



**SETON HALL UNIVERSITY**

**SCHOOL OF LAW**

**BUSINESS LIQUIDATION**

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**WORKING DRAFT**

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## BUSINESS LIQUIDATION

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Business liquidation is a much discussed but little studied phenomena. Until very recently, a twenty year old article about business liquidation in a single district was the only academic writing on the subject.<sup>1</sup> The literature doubled last year with the publication of a paper that described the results of a two-district

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Stata and SPSS files are available upon request from the author for replication purposes.

<sup>1</sup> Michael J. Herbert & Domenic E. Pacitti, *Down and Out in Richmond, Virginia: The Distribution of Assets in Chapter 7 Bankruptcy Proceedings Closed During 1984- 1987*, 22 U. RICH. L. REV. 303 (1988) (reporting results for both consumer and business cases).

comparison between all types of chapter 11 cases and chapter 7 liquidations.<sup>2</sup>

Even within these limited studies, the choice among liquidation mechanisms – chapter 11 or chapter 7 – is rarely considered.<sup>3</sup> While a handful of scholars may lapse into the false dichotomy that paints chapter 11 as the tool of reorganization with chapter 7 as the sole means of liquidation,<sup>4</sup> this simple distinction between chapters is a relic of an age when equity receiverships reorganized corporate debtors while federal bankruptcy courts liquidated them.<sup>5</sup> Today's chapter 11 expressly contemplates

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<sup>2</sup> See Arturo Bris et al., *The Costs of Bankruptcy: Chapter 7 Cash Auctions vs. Chapter 11 Bargaining* 61 J. FIN. 1253 (2006) (sample of small and large corporate bankruptcies in Arizona and New York from 1995 to 2001).

<sup>3</sup> State law alternatives – like assignments for the benefit of creditors – are also widely used, especially by smaller firms. See Ronald J. Mann, *An Empirical Investigation of Liquidation Choices of Failed High-Tech Firms*, 82 WASH. U. L.Q. 1375 (2005); Melvin G Shimm, *The Impact of State Law on Bankruptcy*, 1971 DUKE L. J. 879. *But see* Sherwood Partners, Inc. v. Lycos, Inc., 394 F.3d 1198 (9<sup>th</sup> Cir. 2005) (holding that portions of the Bankruptcy Code preempt California's assignment for the benefit of creditors statute, even when no bankruptcy case is pending).

<sup>4</sup> See, e.g., OLIVER HART, FIRMS, CONTRACTS AND FINANCIAL STRUCTURE 156 (1995) ("Chapter 7 calls for a bankruptcy company to be sold off for cash. In contrast, Chapter 11 is an attempt to allow companies to reorganize."). The dichotomy was more common in older articles, although it sometimes appears to result from oversimplification, rather than misunderstanding. See, e.g., Douglas G. Baird, *The Uneasy Case for Reorganizations*, 15 J. LEGAL STUD. 127 (1986).

<sup>5</sup> See Stephen J. Lubben, *Railroad Receiverships and Modern Bankruptcy Theory*, 89 CORNELL L. REV. 1420 (2004).

liquidation through a plan,<sup>6</sup> as did its New Deal predecessors.<sup>7</sup>

And the debtor (and thus its management) has an absolute right to one conversion between the two chapters.<sup>8</sup>

Conventional wisdom tells us that the debtor's management will always choose chapter 11 because the Bankruptcy Code

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<sup>6</sup> 11 U.S.C. § 1123(b)(4); *see also* 11 U.S.C. § 1123(a)(5)(D) (A plan of reorganization shall "provide adequate means for the plan's implementation such as . . . sale of all or any part of the property of the estate."); § 1129(a)(11) (Court must find that "[c]onfirmation of the plan is not likely to be followed by the liquidation . . . of the debtor or any successor to the debtor under the plan, unless such liquidation or reorganization is proposed in the plan."); § 1141(d)(3) ("The confirmation of a plan does not discharge a debtor if . . . the plan provides for the liquidation of all or substantially all of the property of the estate.").

