibition against payment of antecedent debts, noted above) and withdraw the petitions after using the preservative measures to survive the crisis. Some commentators criticize this as an abuse of composition proceedings (or preservative measures).³⁰ Creditor displeasure is bolstered by empirical studies showing low rates of successful completion of confirmed composition plans.³¹

Japan's small business reorganization procedures also have several problems from the viewpoint of debtors. For example, suppose a small or mid-sized corporation is in financial difficulty and wants to file a reorganization proceeding. The court would not accept a corporate reorganization filing by such a small corporation because of its size. But this does not necessarily mean that the other reorganization methods are suitable for such debtors. In composition, there are no provisions to stay the

²⁸ See generally, Koichi Shimojima, *Tōsanhōtaikei* (System of insolvency law) 526–28 (1990).

²⁹ In some cases, preservative measures enable debtors to negotiate successfully with creditors and other interested parties. After reaching a settlement, such debtors withdraw their composition petitions. Some argue these cases are also an abuse of composition proceedings. But if the composition proceeding assisted the parties in reaching agreement, the proceedings are not necessarily without social value. As these cases illustrate, defining the concept of “abuse” is a nontrivial problem that should be considered carefully. See Shoichi Tagashira, *Wagi tetsuzuki no kinō ni tsuite: Shitekiseiri tonō dōshitsusei, renzokusei no kanten kara* (3) (Functions of composition proceedings: From the viewpoints of consecutiveness and similarity between compositions and out-of-court workouts, pt. 3), 100 *Minshōhō zasshi* 412, 437 (1989).

³⁰ For example, Tatsujiro Ishihara, *Hasanhō waghō jitsumu sōran, Zentei ban* (Practice of bankruptcy and composition laws (full rev. ed.)) 693 (1981). For actual examples of abuse, see *Tōzai jitsumu kenkyūkai hen, Wagi* (Compositions) 90–91 (1988).

³¹ Akira Akiyama, *Wagi ni yoru kaisya saiken no jittai* (An empirical study of reorganization through composition proceedings), 1189 *Kinhō* 24 (1988), also reported in 400 *NBL* 4 (1988); *Nihon Kōnin Kaikeshi Kyōkai, Hokkaidō Kai* (Japan Institution of Certified Public Accountants, Hokkaidō Branch), *Waghō ni yoru wagi tetsuzuki, wagi jōken, rikō jōkyō no jittai: Sapporo chisai jūnenkan no wagi jiken wo sozai to shite* (Actual situation of composition proceedings, plans and plan consummation: An empirical study of composition cases in the Sapporo District Court in a decade), 683 *Hanta* 4 (1989) (hereafter cited as Japan CPA Association, Hokkaido Branch).

enforcement of secured claims. In corporate composition, unanimous consent of creditors is required to adopt the plan. As a result, some ailing firms might be unable to select a suitable reorganization proceeding. This may be one reason why there are relatively few reorganization filings in Japan.

II. THE DATA AND THE QUESTIONS STUDIED

Perceived problems with composition proceedings led to a national data-gathering effort in Japan by the Research Group on Empirical Study of Composition Proceedings.³² The data cover a substantial sample of all composition cases filed in Japan in 1982 and 1987. Of 841 composition cases filed in the two years,³³ the Research Group obtained data on 352 cases. All districts with large populations are included. Some limitations should be noted. The Research Group could not gather the data on some districts, primarily because of the district's geographical remoteness from the researchers. In districts in which data were available, some files had been already discarded. In addition, forms and calculation methods employed in examiner's reports sometimes are not uniform, especially in small districts. This led to further unavailability of some data. The data gathered about each case include area of business; business structure; capital; total assets; real estate assets; equipment assets; accounts receivable; deposits and cash; promissory notes; inventory; total debts; total number of creditors; secured debts; leases; unsecured debts; anticipated payment ratio in liquidation; administrative expenses; preservative measures; period of payments under plan; amount of creditor claims filed; amount of claims allowed; number of creditors accepting plan; amount of claims accepting plan; confirmation, withdrawal, or denial.

³² Professor Yoshimitsu Aoyama, Tokyo University, Director, 1989–present. Professor Tagashira is a member of this group. This research, conducted with the financial support of the Japanese Ministry of Education and the cooperation of the Japanese Supreme Court, is the first detailed nationwide empirical study of composition proceedings.

³³ In 1982, 521 composition cases were filed, Saikōsaibansho jimusōkyoku hen, Shihōtōkeinenpō, Minji gyōsei hen (Administrative Office of the Supreme Court, Annual report of judicial statistics, Vol. 1, Civil cases) (1982); in 1987, 320 were filed. Saikōsaibansho jimusōkyoku hen, Shihōtōkeinenpō, Minji gyōsei hen (Administrative Office of the Supreme Court, Annual report of judicial statistics, Vol. 1, Civil cases) (1987). The Research Group gathered additional data not discussed here. These include data from interviews with and questionnaires from practitioners. Results using these data are also expected to be published in Japan.

A. *Summary Statistics*

For all districts combined, debtors as a group claim assets worth slightly more than half their debts.³⁴ Using a conversion rate of ¥130 to the dollar,³⁵ the average assets for all cases in all districts are \$3.8 million and the average debts are \$7.1 million.³⁶ These results confirm that small and mid-sized firms file composition cases. An *F*-test on the differences of means across districts shows that one cannot reject the hypothesis of equal mean assets and debts across districts.

Before presenting data about creditors and plans, a word about the outcome of composition filings is necessary. Many composition cases do not progress very far and data on them is truncated. Of 347 cases for which there are relevant outcome data, 188 (54.2 percent) were confirmed, 135 (38.9 percent) were withdrawn, and 24 (6.9 percent) were denied.³⁷ In withdrawn cases, there often are few data about plan terms, creditors, and claims. In the next two tables, therefore, the data columns with comparatively few cases are essentially limited to cases that were not withdrawn.

The principal terms of the debtor's composition plan are the proposed percentage of repayment to unsecured creditors, the grace period after confirmation before repayment must begin, and the period of years during which repayment will be made. The asset/debt ratio is the principal financial variable. Table 1 presents the mean and median values for each of these items. Table 1 states results separately for all judicial districts that had a total of more than ten composition filings in the sample in the

³⁴ Average assets range from ¥768 million in Hiroshima to ¥266 million in Nagoya. Average debts range from ¥1.76 billion in Tokyo to ¥574 million in the aggregated smaller districts. See Appendix Table A1.

³⁵ The dollar-yen exchange rate was volatile during the years studied. In 1982, the exchange rate was 249.06 yen to the dollar. In 1987 the rate was 144.60 yen to the dollar. Statistical Abstract of the United States 860 (111th ed. 1991) (table 1482). Recently, the exchange rate has been closer to 110 yen to the dollar. This volatility is one reason we state most monetary figures in yen instead of converting them to dollars. The turmoil in the exchange rate is not matched by similar turmoil in the Japanese domestic money markets. Unless otherwise stated, the yen money figures here and throughout this article are stated in terms of thousands of 1987 yen. The yen figures for 1982 cases have been adjusted to 1987 values using the consumer price index for Japan for the years 1982–87, as reported in Statistical Abstract of the United States 481 (111th ed. 1991) (table 775).

³⁶ See Appendix Table A1.

³⁷ There are three kinds of denials: denial of a commencement (*Kikyaku*, Composition Act §§ 18, 19), denial of a confirmation (*Funinka*, Composition Act § 51), and discontinuance of proceedings (*Haishi*, Composition Act §§ 59, 60).

TABLE 1
COMPOSITION PLAN AND DEBTOR CHARACTERISTICS

DISTRICT	PROPOSED REPAYMENT PERCENTAGE			LENGTH OF PLAN			GRACE PERIOD			ASSET/DEBT RATIO		
	Mean	Median	N	Mean	Median	N	Mean	Median	N	Mean	Median	N
Fukuoka	52.2	50.0	51	6.4	5.0	48	1.8	2.0	45	.51	.47	47
Hiroshima	50.9	50.0	22	6.8	7.5	20	2.2	1.3	21	.66	.61	22
Nagoya	36.1	30.0	43	4.5	4.0	41	.8	1.0	43	.38	.34	41
Okayama	44.0	42.0	13	6.9	6.0	13	1.4	1.0	13	.43	.35	11
Osaka	43.6	40.0	94	5.4	5.0	92	.8	1.0	88	.64	.62	89
Sapporo	37.4	40.0	31	6.0	6.0	31	1.5	1.1	31	.45	.46	31
Tokyo	59.2	50.0	34	5.2	5.0	32	.7	.8	31	.68	.59	32
Other	53.6	50.0	51	6.5	6.0	51	1.2	1.0	50	.58	.57	50
Total	46.9	42.0	339	5.8	5.1	328	1.2	1.0	322	.56	.51	323
F-test significance	.000			.001			.000			.015		

SOURCE.—Research Group on Empirical Study of Composition Proceedings.

two years studied. All other districts are aggregated into a single aggregate district, "Other."³⁸

The mean proposed payment level is 46.9 percent,³⁹ over a mean period of almost six years, following a proposed grace period with no payments of 1.2 years.⁴⁰ The average asset/debt ratio ranges from .68 in Tokyo to .38 in Nagoya. The median plan term data do not substantially differ from the mean data. An *F*-test on the differences across districts of means shows that one can reject the hypothesis of equal mean repayment percentages, plan lengths, grace periods, and asset/debt ratios. Thus, there are substantial regional effects to explore.

Creditor reaction to plans can be gleaned from their voting patterns. Table 2 shows the mean and median number of creditors, allowed amount of creditor claims, number of creditors accepting a plan, and amount of creditor claims accepting a plan.

Composition case debtors have on average eighty creditors and ¥522 million in allowed claims.⁴¹ On average, forty-nine creditors vote to accept each plan and ¥491 million of allowed claims vote to approve.⁴² A much higher percentage of debts than of creditors vote to approve the plans, suggesting that debtors obtain approval from larger creditors and small creditors either do not participate or oppose plans.⁴³ There is no statistically significant regional variation in these creditor characteristics.

³⁸ The districts included in "Other" are Aomori, Asahikawa, Fukushima, Hakodate, Kushiro, Matsue, Niigata, Sendai, Takamatsu, Tokushima, Tottori, and Yamagata. For purposes of this study, we do not distinguish among branches of courts within districts. The data do allow for this refinement.