<sup>7</sup> *See* Section 216(10) of the 1898 Bankruptcy Act. Ch. 541, 30 Stat. 544, *amended by* Act of June 22, 1938, (known as the "Chandler Act"), ch. 575, 52 Stat. 840, *repealed by* Bankruptcy Reform Act of 1978 (the "Bankruptcy Code"), Pub. L. No. 95-598, 92 Stat. 2549. Railroads had a similar power under section 77 of the Act, although the power to completely liquidate was clouded by issues of public policy. *See* Section 77(o) of the 1898 Bankruptcy Act, *enacted by* Reorganization of Railroads Engaged in Interstate Commerce (known as "Section 77"), Pub. L. No. 72-420, 47 Stat. 1474 (1933), *repealed by* Bankruptcy Reform Act of 1978 (the "Bankruptcy Code"), Pub. L. No. 95-598, 92 Stat. 2549. Notably, unlike Chapter X, Chapter XI of the Bankruptcy Act of 1898, after amendment by the Chandler Act, did not provide for liquidation of businesses. *In re Pure Penn Petroleum Co.*, 188 F.2d 851, 854-44 (2d Cir. 1951); *see also* Recent Case, *Bankruptcy - in General - Sale of Entire Assets Not Permitted in Chapter XI Arrangement*, 65 HARV. L. REV. 686, 687 (1952) ("While only Chapter X permits sale as part of a plan, both chapters authorize sale "upon cause shown." 52 Stat. 885, 907 (1938), 11 U.S.C. §§ 516(3), 713(2) (1946). The [Pure Penn Petroleum] court construed "cause" as limited to emergency situations such as the deterioration of perishable assets, relying on Chapter X decisions.").

<sup>8</sup> 11 U.S.C. § 1112(a) (debtor's right to convert from chapter 11 to chapter 7); *see also* 11 U.S.C. § 706(a) (debtor's right to convert to chapter 11 from chapter 7). *But see* *Marrama v. Citizens Bank*, 127 S. Ct. 1105 (2007) (limiting the ability to convert in the personal bankruptcy context by reference to § 706(d)).

mandates a trustee in every chapter 7 case,<sup>9</sup> while in chapter 11 the norm is that the debtor and its management remain “in possession,” with the powers and obligations of a trustee.<sup>10</sup> What has been little examined is the effect of chapter choice on how creditors fare.

The sparse nature of the empirical evidence concerning business liquidation likely reflects the inclination to center on the more alluring and uniquely American elements of chapter 11 reorganization. But if liquidation is inevitable, which tool should be deployed to liquidate the firm? And is the debtor’s absolute right to move between chapters of the Bankruptcy Code a useful device, or simply a misguided attempt to allow managers to attempt reorganization in the maximum number of cases?

Several important implications flow from the chapter choice decision. For example, if chapter 11 provides the markedly better tool for liquidation of a firm, and many practitioners intuitively believe it does, why should debtors have the absolute right to convert to chapter 7?<sup>11</sup> The conversion right under these

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<sup>9</sup> 11 U.S.C. §§ 701-702. *See also* In re Hagerstown Fiber Ltd. P’ship, 226 B.R. 353, 359 (Bankr. S.D.N.Y. 1998).

<sup>10</sup> 11 U.S.C. § 1107.

<sup>11</sup> 11 U.S.C. § 1112(a). The debtor’s power to exercise this choice is apparently unique to American bankruptcy law. *See, e.g.,* Jason Harris & Bruce Gordon, *Lost In Transition: Section 447A And The Question Of Members’ Rights When A Company Transitions From Voluntary Administration*

assumptions seems like little more than a bankruptcy version of “mutually assured destruction”<sup>12</sup> – a provision mostly used for its ability to menace. Should management have that degree of power? Conversely, if chapter 7 provides a better forum for liquidation, we must question if a choice to liquidate under chapter 11 represents little more than a wealth transfer to the debtor’s management.

In this paper, I examine 449 firms that liquidated under chapters 7 or 11 during 1994. I conduct this examination in two parts. Part I sets the stage with a concise overview and comparison of the process of liquidation under chapters 7 and 11. With this review complete, Part II presents the empirical results of this paper. Chapters 7 and 11 are measured along two main axis: the time spent in liquidation and the recovery to unsecured creditors.

Some results are predictable: for example, unsecured creditors sometimes fare much better in chapter 11 liquidations. But other results are likely to surprise academics and chapter 11 practitioners alike. For example, even under a chapter 11 liquidation plan the

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*To A Creditors’ Voluntary Liquidation*, 13 *INSOLVENCY L.J.* 96 (2005) (discussing Australian law).