³⁹ In one view, the proposed repayment level in Chapter 11 cases is strikingly similar. The fiftieth percentile of proposed repayment in confirmed cases was \$409,000, and the fiftieth percentile of debts was \$890,000, for a proposed repayment percent of 46 percent. Flynn, *supra* note 5, at 20–21 (tables 15B and 15C). At all reported percentile levels, the proposed repayment level was 40–50 percent of the obligations. The total proposed repayments, however, were about 75 percent of the total reported obligations. *Id.* at 18–19 (tables 14B and 14C).

⁴⁰ In computing these statistics, amendments to initial plan proposals have been included.

⁴¹ The difference between the average amount of allowed claims in Table 2 and the average total debts in Appendix Table A1 stems from the exclusion of secured claims, preferred claims, and disallowed claims from the allowed claim totals. These excluded claimants usually receive payment in full and not merely the percentage payment proposed under the composition plan.

⁴² The majority-of-creditors approval requirement applies to creditors attending the creditors' meeting, not to the total number of creditors. See note 24 *supra*.

⁴³ Table 2 shows that in Osaka the mean amount of debt accepting a plan exceeded the mean amount of allowed claims. This apparent anomaly is the result of one case with a large acceptance amount for which the allowed amount of claims was missing. Note the higher *N* in the amount accepting column than in the amount allowed column.

TABLE 2
CREDITORS, CLAIMS, AND PLAN ACCEPTANCES

DISTRICT	NO. OF CREDITORS			AMOUNT OF ALLOWED CLAIMS (in Millions of 1987 ¥)			NO. OF CREDITORS ACCEPTING PLAN			AMOUNT ACCEPTING PLAN (in Millions of 1987 ¥)		
	Mean	Median	N	Mean	Median	N	Mean	Median	N	Mean	Median	N
Fukuoka	69	65	29	589	219	36	32	30	37	537	191	37
Hiroshima	79	61	18	540	550	10	46	31	10	455	300	10
Nagoya	80	59	29	560	336	29	47	39	28	518	300	28
Okayama	95	95	2	597	568	9	58	50	9	559	564	7
Osaka	74	55	44	467	289	41	83	40	39	551	272	42
Sapporo	85	75	26	486	246	21	41	36	21	419	191	21
Tokyo	80	57	24	959	650	8	45	43	10	730	407	10
Other	90	62	40	360	151	30	36	28	31	306	119	32
Total	80	61	212	522	264	184	49	34	185	491	231	187
F-test significance	.974			.832			.605			.927		

SOURCE.—Research Group on Empirical Study of Composition Proceedings.

B. Research Questions Addressed

The central policy question about reorganizations is whether the proceedings are worth their costs. Cost-benefit questions can take different forms. Quantitatively, we can best address the question from the creditors' perspective in filed cases. This is an important, even if not exclusive, perspective. If creditors are net losers in filed compositions or reorganizations, that is a strong argument against such proceedings.

Reorganization proceedings acknowledge the creditor perspective by building in a creditor-based cost-benefit analysis. Nonliquidating bankruptcies, both business and consumer, protect creditors through the "best-interests" test. Under the best-interests test, a reorganization plan cannot be confirmed unless creditors will receive under the plan at least what they would receive in a liquidation.⁴⁴

If all reorganization plans were performed, and the best-interests test passed, creditors would be better off, at least in filed cases. But all plans are not performed, and it becomes messy to determine the net gain or loss to creditors. This depends on how much creditors gain in cases in which reorganization plans succeed versus how much they lose in cases in which plans fail. No existing or future study is likely to contain all of the data necessary to definitively answer these questions. But the data in this study come closer to allowing informed estimates than the data in any other study.

The data enable us to estimate the benefits to creditors of confirmed plans in cases with confirmed plans and an upper bound on the costs to creditors of failed plans. By varying the rate at which plans succeed, we gain insight into whether creditors as a group are better off in cases with composition plans than with a system that required liquidations.

In addition to estimating the gain or loss to creditors from composition proceedings, some important preliminary questions can usefully be addressed. Assessing gain requires a measure of what creditors would receive on liquidation and what they receive under a successful composition plan. We therefore begin by analyzing the data on liquidation value estimates and plan repayment terms. We explore models that both check whether the data concerning these items are plausible and help identify the factors influencing them.

A second set of preliminary questions examines the parties' and courts' behavior in filing and withdrawing cases and in confirming or denying plans. Of these matters, the filing-withdrawal behavior is more important.

⁴⁴ 11 U.S.C. § 1129(a)(7)(A)(ii). For the consumer bankruptcy version of this test in the United States, see 11 U.S.C. § 1325(a)(4).

Filing followed by withdrawal is common in Japanese composition cases. Denial of confirmation in those cases not withdrawn occurs in less than 7 percent of cases. Knowledge of how these mechanisms work to leave the residue of confirmed composition cases helps place our estimates in perspective. The confirmation-denial decision should be of interest to bankruptcy observers independent of the results of the creditor-gain analysis.

The multivariate analyses of plan features and the confirmation-denial issues also develop one issue that motivated the Japanese data-gathering effort. A prime concern of the Research Group was the extent of regional variation in composition practices.⁴⁵ In general, there was a belief that Tokyo was a strict district in which obtaining confirmation of a composition plan was difficult compared to other districts. Osaka was believed to be a district in which composition practices were liberal and favorable to debtors and in which a high number of filings would be found. Although some interdistrict variation would be expected by chance, we find the regional variations for several issues to be large and beyond chance expectations.

III. ESTIMATES OF LIQUIDATION VALUE AND PROPOSED REPAYMENT TERMS

Japanese composition proceedings employ a best-interests test. A composition plan cannot be confirmed unless the creditors will receive under the plan at least what they would receive in a liquidation.⁴⁶ Japanese composition practice adds an important datum to the best-interests requirement. In deciding to recommend whether to allow a composition case to commence, the examiner must estimate what creditors would receive on liquidation.⁴⁷ Each case thus yields a neutral expert's estimation of the debtor's liquidation value.

With liquidation value established, the best-interests test requires knowing what the debtor proposes to pay in the composition plan. Comparing the liquidation value with what is promised under the plan allows the court to determine whether creditors will receive at least as much

⁴⁵ For similar concerns in the United States, see Lynn M. LoPucki & William C. Whitford, *Venue Choice*, *supra* note 2.

⁴⁶ Composition Act §§ 18(V), 51(IV); Nihon Kōnin Kaikeshi Kyōkai, Kinki Kai, Hōmu-kaikai Iinkai (Japan Institution of Certified Public Accountants, Kinki Branch, Committee of Legal and Accounting Affairs), *Wagihō chōsa gaidorain* (Guidelines for financial investigation in composition proceedings), in Takahisa Sugano, *Wagijiken no mōshitate, shinri, saiban* (Petition, investigation and adjudication in composition proceedings) 482, 460 (1991) (hereafter cited as Japan CPA Association, Kinki Branch).

⁴⁷ Japan CPA Association, Kinki Branch.

under the composition plan as they would if the debtor were immediately liquidated.

A. *Estimates of Liquidation Value*

The pattern of the liquidation estimates is itself of interest. On the whole, examiners are skeptical about the possibility of unsecured creditors receiving substantial payments on liquidation. The tenth percentile of liquidation estimates is zero, indicating that in at least 10 percent of composition cases, examiners estimate no liquidation value. The fiftieth percentile is less than 10 percent, and the ninetieth percentile is less than 30 percent. The mean estimate is 12.4 percent, and the mode is zero.⁴⁸

⁴⁸ The conclusions that can be drawn from our data depend on the absence of bias in the examiners' estimates of liquidation value. We cannot directly test for bias but can provide one related measure of liquidation values. The Japanese Supreme Court reports data on the percentage of debts paid in liquidation cases and on the number of no-asset cases. Saikōsaibansho jimusōkyoku hen, Shihōtōkeinenpō, Minji gyōsei hen (Administrative Office of the Supreme Court, Annual report of judicial statistics, Vol. 1, Civil cases) (1987), at 300, 302 (tables 200-1, 202-1). These data are reported separately for natural persons and for stock corporations. Stock corporations probably provide the category of liquidation cases most analogous to the businesses studied here. The data show the following percentage distributions in cases ending with distributions:

total cases ending with distributions	753
distribution up to 5 percent	336
distribution more than 5 percent and up to 10 percent	153
distribution more than 10 percent and up to 25 percent	165
distribution more than 25 percent and up to 50 percent	64
distribution more than 50 percent and up to 75 percent	24
distribution over 75 percent	11

Id., table 202-1. We use the midpoint of each percentage distribution interval to estimate a mean. For example, for the 336 cases reported with distributions of up to 5 percent, we use 2.5 percent as the distributed amount. For the 64 liquidation cases with distributions between 25 percent and 50 percent, we use 37.5 percent as the distributed amount. In addition to the 753 cases with distributions, there were 202 cases ending with no distributions. *Id.*, table 200-1. (Tables 200-1 and 202-1 report slightly different numbers of cases ending in distributions, but, for our purposes, the difference, less than 1 percent, is too small to materially affect the results. The difference in the number of cases appears to be attributable to different treatment of consolidated cases.) Combining the zero distribution in no-asset cases with the mean distribution in cases that ended with distributions yields an average liquidating distribution by stock corporations, in 1987, of 10.3 percent of claims to creditors. This is lower than the 12.4 percent mean distribution we report in text. If one excludes no-asset cases from the 1987 liquidation cases, the actual distribution to creditors is 12.9 percent. If one excludes zero-estimate cases from our sample, the estimated mean distribution is 14.5 percent. Both comparisons suggest that the examiners are estimating liquidation values slightly higher for composition cases than are actually observed in liquidation cases. This is plausible because one might expect, on average, that a healthier group of firms would seek composition than would seek liquidation. If one included the "natural persons" liquidation category in the Japanese Supreme Court's data, the percentage distribution would decline.

These summary liquidation value statistics, standing alone, may tell an incomplete story. Factors such as the financial health of the debtor, local practice, and the individual examiner may all influence the estimate. These considerations suggest the use of multivariate analysis.

Given the wealth of data about each debtor, many possible models forecasting a particular debtor's liquidation value are possible. We employ a model in which the dependent variable is the percentage of debts unsecured creditors would receive on liquidation, as estimated by the court-appointed examiner. To account for regional variation, the independent variables include dummy variables for the judicial districts.

Three variables account for the debtor's financial condition. The independent variables include a measure of the debtor's overall health, its free total assets to free total debts ratio. The free asset/debt ratio differs from the ratio of total assets to total debts. The numerator in free asset/debt ratio is total assets minus secured debts and preferred debts. These are the assets available to pay general unsecured creditors under a composition plan. The denominator is total debts minus secured debts and preferred debts. We also include a variable to track each debtor's most liquid assets (deposits and promissory notes). The liquid asset ratio divides these liquid assets by unsecured and unpreferred debts to arrive at a measure of what percentage of unsecured claims could be quickly paid off in liquidation using liquid assets. The variable "capital" provides a measure of firm size.⁴⁹

To account for the examiner's background, we use a dummy variable to distinguish between examiners who are lawyers or certified public accountants (CPAs) and those who are not. We distinguish among areas of business through dummy variables for the following: retail, transportation, manufacturing, and construction.⁵⁰ We also include a variable, "in-

⁴⁹ Capital requirements recently took on new importance in Japan. The net worth of Japanese corporations has been said to be lower than that of U.S. corporations. In 1990, the Japanese Diet amended the Commercial Code and introduced a minimum capital requirement to help assure that firms have sufficient assets to pay their debts. Law No. 64 of 1990. The minimum capital has been set at ¥10,000,000 and ¥300,000, respectively, for stock and limited liability companies. Commercial Code § 168-4, Yūgengaisyahō (Limited liability company act), Law No. 74 of 1938, § 9. Application of these provisions is suspended with regard to existing companies for five years. See Supplemental provisions to the amendment. For more details, see Michio Matsueda, Kazuo Ihara & Haruhiko Katakai, 1 *Doing Business in Japan* 7-9 (Zentaro Kitagawa ed. 1992); Masahiro Kitazawa, *Kabushikigaisha no setsuritsu ni kansuru kaisei* (Amendments relating to incorporation of stock companies), 963 *Juristo* 37 (1990).

⁵⁰ A variable used to code for the two different years (1982 and 1987) in the study proved to be of little interest.

TABLE 3
REGRESSION RESULTS (TOBIT)
(Dependent Variable = Square Root of Estimated Liquidation Percentage)

	Coefficient	Standard Error	Significance
Regional variables:*			
Fukuoka	-.043	.727	.953
Hiroshima	1.289	.743	.085
Nagoya	1.338	.611	.031
Osaka	1.391	.495	.006
Sapporo	-.079	.610	.898
Tokyo	1.683	1.179	.156
Business-area variables:*			
Construction	.470	.469	.318
Manufacturing	-.168	.454	.712
Retail	1.008	.409	.015
Transportation	.055	.768	.943
Financial variables:			
Free asset/debt ratio (adjusted)	.707	.230	.003
Liquid asset/debt ratio (square root)	2.264	.838	.008
Debtor's capital (millions ¥) (logarithm)	.158	.140	.262
Examiner (neither lawyer nor CPA)†	2.840	1.353	.038
Constant	.228	.632	.719
$\chi^2(14)$	48.85		
Significance χ^2	.0000		
Pseudo R^2	.10		
Standard error	1.76		
Log likelihood	-229.84		
N	125		

SOURCE.—Research Group on Empirical Study of Composition Proceedings.

* Other is the reference variable.

† Examiner = lawyer or certified public accountant (CPA) is the reference variable.

dividual," to distinguish individual debtors from other debtors. Table 3 presents the results of the model using multivariate regression analysis.⁵¹

⁵¹ Because the estimated repayment percentage is truncated at zero, even if a firm has negative net worth, a Tobit model is appropriate. For example, Jan Kmenta, *Elements of Econometrics* 560–63 (2d ed. 1986). There are nineteen zero estimates in the 125 cases in the model sample. The transformations of the financial variables improve the model slightly. The free asset/debt ratio, which has positive and negative values, was transformed by taking the square root of the absolute value of the ratio and then restoring the negative sign for values less than zero.

Two variables, "Okayama" and "Individual Debtor," are omitted from Table 3 because there was only one case with these characteristics for which data on all of the other variables was also available. Therefore, the Okayama case has been included in the residual regional category, "Other," and the distinction between individual and nonindividual debtors has been dropped.

Substantial regional variation emerges. Osaka and Nagoya examiners estimate liquidation values higher than examiners in the reference category, holding constant the other variables. These higher estimates are statistically significant. The same result is true to a lesser extent of Hiroshima examiners. The strongest tendency toward estimating high liquidation values is in Tokyo, though this result is of marginal statistical significance. While regional variation is important, the debtor's financial condition does substantially influence the examiners. The asset/debt ratios in Table 3 are among the most important and significant factors in explaining liquidation value estimates. The presence of relatively more liquid assets (deposits and promissory notes) increases estimates, as does the presence of more free assets. Examiners who are neither lawyers nor CPAs estimate liquidation values that are substantially and significantly higher than do examiners who are lawyers or CPAs.

B. Proposed Repayment Percentage

As in U.S. Chapter 11 reorganization plans, liquidation estimates are a floor for a Japanese composition plan's payment terms. Plans that propose payments below the examiners' estimated liquidation percentage should not be confirmed. How much above the estimated liquidation percentage do proposed plan payments rise? Unlike U.S. debtors, Japanese composition debtors generally may not classify unsecured claims.⁵² The proposed repayment percentage thus applies to all unsecured creditors. Table 1 above presents descriptive statistics on the repayment proposals.

In round figures, debtors promise, on average, about 47 percent repayment. Table 1 shows that most of the mean and median percentage proposed repayments are in the 40–50 percent range. These figures apply whether one limits study to adjudicated cases or includes cases that are filed but withdrawn by the debtor before confirmation or denial.⁵³

As in the case of estimated liquidation values, mean repayment percentages, standing alone, incompletely describe the data. What are the major influences on the debtor's proposed repayment percentage? Table 1 shows that repayment percentages may vary by region. The mean pro-

⁵² 11 U.S.C. § 1122. Though, like the United States, Japan does allow some separate treatment of small and insider claims. Such provisions were found in 17 of 352 composition cases.

⁵³ The frequency distribution of proposed percentages in cases not withdrawn makes clear that the proposed repayment level is not the result of a very finely tuned calculation. The multi-peaked repayment distribution suggests that debtors tend to think in units of 10 percentage points. More than 83 percent of the plans called for repayment percentages that are evenly divisible by ten.

posed repayment percentage ranges from 59.2 percent in Tokyo to 36.1 percent in Nagoya. As in the case of estimated liquidation percentages, proposed repayments should vary based on each debtor's financial health.⁵⁴ Two other plan terms might be expected to influence the repayment percentage. Plans include the period during which payments will continue (up to fifteen years in our sample) and usually include a grace period before which no payments need be made. A trade-off exists between a higher percentage of payments and quicker payments. Debtors who propose to complete plans more quickly might promise lower percentage returns. Debtors who propose to pay out over a longer period may propose longer initial grace periods.

Multivariate regression results with the proposed repayment percentage as the dependent variable,⁵⁵ and a series of independent variables appear in Table 4.

Substantial regional effects again emerge. As suggested by Table 1, Sapporo, Osaka, and Nagoya plans promise the lowest percentages of payments, holding constant the other variables. Compared to the reference districts, this effect is statistically significant and large. Even controlling for other factors, the expected relationships between payment level and grace period and period-of-plan emerge. Longer plans and longer grace periods correlate with higher percentage repayments.⁵⁶ Both of these effects are highly statistically significant. Retail firms, construction firms, and transportation firms promise higher payments than other firms, and the construction firm effects are of near statistical significance.

The relationship between promised payment levels and financial health is of prime interest. Financial health measures are more difficult to quantify here than in the case of liquidation value estimates. The financial health of interest for purposes of payment levels is future financial health, not current ratios or asset levels. Of the many possible financial indicators, the estimated liquidation percentage proves to be the best predictor of the proposed repayment percentage. Debtors may draft their proposed payments with an eye on the confirmation standard, which expressly considers liquidation value. Liquidation value, in turn, correlates with other measures of financial health, as shown in Table 3. Using other

⁵⁴ Repayment percentages are proposed by the debtor, not by the examiner, although the examiner might suggest an amendment of the percentages if necessary.

⁵⁵ The dependent variable is truncated above (at 100 percent) but not below (there are no zero payment plans). A Tobit model, see note 51 *supra*, yields essentially the same results.

⁵⁶ This result contrasts with a study of Sapporo compositions. Japan CPA Association, Hokkaidō Branch, *supra* note 31, at 4 (finding no correlation between repayment rates and periods of payment under composition plans).

TABLE 4
REGRESSION RESULTS
(Dependent Variable = Proposed Repayment Percentage)*

	Coefficient	Standard Error	Significance
Regional variables:†			
Fukuoka	-6.700	5.255	.205
Hiroshima	-5.475	5.847	.351
Nagoya	-12.206	4.822	.013
Osaka	-9.374	4.134	.025
Sapporo	-13.638	4.768	.005
Tokyo	-2.644	9.755	.787
Business-area variables:†			
Construction	6.532	3.702	.080
Manufacturing	-3.394	3.542	.340
Retail	3.907	3.597	.280
Transportation	6.402	6.268	.309
Financial variables:			
Estimated liquidation percentage	.691	.125	.000
Payment period (years)	1.237	.547	.026
Grace period (years)	5.222	1.303	.000
Capital (millions ¥)	-.025	.022	.256
Constant	27.154	5.408	.000
<i>F</i>	6.95		
Significance <i>F</i>	.0000		
Adjusted <i>R</i> ²	.39		
Standard error	15.10		
<i>N</i>	132		

SOURCE.—Research Group on Empirical Study of Composition Proceedings.

* Only cases not withdrawn are included in this analysis.

† Other is the reference variable.

measures of financial health, such as those used in Table 3, yields models for repayment percentages with less explanatory power than does using the estimated liquidation percentage.

C. Compliance with the Best-Interests Test

Knowledge of estimated liquidation percentages and proposed repayment percentages allows analysis of compliance with the best-interests-of-creditors requirement. Given the presence of grace periods and multi-year plans, the nominal promised percentage repayment in a plan is not directly comparable with the estimated liquidation percentage. One must apply a discount rate and take into account the number of years of the plan as well as the grace period. These adjustments, together with knowledge of the allowed amount of claims, permit calculation of the present

value of the stream of payments promised in the composition plan. One can compare this present value with the estimated liquidation amount, as determined by the examiner's estimated liquidation percentage and the allowed amount of claims. The present value should exceed that estimated liquidation amount. In addition, to the extent the present value exceeds the liquidation value, one can estimate the going-concern "surplus"⁵⁷ that the debtor proposes to pay to creditors under the composition plan.

Calculating the present value of payments promised under a composition plan requires a discount rate. We use a high-end figure, 7 percent,⁵⁸ to avoid understating the losses to creditors inherent in delayed repayments. In our overall gain analysis, *infra*, the riskiness of lending to failing debtors is accounted for by estimates of plan success rates. For present purposes, the 7 percent discount rate accounts for the forgone opportunity of lending to healthy firms at a market rate.