<sup>12</sup> Cf. Robert J. Art, *The Case for the “Mad-Plus” Posture*, in *THE USE OF FORCE: MILITARY POWER & INTERNATIONAL POLITICS* 378 (Robert J. Art & Kenneth N. Waltz ed. 3d Ed. 1988) (discussing the then prevailing theories of nuclear strategy, including mutually assured destruction or “MAD”). Of course, the threat inherent in the power to convert may be the source of much of the debtor’s bargaining power in chapter 11. The question is whether the threat gives the debtor too much bargaining power.

median recovery to unsecured creditors is zero – this means that at least half of the unsecured creditors will suffer a complete loss, regardless of the procedure the debtor uses to liquidate. Straight chapter 11 and chapter 7 cases take about a year or two to complete, but converted cases average almost five years from start to finish.

Almost 250 debtors in the sample filed and liquidated under chapter 7. But why? In a sample comprised solely of business entities – entities that enjoy limited liability under state law – the number of original chapter 7 cases should arguably be quite small.<sup>13</sup> And since I show that these cases rarely return anything to unsecured creditors, there is a real question of why these businesses could not or should not liquidate under state debtor-creditor law.<sup>14</sup>

Very few creditors ultimately receive the benefits of a chapter 11 liquidation – most chapter 11 cases convert to chapter 7 and very few liquidating plans are ultimately confirmed. Only 81 of

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<sup>13</sup> See Douglas G. Baird, *A World Without Bankruptcy*, 50 L. & CONTEMP. PROBS. 173, 182 (1987). Baird and Morrison argue that owner liability issues motivate an entity's bankruptcy, but their story centers on small businesses that file chapter 11. Baird, Douglas G. and Morrison, Edward R., *Serial Entrepreneurs and Small Business Bankruptcies*, Working Paper (2005) (<http://ssrn.com/abstract=660301>).

<sup>14</sup> Cf. Stephen J. Lubben, *The New and Improved Chapter 11*, 93 KY. L.J. 839, 850 (2005).

202 chapter 11 debtors in the sample filed plans, and only 43 of those plans were actually confirmed. The result is that chapter 7 is the prevailing method of business liquidation, although a sizable number of firms first attempt either a reorganization or liquidation under chapter 11.

## I. Liquidation under the Bankruptcy Code

While the Bankruptcy Code and its predecessors have long offered multiple avenues for terminating a business's operations, chapter 7 is the tool that most people immediately think of upon any mention of bankruptcy. The theme in chapter 7 is the speedy collection, reduction to cash, and distribution of the debtor's assets.<sup>15</sup>

In a chapter 7 case, the United States Trustee – an employee of the Department of Justice – must appoint an interim trustee promptly after the filing.<sup>16</sup> The interim trustee serves until a trustee is elected by eligible creditors.<sup>17</sup> If no trustee is elected, the interim trustee serves as trustee for the remainder of the case.<sup>18</sup>

The ultimate goal of chapter 7 is distribution of the debtor's property according to the priorities set forth in the Bankruptcy Code.<sup>19</sup> While the distribution scheme used in chapter 7 is often said to reflect the “absolute priority rule”<sup>20</sup> -- the rule that states that creditors must be paid in full before the debtor gets anything --

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<sup>15</sup> 11 U.S.C. § 704(a)(1).

<sup>16</sup> 11 U.S.C. § 701.

<sup>17</sup> In most districts, the interim trustee is appointed from a group of pre-qualified trustees.

<sup>18</sup> 11 U.S.C. § 702.

<sup>19</sup> 11 U.S.C. § 726.

<sup>20</sup> See, e.g., Michelle J. White, *Corporate Bankruptcy As a Filtering Device: Chapter 11 Reorganizations and Out-of-Court Debt Restructurings*, 10 J.L. ECON. & ORG. 268, 270-71 (1994).

the scheme actually acknowledges a variety of deviations from that rule and reflects a series of Congressional policy determinations.<sup>21</sup> This statutory scheme is the only available distribution scheme in chapter 7 – thus obviating the need for any creditor voting.

Creditor voting is, of course, a key feature of chapter 11 cases, even those that propose liquidating plans.<sup>22</sup> In addition, while trustees are appointed in all chapter 7 cases, the selection of a trustee in a chapter 11 case is, by all accounts, rare.<sup>23</sup> Thus, debtor's management will formally control the plan process in chapter 11, which gives them great flexibility in shaping the liquidation. This could, subject to creditor vote, include deviations from strict adherence to the chapter 7 distribution scheme.

Finally, while a decision to file under chapter 7 is tantamount to a declaration of an intent to liquidate, a chapter 11 filing contains no such information. Liquidation under chapter 11 may therefore offer a greater opportunity for a “going concern” liquidation.

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<sup>21</sup> See, e.g., §§ 507, 523, 724(b). Section 507, for example, entitles various entities to priority repayment of what would otherwise be ordinary unsecured claims.