Using the discount rate, we calculate for each debtor the difference between the present value of the promised stream of payments and the amount the examiner estimates would be distributed in liquidation. Call this difference the "surplus." Table 5 presents summary statistics about the surplus and the estimated liquidation amount.

For the 124 confirmed cases for which the data necessary to calculate both the surplus and the liquidation amount are available, the surplus is positive in 118 cases. In six of the 124 cases (about 5 percent), the surplus is negative but the plan was confirmed despite the seeming violation of the best-interests test. In two of these six cases the negative surplus was sufficiently small that it might disappear if a different, but still plausible, discount rate were used. Violation of the best-interests test in the other four cases does not seem to be sensitive to the discount rate assumption.⁵⁹ We conclude that there is substantial compliance with the best-interests requirement, with a few departures.

⁵⁷ For a more formal discussion of going-concern surplus, see Section V *infra*.

⁵⁸ The guidelines for examiners state that long-term interest rates should be used to compute present values. Japan CPA Association, Kinki Branch, *supra* note 46. For all Japanese industries, the rate of interest paid for borrowed money from 1985 to 1989 ranged from about 5 to 7 percent. Sōmuchō Tōkeikyoku (Statistics Bureau, Management and Coordination Agency), Dai Yonjūikkai, Nihon Tōkei Nenpō (Japan statistical yearbook no. 41) 373 (1991) (table 11-2, col. 17). In comparison, the basic interest rate of the Bank of Japan, the rate at which major Japanese banks may borrow from the Bank of Japan, ranged from about 2.5 to 4.5 percent during this period. *Id.* at 399 (table 12-7). The 1985 average long-term lending rate for all banks was 7.3 percent in 1985 and 5.6 percent in 1988. *Id.* at 423 (table 12-26).

⁵⁹ Two of these four erroneously confirmed plans were in Osaka and the other two were in Nagoya.

TABLE 5
ESTIMATED SURPLUS (Assuming Performed Plans)
AND LIQUIDATION AMOUNT
(in Thousands of 1987 ¥)

	Estimated Surplus	Liquidation Amount
Mean	85,112	55,187
Median	43,165	20,647
Sum for all cases	10,553,923	6,843,156
Number of cases	124	124

SOURCE.—Research Group on Empirical Study of Composition Proceedings.

More important, the surplus and liquidation amount calculations allow us to compute, in Section V, aggregate gains to creditors flowing from using compositions instead of liquidations. For now, we note that, if all plans were performed in full, creditors would receive an excess of ¥10.6 billion over what examiners estimate creditors would receive in liquidation. The potential gains from reorganization, even for 124 modestly sized firms, are substantial.

IV. CONFIRMATION, WITHDRAWAL, AND DENIAL

The selection of cases for adjudication influences the conclusions one can draw from the data. The most important selection effect for filed cases is the substantial rate at which debtors file composition cases and later withdraw them before case commencement.⁶⁰ Withdrawal accounts for 39 percent of composition terminations. A second group of cases, comprising 7 percent of terminations, are filed and not withdrawn, but confirmation is denied.

A. *Withdraw versus Litigate*

Withdrawals may stem from different causes. Some withdrawals may be due to successful negotiation of a workout with creditors, thereby eliminating the need for a court-approved composition plan. Other withdrawals may result from the debtor giving up and transferring all assets to creditors or otherwise ceasing resistance to collection efforts. Withdrawn cases thus can reflect successful negotiations or complete failure.

Still other withdrawals may be part of strategic composition filings.

⁶⁰ For a description of case commencement, see Section IA. After commencement, the debtor cannot unilaterally withdraw.

Debtors who seek preservative measures may have no real interest in pursuing their case to the confirmation stage. They seek the temporary relief afforded by preservative measures and plan to withdraw after obtaining that relief. The most important preservative measure, the prohibition against payment of antecedent debts, is granted in the vast majority of filings.⁶¹

Statistics comparing withdrawn cases and cases not withdrawn assist in sorting through the withdrawn cases. Table 6 presents means of several characteristics for both classes of cases. The last column provides a measure of the statistical significance of the differences in means for the two groups. For most characteristics, we cannot reject the hypothesis of no difference between the groups of withdrawn and not withdrawn cases.⁶²

But the observable differences suggest that withdrawing firms are somewhat healthier financially than nonwithdrawing firms and propose correspondingly more generous plans. The asset/debt ratio means show a significantly higher mean for withdrawn cases, suggesting they might be a healthier group of firms than are those that seek plan confirmation. In addition, the significant difference in the proposed payment percentage suggests that withdrawing debtors propose plans that promise higher repayment percentages than nonwithdrawing firms. Withdrawing firms also propose shorter payment periods and shorter grace periods, again suggesting more favorable terms to creditors than firms that do not withdraw. Not surprisingly, withdrawn cases have much shorter case lengths than cases not withdrawn.

The generally healthier state of withdrawing firms suggests that for some firms withdrawal is a consequence of settlement with creditors or of a strategic filing rather than abandonment of the business.⁶³ The multivariate analysis in Table 7 uses regional and industry dummy variables, together with measures of financial health to yield two interesting results.⁶⁴ First, perhaps reflecting the ambiguity of withdrawal, financial measures of the debtor's health help little in explaining the withdrawal decision. Neither the free asset/debt ratio nor other measures we have

⁶¹ The data show this preservative measure being granted in at least 82.4 percent of filings. The actual rate may be higher because cases with missing data are included in this figure as not having had this preservative measure granted.

⁶² Since examiners had not yet been appointed in many withdrawn cases, some data about withdrawn cases were gathered from debtors' petitions. These data may be less reliable than data reported by examiners.

⁶³ It should be noted, however, that some practitioners believe at least one-half of withdrawn cases result in liquidation.

⁶⁴ Since the decision to deny or confirm is dichotomous, logistic regression rather than ordinary least squares regression is used.

TABLE 6
WITHDRAWN AND NOT WITHDRAWN CASE COMPARISON

	NOT WITHDRAWN		WITHDRAWN		SIGNIFICANCE
	Mean	N	Mean	N	
Assets (000s ¥)	493,135	207	511,440	115	.858
Debts (000s ¥)	897,297	209	982,278	118	.711
Asset/debt ratio	.51	207	.65	115	.029
Free asset/debt ratio	-.22	175	.24	83	.188
Liquid asset/debt ratio	.19	145	.21	64	.750
Estimated liquidation percentage	12.1	148	13.5	40	.542
Payment percentage	44.2	210	51.0	128	.008
Payment period (years)	5.9	207	5.5	121	.204
Grace period (years)	1.2	204	1.1	117	.275
Case length (days)	231	207	133	130	.000
Capital (000s ¥)	22,776	182	17,202	95	.274
Average claim (000s ¥)	11,915	141	12,047	70	.963

SOURCE.—Research Group on Empirical Study of Composition Proceedings.

TABLE 7
LOGISTIC REGRESSION RESULTS
(Dependent Variable = Withdraw or Not Withdraw)

	Coefficient	Standard Error	Significance
Regional variables:*			
Fukuoka	-1.082	1.182	.362
Hiroshima	1.030	.956	.283
Nagoya	-.817	.902	.367
Osaka	1.403	.672	.039
Sapporo	-.765	.806	.344
Tokyo	3.793	1.150	.001
Business-area variables:*			
Construction	-.692	.662	.298
Manufacturing	-1.113	.703	.116
Retail	-.860	.643	.184
Transportation	-1.150	1.235	.353
Financial variables:			
Free asset/debt ratio	.052	.435	.906
Liquid asset/debt ratio	-.652	1.235	.598
Average claim exceeds ¥25 million	-2.395	1.215	.051
Capital (millions ¥)	-.032	.015	.039
Constant	-.206	.622	.741
$\chi^2(14)$	41.20		
Significance	.0002		
Pseudo R^2	.26		
Log likelihood	-59.30		
N	134		

SOURCE.—Research Group on Empirical Study of Composition Proceedings.

* Other is the reference variable.

tried provide insights into the withdrawal decision. The noteworthy financial measures are the creditors' average claim⁶⁵ and the debtor's capital. Larger capital correlates with litigation rather than withdrawal. And average creditor claim size in excess of ¥25 million correlates with litigation. Holding other factors constant, creditors with large stakes are more likely to force litigation rather than allow to settlement and withdrawal.

Second, substantial regional effects emerge. The tendency to file and later withdraw is strongest in Tokyo and Osaka. In Osaka the withdrawal rate is 50 percent, in Tokyo 68 percent, and in all other districts combined only 29 percent. Table 7 suggests that the high Tokyo-Osaka withdrawal rates are unlikely to be a consequence of firms with different financial characteristics filing in these districts. These may be districts where debtors are more likely to use a composition filing merely to gain the benefits of preservative measures.

Further evidence of filing simply to obtain the benefit of preservative measures may be gleaned from the time a case is on the docket. In Osaka, the mean time from filing to termination in withdrawn cases is fifty-five days compared to 190 days in cases not withdrawn. Osaka thus has a pattern of both many filings and a high rate of relatively quick withdrawals. This pattern is consistent with a desire to use composition proceedings to obtain preservative measures and then withdraw without seriously pursuing a composition plan.

The explanation in Tokyo may differ. In Tokyo, the mean case length in withdrawn cases, 201 days, is not significantly different from the mean time in cases not withdrawn, 259 days.⁶⁶ Perhaps the Tokyo debtors hope to confirm plans more than Osaka debtors, pursue them seriously for about six months, but then find that courts and examiners impose stringent terms. Table 2 shows, by way of support, that Tokyo has the highest repayment percentages, the shortest grace periods, and among the shortest plan periods.⁶⁷

⁶⁵ The average claim is the total debts divided by the number of creditors. More refined measures, such as the average unsecured claim, cannot be calculated from the data.

⁶⁶ A *t*-test is significant at the .376 level for the eleven not withdrawn cases and twenty-three withdrawn cases.

⁶⁷ For all cases, including withdrawn cases, the repayment percentage and grace period differences between Tokyo and all other districts combined are highly statistically significant. The greater observed "seriousness" of Tokyo debtors also is related to the fact that the Tokyo District Court screens cases prior to filing and does not even accept the filing of unpromising cases.

B. Confirmation versus Denial

Of cases not withdrawn, how many are confirmed and what factors influence confirmation? On the whole, denial plays a less important role in composition proceedings than withdrawal.⁶⁸ Relatively few plans not withdrawn suffer involuntary dismissal based on either denial of commencement or discontinuance of proceedings (twenty-four of 212, or 11 percent) and the overall impact of confirmation proceedings would not change dramatically if one ignored the denied cases. Nevertheless, filing and withdrawal decisions take place against a background of both statutory requirements and denial practice. Denial decisions therefore may shape behavior in many cases not formally confirmed or denied. The decision to file a composition case ought to be made with knowledge of the chances for plan confirmation.

As in the withdrawn/not withdrawn comparison, we begin, in Table 8, with the means of several characteristics for both classes of cases. The last column again provides a measure of the statistical significance of the differences in means for the two groups.

For almost all characteristics, we cannot reject the hypothesis of no difference between the cases with confirmed plans and cases in which confirmation is denied. The observable differences do not even strongly suggest a direction in effect, much less a statistically significant effect. Given the few cases in the denied category, the absence of highly significant differences is not surprising, and multivariate models we have tested yield results that are highly dependent on denials in two or three cases. The results do not support what one might think is the obvious explanation for confirmation versus denial: that firms in denied cases are measurably less financially healthy than firms in confirmed cases.

The one suggestive difference between the confirmed case and denied case means is in the average claim size. Denied cases have an average claim size more than twice that of confirmed cases. More significant, if average claim size exceeds ¥25 million, there is a notably increased chance of confirmation denial. Of fourteen not withdrawn cases with average claims above ¥25 million, five (36 percent) were denied. Of 127 cases not withdrawn with average claims below ¥25 million, only nine (7 percent) were denied.⁶⁹

⁶⁸ On the different kinds of denial, see note 37 *supra*.

⁶⁹ This difference is significant at the .006 level (using Fischer's exact test in a 2 x 2 table in which average claims are divided into big (greater than ¥25 million) and small categories and case outcome is divided into confirm and deny categories) and survives at a statistically significant level in a multivariate analysis that includes regional, financial, and industry independent variables. This analysis used a dummy variable to represent cases with average claims in excess of ¥25 million.

TABLE 8
CONFIRMED PLAN AND DENIED PLAN CASE COMPARISON

	CONFIRMED		DENIED		SIGNIFICANCE
	Mean	N	Mean	N	
Assets (000s ¥)	493,337	184	491,520	23	.990
Debts (000s ¥)	908,254	186	808,685	23	.627
Asset/debt ratio	.51	184	.54	23	.663
Free asset/debt ratio	-.28	156	.32	19	.109
Liquid asset/debt ratio	.19	129	.18	16	.821
Liquidation percentage	11.9	133	13.6	15	.584
Payment percentage	44.4	186	42.7	24	.691
Payment period (years)	6.1	185	5.0	22	.111
Grace period (years)	1.2	181	1.1	23	.280
Case length (days)	235	185	195	22	.258
Average claim (000s ¥)	10,489	127	24,846	14	.118
Average claim exceeds ¥25 million	.07	127	.36	14	.006

SOURCE.—Research Group on Empirical Study of Composition Proceedings.

We hesitate to make too much of this average claim finding because of the few (fourteen) denial cases for which average claims can be computed.⁷⁰ Nevertheless, we tentatively suggest that average claim size is one of the most powerful factors leading to involuntary dismissals. Truly weak firms may either not file or withdraw after filing without seeking confirmation. Average claim size suggests whether creditors are likely to have the incentives to organize to oppose or seek modification of a debtor's plan. The creditors' incentives to organize thus could be the crucial indicator of their likely influence on the debtor and on the outcome of the reorganization proceeding.⁷¹

C. Confirmation, Withdrawal, and Denial

Finally, it is worth exploring a model in which one does not artificially constrain the outcome of cases to the withdraw/not withdraw or confirm/

⁷⁰ There is another reason for caution in interpreting our findings with respect to denied cases. Of the fourteen denied cases with average claim data, nine were Kikyaku denial orders and five were Haishi denial orders. See note 37 *supra*. Kikyaku denials can occur for several reasons, including the debtor's failure to appear. A Kikyaku denial for failure to appear is virtually a withdrawal. The data do not allow us to distinguish between failure-to-appear-based Kikyaku denials and other Kikyaku denials, such as those based on failing to provide for equal treatment of creditors. Haishi denials are for cause and occur after the commencement of the case.

⁷¹ Creditors' incentives may help explain another initially bizarre finding. Relatively solvent debtors appear to take longer to confirm a plan than relatively insolvent debtors. Flynn, *supra* note 5, at 29. In these cases, as Flynn suggests, creditors may be willing to expend more time fighting among themselves for the debtor's assets.

deny dichotomies. In fact, three outcomes are prominent—confirm, withdraw, and deny. Using multinomial logistic regression,⁷² one can allow for multiple dependent variable values. The Appendix presents a model in which the dependent variable can take on three values (confirm, withdraw, deny) as a function of the independent variables.⁷³ It confirms and refines the prior results. The financial variables are of little help in explaining case outcomes. The Tokyo-Osaka regional effect emerges clearly as a withdrawal effect, a result consistent with Table 7. The variables for these regions are significant in pushing toward withdrawal and away from confirmation. These regions also show a large, but marginally significant, denial effect. Hiroshima shows a stronger and more significant denial effect than withdrawal effect. The average claim size shows a significant correlation with denial as compared to confirmation but no interesting effect with respect to withdrawal as compared to confirmation. The average claim effect in Table 7 can now be more clearly interpreted as pushing toward denial.

V. NET GAIN OR LOSS TO CREDITORS FROM COMPOSITIONS

Understanding the liquidation estimation, repayment percentage, and confirmation-withdrawal processes helps place our estimate of creditor gain in perspective. Our quantitative estimate of creditor gains begins with confirmed cases. The data allow less satisfactory estimates of gain or loss in other cases. Given this limitation and the absence of data on attorney fees for creditors, our estimate can be thought of as an estimate of the pool of money generated by successful compositions, out of which the costs of both successful and unsuccessful compositions, as well as attorneys' fees, must be paid.

With this qualification noted, the surplus data developed in exploring the best-interests test, together with other available data, allow us to make the first quantitative estimate of the benefits or burdens of a reorganization system. The surplus is a measure of the going-concern surplus that will be distributed to creditors. It is not a complete measure of the excess of going-concern value over liquidation value because nothing requires that this full difference be dedicated to creditors. Under composition law, the firm's owners can retain some or even most of the going-concern surplus if they can obtain the necessary votes from creditors.

From the creditors' point of view, the surplus, as we have defined it, is

⁷² For a brief discussion of multinomial logit models and their limitations, see Kmenta, *supra* note 51, at 557–59.

⁷³ Appendix Table A2.

an important quantity whether or not it embodies the entire going-concern surplus. The surplus is the amount that creditors will receive in excess of estimated liquidation value. If liquidation is the natural alternative to reorganization, comparing what creditors receive under composition plans with what they would receive in liquidation is a relevant measure of whether, in filed cases, creditors fare better with reorganizations than without them.

A. Returns to Creditors in Confirmed Cases

Table 5 above contains data that allow estimation of the gain or loss from compositions. The sum of the surplus across all cases can be viewed as an upper bound on the creditors' collective gain from composition proceedings. This sum is the difference between what creditors are to receive if all composition plan payments are made and what creditors would have received if the debtor had been liquidated.

The quantitative downside of composition plans stems from failed plans in which creditors receive a present value less than they would have received had the debtor been quickly liquidated. Define the "deficiency" to be the difference between what creditors would have received had the debtor been liquidated and what creditors actually receive under a failed composition plan. Putting aside administrative costs, the maximum deficiency attributable to a composition plan is the debtor's liquidation value. That is, the composition plan's worst outcome is to pay the creditors nothing, thereby depriving the creditors of what they would have received had the debtor been liquidated. For the system as a whole, the maximum downside exposure of compositions is the sum of the deficiency across all cases.

To use the surplus and deficiency sums, recall Table 5's figures for these amounts. It shows that the sum of all the surpluses is ¥10.6 billion. If all plans fully succeed, this is the gain from composition proceedings. The sum of all deficiencies is ¥6.8 billion. If all plans completely fail, and creditors receive nothing in lieu of what they would have received in liquidation, this is the maximum loss attributable to composition proceedings.

In reality of course, some plans succeed and others fail. Among the failures, creditors receive varying percentages of what they would have received in liquidation. Using the surplus and deficiency sums, we estimate what rate of plan success is necessary for composition plans for there to be a net gain to creditors from confirmed composition plans.

Define the rate of successful plans to be SR , where SR can vary from 0 to 1. If all plans succeed, SR is 1; if none succeed, SR is 0; if half the

composition plans succeed, SR is .50. If all plans either completely succeed or completely fail, then the net gain or loss to creditors from confirmed composition plans is

$$\begin{aligned} \text{net} = & \text{SR} \times (\text{sum of surpluses}) - (1 - \text{SR}) \\ & \times (\text{sum of deficiencies}). \end{aligned} \quad (1)$$

That is, since only some plans succeed, the net gain to creditors is the gain from successful plans minus the loss from unsuccessful plans. Since we cannot identify in advance which plans fail and which succeed, we in effect use average surpluses and deficiencies by not having SR vary as a function of individual case characteristics.

Refinements of “net” can more finely tune the analysis. First, unsuccessful composition plans do not always result in a complete loss of liquidation value. Across many cases, it is meaningful to think of an average loss in unsuccessful cases. Call this the “average loss” and refine equation (1) to read

$$\begin{aligned} \text{net} = & \text{SR} \times (\text{sum of surpluses}) - (1 - \text{SR}) \\ & \times (\text{average loss}) \times (\text{sum of deficiencies}). \end{aligned} \quad (2)$$

Equation (2) provides a more refined measure of loss in failed composition cases.

Second, in both compositions and liquidations, distributions to creditors are not instantaneous. Composition cases do not begin distributing to creditors until after confirmation of a plan. We discount, using a 7 percent discount rate, the value of composition payments to reflect the delay between filing and confirmation. This delay is available for the composition cases in our sample. Liquidations also take time. For example, in liquidating bankruptcies from 1981 to 1985, the time period from bankruptcy adjudication to conclusion of the case by distribution to creditors was under one year in less than 16 percent of the cases.⁷⁴ Only slightly more than half the cases concluded distributions within two years.⁷⁵ This delay suggests the need to adjust both the surplus of composition distributions over liquidation distributions and the expected liquida-

⁷⁴ Saikōsaibansho jimusōkyoku hen, Shihōtōkeinenpō, Minji gyōsei hen (Administrative Office of the Supreme Court, Annual reports of judicial statistics, Vol. 1, Civil cases) (1981–85). These figures do not include no-asset cases.

⁷⁵ In the periods 1976–80 and 1986–88, even lower percentages of cases completed distributions within two years. Saikōsaibansho jimusōkyoku hen, Shihōtōkeinenpō, Minji gyōsei hen (Administrative Office of the Supreme Court, Annual reports of judicial statistics, Vol. 1, Civil cases) (1976–80, 1986–88).

tion distributions to reflect present values.⁷⁶ We again use 7 percent and assume, conservatively, that liquidation distributions are delayed one year.⁷⁷

So long as net is positive, there may be, from the creditors' point of view, a straightforward economic case for maintaining composition proceedings instead of forcing liquidations in filed cases. At what levels of successful plan performance (SR) does net remain positive? This depends in part on the average loss in failed composition cases and is explored in Figure 1. The vertical axis in Figure 1 is a measure of the net gain to creditors in confirmed cases over what they would receive in a universal liquidation regime. Figure 1 plots this net as a function of success rate (SR) for various average losses. Each line in the Figure represents a different average loss rate. For example, if the average loss in failed cases is 50 percent of liquidation value, the success rate (SR) must be greater than 25 percent for net to be positive. If the average loss is 100 percent (equivalent to a total loss) in failed composition cases, SR must rise above 40 percent for net to be positive.

Data from other empirical studies of Japanese compositions enable us to take the analysis one step farther. A study of composition cases filed in Sapporo's main district court from 1977 to 1986 focused in part on the rate at which payments under composition plans were completed.⁷⁸ From this study we estimate a composition plan completion success rate of 42 percent.⁷⁹ Assume further that the successful completion rates from 1977

⁷⁶ In performing a best-interests-of-creditors test, the examiners are not instructed to use the present value of expected liquidation distributions in their calculations. Since our current calculation is designed to measure economic benefits, and not compliance with a formal best-interests test, we make the adjustment. We note, however, that ignoring this adjustment would change our estimates only slightly.

⁷⁷ Other adjustments are possible. We could allow for partially successful plans (in which only some of the surplus is captured), and we could account for administrative expenses to the extent composition expenses exceed liquidation expenses, a topic we explore below. In addition, we might not assume a single rate of success. It seems likely that the larger debtors would succeed in fulfilling their composition plans at a higher rate than smaller debtors. The greater gains in the large, relatively successful group of cases suggest that lumping all cases together, and using a single success rate, understates the potential gain from composition proceedings. We defer these complications in this effort.

⁷⁸ Japan CPA Association, Hokkaido Branch, *supra* note 31, at 4.

⁷⁹ The data, which included responses for 111 of the 123 filings during the decade studied, showed that 33 percent of the eighty-seven confirmed plans had been completed or were on schedule toward completion. An additional eleven confirmed plans (13 percent) were categorized as being nearly completely complied with, but with a little delay ("Okurenagara omune bensai"). It is unclear how to quantify the "nearly completely" confirmed cases. Clearly they should not be counted as failures. But they also should not be counted as eleven completed plans. We conservatively discount the 13 percent near-completion rate to 9 percent to reflect the partial (but near-complete) compliance rate. We therefore estimate a success rate in Sapporo of 33 percent plus this 9 percent, or 42 percent.

FIGURE 1.—Creditor gain or loss from compositions as a function of plan success rate and loss rate in failed plans. Loss = liquidation value lost due to composition effort.

to 1986 are representative of our 1982 and 1987 cases. Our study's data allow us to extract the sum of surpluses and the sum of deficiencies for confirmed cases in Sapporo's main district in 1982 and 1987. There are fifteen such cases with complete enough data. Figure 2 uses the data from them to explore the gain or loss to creditors in Sapporo cases.

Figure 2 suggests the high likelihood that, as a group, creditors in Sapporo compositions are receiving more than they would receive if debtors were liquidated in these cases. The vertical line in the Figure represents the observed success rate. Using the 42 percent successful completion rate mentioned above, the net to creditors is positive *regardless of the amount of liquidation value lost in failed composition plans*. Even if 100 percent of liquidation value is lost in failed compositions, enough composition plans are successfully completed to yield a net gain to creditors.

The Sapporo data on successful completion may not represent the national experience. From a national study of fairly large (over ¥500 million in debts)⁸⁰ composition cases filed in 1983, we estimate a plan success

⁸⁰ According to Appendix Table A1, the cases in this study have a mean debt level of ¥926 million and a median debt level of ¥395 million.

FIGURE 2.—Creditor gain or loss from compositions as a function of plan success rate and loss rate in failed plans (Sapporo). Loss = liquidation value lost due to composition effort.

rate of 34 percent.⁸¹ Assume that failed compositions result in the loss of 50 percent of liquidation value. We therefore use the 50 percent liquidation loss line in Figure 1, which suggests that, nationally, creditors gain, in the 124 cases with the necessary data, ¥1.2 billion, or about ¥10

⁸¹ The national study found that 28.4 percent of the cases had performed completely or were currently performing as planned. Akiyama, *supra* note 31, at 24. Although the author does not make it clear, the sample examined in the nationwide study apparently included withdrawn and denied cases. The author reports that 59.5 percent of the firms simply disappeared, 28.4 percent performed, and the rest failed to repay as scheduled. If withdrawn cases are included in the sample, the disappearance rate is overstated. This probably more than offsets the deflating effect on the disappearance rate of limiting the sample to large cases. Larger firms might be expected to yield a higher successful plan performance rate than the mixture of firms in this study's sample.

Using the Sapporo study data, we increase the 28 percent success rate a conservative 6 percent to reflect nearly complete performance due to a little delay. This is well below the 13 percent near-complete performance rate observed in Sapporo. See note 79 *supra*. We use 6 percent rather than some probably more realistic higher figure to adjust for the fact that the national study sample consisted of large firms. They may successfully complete composition plans at a higher rate than smaller firms.

The 28 percent full completion rate plus the 6 percent near-completion rate yield a 34 percent success rate.

million per case. At a 130 yen to the dollar exchange rate, this gain is about \$74,000 per case.

The implications of the effect of the plan success rate (SR) on net embodied in Figures 1 and 2 are extremely important. The composition data suggest that one can tolerate surprisingly low success rates (for example, 25 percent if 50 percent of liquidation value is lost in failed cases) in some forms of reorganization and creditors may still emerge with a net gain in filed cases.

B. Administrative Costs of Confirmed Cases

The preceding analysis changes only somewhat when we take costs into account. Our data on costs include all court fees and the fees and expenses of examiners and trustees. They do not include debtor or creditor attorneys' fees. In the 124 cases used to compute the surplus and deficiency sums, administrative costs totalled ¥316 million, or about ¥2.5 million per case. If these costs were paid by creditors, they would absorb about 25 percent of the estimated ¥10 million creditors gain per case from compositions.

But it is not clear that the administrative costs should be viewed as paid by creditors. In Japan, administrative costs are paid up front by the debtor. As noted, debtors need not dedicate the entire going-concern surplus to creditors. The portion of the surplus retained by the debtor is nevertheless a benefit of a successful composition. This is value that would have been lost had the debtor been liquidated. If debtors gain even a small fraction of what creditors gain, then the gain per case rises to well over \$74,000. If they gain as much as creditors gain, the gain per case is perhaps \$150,000. It is from this larger gain that one should subtract the administrative costs of compositions, and the difference leaves room for substantial net gains.⁸²

In addition, it is not the absolute level of administrative costs that matters. If a pure liquidation regime is the alternative to a composition system, the relevant quantity is the excess of composition administrative costs over liquidation administrative costs. Given low composition administrative costs, this difference cannot be substantial enough to warrant separate treatment. It can only affect the necessary success rate (SR) by a few points at most.

Similar considerations apply to attorneys' fees. The composition gains to creditors and the debtor should be reduced by their attorneys' fees.

⁸² The composition data show both small absolute costs and a very significant scaling effect. On average, administrative costs absorb less than 2 percent of assets.

In each case, the amount of the reduction should be the difference between the fees connected to the composition case and the fees that would have been incurred in a liquidation proceeding.⁸³

C. *Withdrawn and Denied Cases*

It is more difficult to assess the gain or loss in compositions in withdrawn or failed cases. In withdrawn cases, debtors incur administrative costs, less the amount refunded on withdrawal, without obtaining the benefits of a court-approved plan. On the other hand, withdrawing debtors may negotiate private plans with creditors that produce benefits to creditors similar to the benefits of court-approved plans. If there is a going-concern surplus, it is in the interests of all parties to preserve it whether or not composition proceedings exist.⁸⁴ When the parties secure this surplus without a composition plan, the source of the gain or loss is more ambiguous than in the case of confirmed plans.⁸⁵ Some of the out-of-court workouts reached in withdrawn cases may be attributable to the background rules supplied by composition law. Other private workouts might result from the parties' realization that gain can be obtained regardless of composition law's rules. On the whole, we are more comfortable viewing most withdrawals as cases that never really entered the composition system.⁸⁶ In workouts that never reach the court system, it is similarly difficult to separate the degree to which the bargain is shaped by legal rules, as distinguished from economic forces.

⁸³ See Eisenberg, *supra* note 7. In liquidation proceedings, the debtor must pay, among other things, administrative expenses and its own attorneys' fees. The administrative expenses might be a little lower than those it would incur in a composition proceeding because only one officer (trustee) is hired in the former compared with two (examiner and trustee) in the latter. According to a rule announced by the Tokyo district court, for example, standard amounts of advance payment of administrative expenses for debtors with total debts of ¥100 million or more are set at over ¥2 million in liquidations, but over ¥4 million in compositions. Tōzai jitsumu kenkyūkai hen, *supra* note 30, at 26. In addition, since the debtor's business terminates in liquidations, fees of its attorney would usually be less expensive than such fees in compositions. On the other hand, it is unlikely that there is a big difference between the two proceedings in expenses that creditors must pay. Official creditors' committees do not operate in Japanese composition proceedings, and most creditors do not play an active role in the proceedings.

⁸⁴ Compare Frank H. Easterbrook, Is Corporate Bankruptcy Efficient? 27 J. Fin. Econ. 411 (1990); Eisenberg, *supra* note 7.

⁸⁵ Even in the case of confirmed plans, one might separate gains that would have been achieved without a composition law from gains that are more directly attributable to a composition law. Some cases that ended with confirmed plans might have reached substantially similar results without a law. Other cases with confirmed plans might need the law's protections to save what would otherwise be a liquidation.

⁸⁶ Their time on the docket is relatively brief. See Table 6 *supra*.

The most troublesome withdrawn cases are those in which filing is used as a tactic to delay collection efforts by obtaining preservative measures available only in court proceedings. If liquidation quickly follows withdrawal, then composition proceedings in such cases may result in unwarranted transfers from creditors to debtors or in the reduction of the amount available in liquidation. We detect little evidence that such cases dominate the more innocent withdrawals. Without knowing the relative frequency of tainted withdrawal cases, we cannot estimate their overall costs.

Denied cases presumably result in liquidation of the firm.⁸⁷ In these cases, the composition proceedings only delay the inevitable and may result in delay, with a reduced amount available on liquidation, and in administrative costs that exceed the costs that would have been incurred had the debtor been liquidated without the composition filing. The denied cases in our sample had little information about liquidation value. Only five of twenty-four cases had the necessary data. Using the average liquidation amount in the five cases for all twenty-four cases yields a total liquidation amount of ¥195 million. Administrative cost data were available in twenty-two of the twenty-four cases. Using the average costs in the twenty-two cases yields total administrative costs of ¥59.5 million. Combining these figures (a total of ¥254 million) provides the maximum measurable loss in denied cases. But this loss does not account for the liquidation value that survived the composition proceedings and the administrative costs of liquidation that would have been incurred even without commencement of composition proceedings. Probably a loss of ¥100 million would be closer to the real loss. This estimate might be deducted from the composition gains computed above.

D. Other Gains and Losses

The net gains to debtors and creditors do not completely measure composition law's effect. The items discussed so far are the most directly measurable effects. Although they add substantially to our knowledge of reorganization's effects, they cannot supply a complete picture. Even firm knowledge of gain and administrative costs in confirmed cases might leave room for debate about composition law's impact. Less quantifiable costs and benefits also should be considered.

There is a social cost to running the composition case system. In Japan,

⁸⁷ In cases of denied confirmation and discontinuance, see note 37 *supra*, courts must subject the debtor to a liquidating bankruptcy, even *sua sponte*. Composition Act § 9. Although there is no such requirement with respect to denial of commencement, most such cases are likely to end up in liquidation.

however, special courts do not handle these cases, and the number of composition cases is a small fraction of Japanese civil case filings.⁸⁸ The marginal cost to the system of each composition case therefore probably is low.

Other gains or losses may flow to third parties. Debtors in business under composition plans retain employees who would otherwise face unemployment or relocation to new jobs. At the time of filing composition proceedings debtors averaged thirty employees.⁸⁹ Communities may benefit from the continued operation of enterprises. The payoff in successful cases thus is magnified beyond the immediate return to the debtor and its creditors. But the losses in cases with failed plans might also be higher. Failed plans delay the full redeployment of resources, including human capital, from failing economic activities to activities with a brighter future.⁹⁰

Laws affect behavior in transactions that never enter the legal system. As noted earlier, composition law may affect lending and borrowing practices and out-of-court restructurings in transactions that do not involve troubled firms. Our data do not allow assessment of this effect.

VI. IMPLICATIONS FOR U.S. BUSINESS REORGANIZATIONS

Although the Japanese composition experience is important in its own right, Japanese compositions and U.S. Chapter 11 proceedings share enough features to warrant considering the implications of the Japanese experience for U.S. reorganizations. Both reorganization systems are believed to be debtor-dominated and subject to abuse. Both require that plans be filed; in Japan, composition plans must be filed by debtors,⁹¹ in the United States, debtors have an exclusive period during which to file plans.⁹² Similar approval standards apply to voting by creditors. Both require consideration of what creditors would receive in liquidation. In

⁸⁸ In 1990, for example, there were 610,347 new civil case filings and only seventy-seven composition filings. Saikōsaibansho jimusōkyoku hen, *supra* note 14.

⁸⁹ The median number of employees was sixteen, and the tenth percentile was four employees.

⁹⁰ Composition's existence as an alternative to liquidation introduces uncertainty. During the pendency of a composition proceeding, third parties may shy away from dealing with the debtor. But this cost should be reflected in the return to creditors. The surplus and the overall failure rate of plans together should account for such losses incurred as a result of the pendency of the proceedings. If reluctance to deal with the debtor reduces the amount that the debtor can be expected to repay, either the plan's proposed repayment percent or the failure rate of plans should reflect this effect.

⁹¹ Composition Act § 12.

⁹² 11 U.S.C. § 1121(b).

Japan, secured creditors are unaffected by compositions;⁹³ in the United States, secured creditors can be affected, but empirical work suggests that they are paid very high percentages of their debts.⁹⁴ A few lessons for U.S. reorganizations may emerge from this study of Japanese compositions.

A. *Revisiting Compositions*

First, Japan's experience suggests the possibility of greater use of formal composition proceedings in small and midsize cases. Some believe Chapter 11 results in a net loss to creditors.⁹⁵ If, as seems likely, Japan's system yields gains to creditors, at least in filed cases, perhaps the United States should consider placing greater emphasis on compositions.

Compositions proposed by debtors have features that may reduce costs compared to more elaborate reorganizations. Composition plans do not change a firm's ownership structure. This avoids the need to arrive at a going-concern value for each firm. The principal issue in composition cases is the proposed repayment percentage to unsecured creditors. A debtor in need of relief and genuinely interested in surviving has an incentive to propose a reasonable plan that grants substantial going-concern surplus to creditors. If the debtor fails to propose such a plan, creditors will not approve and the debtor risks liquidation and loss of its possible share of the going-concern surplus. Creditors evaluating plans have some incentive to accept reasonable plans. If there is a going-concern surplus, creditors who reject reasonable plans risk losing the portion of the surplus they might otherwise enjoy.

From a creditor's perspective, a seemingly negative feature of compositions is that they deny creditors the possibility of obtaining ownership interests in the debtor. The Chapter 11 practice of converting debt to equity is not available in compositions. But in the case of small and midsize firms, shifting ownership from the debtor to creditors is unlikely to be successful. Small firms depend on their owners; the owners often *are* the firms. Plans that separate owners of small businesses from their ownership status probably are doomed.⁹⁶ The available evidence suggests

⁹³ But secured creditors, especially banks, may be reluctant to foreclose due to the adverse publicity generated by being the cause of a firm's closing, with resulting job losses.

⁹⁴ See Eisenberg, *supra* note 7 (summarizing studies).

⁹⁵ Bradley & Rosenzweig, *supra* note 7.

⁹⁶ Ralph A. Peeples, *Staying In: Chapter 11, Close Corporations and the Absolute Priority Rule*, 63 Am. Bankr. L. J. 65 (1989).

that small U.S. reorganizations often are compositions.⁹⁷ Greater emphasis on them may be in order.

This is not the place to develop a detailed proposal for compositions in lieu of more widely ranging reorganizations for small and midsize firms. But compositions do offer a simpler reorganization system without sacrificing much of value to creditors in small and midsize cases. The simplicity may produce faster and less expensive restructurings.

B. Possible Lessons for Chapter 11

Perhaps the chief inference to consider is whether the low success rate of plans needed to yield gains would apply to the current U.S. reorganization system. The essence of reorganization in both economies, to retain going-concern value, is the same. Although admittedly speculative, we now try to quantify the potential gains to creditors under Chapter 11 in filed cases.

Since we lack detailed U.S. data, some assumptions are necessary to explore this question. Assume that the going-concern surplus in the United States is the same as in Japan and that U.S. small and midsize firms look in other relevant respects like the Japanese firms in our sample. Assume also that failed Chapter 11 plans cost creditors half of what they would have received if the debtor had immediately been liquidated. That is, instead of receiving ten cents on the dollar in an immediate liquidation, failed plans yield only five cents on the dollar. We must also account for cases in which no plan can be confirmed. Let us treat these as failed plans in which half of the liquidation value is lost. We use these assumptions to focus on administrative costs and attorneys' fees, which seem much higher and central to reorganization debate in the United States than in Japan. As used for present purposes, administrative costs include professional fees of the debtor and creditors.

In exploring the effect of administrative costs, it is important to distinguish between liquidation administrative costs and reorganization administrative costs. If one knows the relationship between these two costs—for example, reorganization administrative costs are twice liquidation administrative costs—one need only vary the range of liquidation administrative expenses to be able to compute success rates needed to support reorganization over liquidation.

Table 9 explores the plan completion rate necessary for creditors to

⁹⁷ Jerome R. Kerkman, *The Debtor in Full Control: A Case for Adoption of the Trustee System*, 70 Marq. L. Rev. 159 (1987); LoPucki, *supra* note 6.

TABLE 9
SUCCESSFUL REORGANIZATION RATE NEEDED TO YIELD NET GAIN TO CREDITORS

REORGANIZATION/ LIQUIDATION ADMINISTRATIVE EXPENSE RATIO	PERCENTAGE OF LIQUIDATION VALUE DEDICATED TO ADMINISTRATIVE EXPENSES				
	3	6	9	12	15
1	25	25	25	25	25
2	27	28	30	31	33
3	28	31	34	37	40
4	30	34	38	43	48

have a net gain from reorganizations under varying assumptions about (1) administrative costs and (2) the relationship between liquidation administrative costs and reorganization administrative costs. The columns in the table vary the percentage of liquidation value devoted to administrative expenses on liquidation. The rows in the table vary the relationship between liquidation expenses and reorganization expenses. For example, the entry "25" in the upper left corner of the table assumes that, (1) on liquidation, administrative expenses would absorb 3 percent of liquidation value, and (2) in reorganization, administrative expenses would be the same as (a ratio of 1:1) in liquidation.⁹⁸ The entry "27" just

⁹⁸ The entries are calculated as follows. As stated in the text, assume a 50 percent loss rate for failed reorganization plans. Putting aside differences in administrative expenses, the gain to creditors is then the plan success rate (SR) times the sum of surpluses minus the failure rate times the average loss (.5) times the sum of deficiencies. The deficiency calculation used here discounts to present value using a discount rate of 7 percent. The surplus calculation, described *supra* in text, is also based on present values using a 7 percent discount rate. The difference between reorganization and liquidation administrative costs is varied, and one works backward to arrive at the necessary SR and failure rate (1 - SR) to leave a net gain for creditors. For example, if liquidation administrative expenses are 3 percent of liquidation value and the ratio of reorganization administrative expenses to liquidation administrative expenses is 2:1, then reorganization administrative expenses are 3 percent higher than liquidation administrative expenses and their difference is 3 percent of liquidation value. The calculation for this combination of administrative expenses is then

$$\text{gain} = [\text{SR} \times (\text{sum of surpluses})] - [(1 - \text{SR}) \times .5 \times (\text{sum of deficiencies})] \\ - [.03 \times (\text{sum of deficiencies})].$$

In this expression, SR is the success rate of reorganizations and 1 - SR is the failure rate. The sum of surpluses and the sum of deficiencies are described in the text *supra*. The .5 in the middle term reflects the assumed 50 percent loss rate on failed reorganizations. That is, there is an average loss of 50 percent of liquidation value when plans fail. The last term is the difference in administrative expenses between reorganization and liquidation. Since we have stated the administrative expenses as a percentage of liquidation value, the difference in administrative expenses can be expressed as a percentage of the sum of deficiencies. Recall that the individual case deficiencies are simply the debtor's liquidation value. The

below the “25” assumes that, (1) on liquidation, administrative expenses would absorb 3 percent of liquidation value, and (2) in reorganization, administrative expenses would be twice as high (a ratio of 2:1, or 6 percent of liquidation value). Under these two assumptions, and using the surplus and deficiency from the Japanese cases, the reorganization completion rate must be 27 percent to yield a net gain to creditors in filed cases. If liquidation administrative expenses are 9 percent and reorganization expenses are four times as high as liquidation expenses, a 38 percent successful completion rate becomes necessary.

The rate of successful completion needed to support reorganizations is surprisingly low. It is so low that an important segment of Chapter 11 cases may already yield a gain to creditors. Flynn reports confirmation rates in Chapter 11 by asset size. For cases with assets in excess of \$1 million, he estimates that 35.9 percent of Chapter 11 filings are confirmed.⁹⁹ If liquidation administrative expenses are less than 6 percent of assets,¹⁰⁰ and reorganization administrative expenses are no more than three times higher than liquidation expenses, Table 9 suggests that only a 28 percent completion rate may be needed to generate a gain to creditors. Thus, even allowing for some failed confirmed plans, Chapter 11 may already yield a gain to creditors for firms with assets in excess of \$1 million.

The current system is more problematical for the 80 percent or so of Chapter 11 filings with assets of less than \$1 million. The available data suggest that overall plan confirmation rates are in the 10–20 percent range.¹⁰¹ The successful plan completion rate would, of course, be a smaller fraction of filings than would the confirmation rate. Not all confirmed plans are successfully completed.¹⁰² The case for current Chapter

.03 in the above expression changes whenever one changes assumptions about the level of administrative expenses or the relationship between reorganization and liquidation administrative expenses. In the first line of Table 9, where reorganization and liquidation administrative expenses are assumed to be equal, the third term in the expression drops out.

⁹⁹ Flynn, *supra* note 5, at 34 (table 31).

¹⁰⁰ See Theodore Eisenberg, Bankruptcy in the Administrative State, 50 Law & Contemp. Probs., No. 2, at 3, 41–42 (1987) (summarizing studies, including studies with small Chapter 11 cases); authorities cited note 2 *supra* (about 3 percent costs in large cases).

¹⁰¹ See authorities cited in note 4 *supra*; Flynn, *supra* note 5, at 10–11 (17 percent confirmation rate); Michele Galen & Catherine Yang, A New Page for Chapter 11? Bus. Week, January 25, 1993, at 36, 37 (6.5 percent chance of reorganizing as a going concern) (citing Susan Jensen-Conklin study of Southern District of New York cases). For data on successful plan completion in U.S. consumer bankruptcies under Chapter 13, see Sullivan, Warren, & Westbrook, *supra* note 1, at 215–17.

¹⁰² Flynn, *supra* note 5, at 13; Kentucky Study, *supra* note 4 (58 percent successful completion rate in Southern District of New York).

11 for small firms is difficult to sustain. At the 10 percent plan success rate level, there are few plausible scenarios of gain to creditors. Either we must become more discriminating about the debtors allowed to use Chapter 11, or we must hope that intangible benefits outweigh the losses to creditors. At the 10 percent success level, that seems like wishful thinking.

VII. CONCLUSION

If the small and mid-sized business Chapter 11 system is to become viable, changes are needed. The Japanese composition experience demonstrates that we should not simply give up on the idea of preserving going-concern value. Even firms troubled enough to file for bankruptcy often have a going-concern value worth preserving. But plan completion rates in Japan are well above U.S. plan confirmation rates. We need to be choosier about firms admitted to Chapter 11. An early serious screening of cases for viability—analogue to the Japanese decision to allow a case to commence—should help¹⁰³ and eventually should lead to a reduction in weak filings as debtors absorb the new standard. Perhaps the Japanese technique of requiring some advance payment of administrative costs also would screen out unpromising cases.¹⁰⁴ Courts might be encouraged to convert cases to Chapter 7 by allowing judges, *sua sponte*, to order conversion in seemingly hopeless cases.¹⁰⁵ If we reduce the hopeless Chapter 11 filings, extremely high rates of plan success are not needed to justify the system. Success rates well under 50 percent can be tolerated.

The Japanese data also suggest an important screening criteria. The average debtor in composition proceedings had assets of \$3.8 million (with a median of about \$1.5 million).¹⁰⁶ This would put these firms well into the upper range of assets of U.S. Chapter 11 filings.¹⁰⁷ The higher success rate in Japan may be a function of smaller debtors not even trying to seek reorganization. The U.S. data showing relatively high confirmation rates for firms with assets in excess of \$1 million supports this view.

¹⁰³ See Jones, *supra* note 4, at 1092 (debtor should have to seek permission to reorganize debts); Kentucky Study, *supra* note 4, at A12 (screening process in the Western District of Kentucky).

¹⁰⁴ Some argue that in Japan this unjustifiably blocks small debtors from benefiting from composition proceedings.

¹⁰⁵ Current law requires a motion by a party in interest or the U.S. trustee. 11 U.S.C. § 1112(b).

¹⁰⁶ See Appendix Table A1.

¹⁰⁷ Bermant, Lombard, & Wiggins, *supra* note 5; Flynn, *supra* note 5.

These findings suggest the need to distinguish more sharply between small and mid-sized firms.¹⁰⁸

The conclusions for Japan are even more promising. In filed cases, the composition system probably yields a net gain to creditors. Some troublesome regional variations exist. Even accounting for financial differences across firms, there is a strong tendency to file and withdraw cases in Hiroshima, Osaka, and Tokyo. Denial of confirmation is more likely to occur in Hiroshima and Tokyo. Proposed repayment percentages are relatively lower in Nagoya, Osaka, and Sapporo, and liquidation estimates are lower in Fukuoka and Sapporo. Preservation measures may be being abused. In general, the data support fine-tuning the composition system rather than scrapping it.

The question explored here, the net gain or loss from reorganization over liquidation, is a separate question from whether reorganization (in Japan or the United States) is the preferable system for maximizing values. Proposals to use auctions or variants thereof in lieu of Chapter 11 seem premised on the assumption of a healthy market for troubled large firms (or their assets). As firms shrink from the megafirms usually considered in auction proposals,¹⁰⁹ the healthy market assumption becomes more questionable. In samples consisting of small and mid-sized firms, auctions may be of little use.

¹⁰⁸ Thus, Congress was headed in the right direction with a bankruptcy reform bill designed to provide a separate, streamlined reorganization procedure for small businesses. S.1985, 102d Cong., 1st Sess. (1991); S.540, 103d Cong., 1st Sess. (1993). For the history of S.1985 and a related bill in the House, see David F. Bantleon & Kathy L. Kresch, A Bankruptcy Law for the '90s, 2 Bus. Law Today 25 (January/February 1993). And Judge Small's judicially created streamlined procedures for small Chapter 11 cases also are a promising development. A. Thomas Small, The Chapter 11(a) Fast Track to Confirmation for Small Business Debtors (presented at a Workshop for Bankruptcy Judges of the 8th, 9th and 10th Judicial Circuits, Phoenix, December 4-6, 1989) (describing practice in the Eastern District of North Carolina).

¹⁰⁹ For example, Baird, *supra* note 4. Auctions of even large firms can yield few or no bidders. Lynn M. LoPucki & William C. Whitford, Corporate Governance in the Bankruptcy Reorganization of Large, Publicly Held Companies, 141 U. Pa. L. Rev. 669 (1993).

APPENDIX

TABLE A1
ASSETS AND DEBTS
(Money Figures in Millions of 1987 ¥)

DISTRICT	TOTAL ASSETS			TOTAL DEBTS		
	Mean	Median	N	Mean	Median	N
Fukuoka	553	112	47	810	301	50
Hiroshima	768	514	22	1,258	696	22
Nagoya	266	150	41	699	376	42
Okayama	326	177	11	886	924	12
Osaka	566	197	89	968	415	89
Sapporo	406	204	31	790	410	31
Tokyo	742	320	32	1,757	707	32
Other	339	170	50	574	309	50
Total	499	190	323	926	395	328
F-test significance	.237			.154		

SOURCE.—Research Group on Empirical Study of Composition Proceedings.

TABLE A2
MULTINOMIAL LOGIT RESULTS
(Dependent Variable = Confirm, Withdraw, or Deny)

	Coefficient	Standard Error	Significance
A. Withdraw vs. confirm:			
Regional variables:*			
Fukuoka	-.763	1.144	.506
Hiroshima	1.915	.988	.055
Osaka	1.675	.626	.009
Sapporo	-.489	.745	.513
Tokyo	4.070	1.100	.000
Business-area variables:*			
Manufacturing	-.889	.691	.340
Retail	-.448	.641	.486
Financial variables:			
Free asset/debt ratio	.042	.465	.928
Liquid asset/debt ratio (square root)	.480	1.189	.687
Average claim (million ¥)	-.051	.037	.170
Capital (million ¥)	-.029	.015	.058
Constant	-.803	.678	.239
B. Denied vs. confirm:			
Regional variables:*			
Fukuoka	1.493	1.666	.372
Hiroshima	4.938	1.789	.007
Osaka	2.523	1.537	.103
Sapporo	1.634	1.699	.338
Tokyo	3.596	1.910	.062

TABLE A2 (Continued)

	Coefficient	Standard Error	Significance
Business-area variables:*			
Manufacturing	-.433	1.087	.691
Retail	3.048	1.276	.019
Financial variables:			
Free asset/debt ratio	-.188	.883	.832
Liquid asset/debt ratio (square root)	-.433	2.307	.851
Average claim (million ¥)	.058	.026	.027
Capital (million ¥)	-.004	.011	.737
Constant	-5.890	1.919	.003
$\chi^2(22)$	65.10		
Significance	.0000		
Pseudo R^2	.29		
Log likelihood	-79.43		
N	134		

SOURCE.—Research Group on Empirical Study of Composition Proceedings.

NOTE.—In the multinomial logit, three variables (Nagoya, Construction, and Transportation) lacked sufficient variation to warrant inclusion in the model. A selection effect model, in which nonwithdrawal is a filtering mechanism for confirmed and denied cases, could also be used.

* Other is the reference variable.