<sup>22</sup> 11 U.S.C. § 1126.

<sup>23</sup> 11 U.S.C. § 1101. See also Kenneth N. Klee, *One Size Fits Some: Single Asset Real Estate Bankruptcy Cases*, 87 CORNELL L. REV. 1285, n.31 (2002); Robert M. Lawless et al., *A Glimpse at Professional Fees and Other Direct Costs in Small Firm Bankruptcies*, 1994 U. ILL. L. REV. 847, 873.

## **II. An Empirical Study of Business Liquidation**

In this portion of the paper I present the results of my empirical study of business liquidation. In the first two sections I introduce the study. I then turn to consideration of creditor recoveries in Section C and time to resolution in Section D.

### *A. Sample Selection*

The sample consists of 449 bankruptcy cases filed in 1994, drawn from the Business Bankruptcy Project database. This database was first created by Dr. Teresa Sullivan, Professor Elizabeth Warren, and Professor Jay Lawrence Westbrook and consists of cases drawn from twenty-three widely disbursed districts, two from each of the numbered circuits, with the exception of the Ninth Circuit, from which three districts were selected.<sup>24</sup> The districts selected were from the high and low population states in the circuits. They also were selected due to their chapter 11 activity; the study additionally required that at

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<sup>24</sup> The districts selected were Massachusetts, Southern District of New York, New Jersey, Maryland, Northern District of Texas, Eastern District of Michigan, Northern District of Illinois, Minnesota, Central District of California, Colorado, Middle District of Florida, New Hampshire, Connecticut, Delaware, Eastern District of North Carolina, Eastern District of Louisiana, Western District of Tennessee, Eastern District of Wisconsin, Nebraska, Western District of Oklahoma, Hawaii, and the Middle District of Georgia.

least fifty chapter 11 cases had been filed in the chosen district during the twelve months ending in June 1993.

The actual cases chosen from any district were also randomly chosen from within that district. For example, cases from the Central District of California were drawn from throughout that vast district, and not simply taken from Los Angeles.<sup>25</sup>

In the main Business Bankruptcy Project study, up to one hundred fifty business cases in each district were selected for inclusion in the database: fifty chapter 7 cases, fifty chapter 13 cases, and fifty chapter 11 cases.<sup>26</sup> Cases were drawn evenly from the four calendar quarters in 1994. Because some districts did not have the requisite fifty cases in chapter 11 or chapter 13, the sample ultimately resulted in a database of 1150 chapter 7 cases, 986 chapter 11 cases, and 986 chapter 13 cases. The Business Bankruptcy Project database contains 7.9% of all business chapter 11 cases filed in 1994, and about 20% of the chapter 11 filings by public companies in 1994.

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<sup>25</sup> For further information on the Business Bankruptcy Project, and its methodology, see Elizabeth Warren & Jay Lawrence Westbrook, *Financial Characteristics of Businesses in Bankruptcy*, 73 AM. BANKR. L.J. 499 (1999).

<sup>26</sup> Because of these selection rules in the main sample, it is fair to assume that my sub-sample underweights chapter 7 cases relative to chapter 11 cases, since the two types of cases do not appear with equal probability in practice.

From this larger database, cases that met any one of the following three tests were selected for inclusion in the present study:

1. Chapter 7 cases where the result was anything other than dismissal.
2. Chapter 11 cases with confirmed plans where the plan was either identified as a liquidating plan or the business ceased operations before or during the case.
3. Chapter 11 cases that converted to chapter 7 where the result in chapter 7 was anything other than dismissal.

In all instances cases were subject to the further requirement that the primary debtor be an artificial entity such as a corporation or limited partnership – I thus excluded sole proprietorships from the sample. This was done to avoid confusion caused by the dual nature of sole proprietor bankruptcy, which mixes business and consumer bankruptcy issues in a single case.<sup>27</sup> To further steer clear of owner liability, twenty-four cases that appeared to be either general partnerships or other unincorporated entities were

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<sup>27</sup> See Robert M. Lawless & Elizabeth Warren, *The Myth of the Disappearing Business Bankruptcy*, 93 CAL. L. REV. 743 (2005).

also removed from the sample.<sup>28</sup> The sample is thus largely comprised of corporations, although at least eight limited partnerships<sup>29</sup> and two professional corporations remain in the sample.<sup>30</sup>

These selection rules serve several purposes, all designed to ensure that the sample is comprised solely of “pure” business liquidations. The first and third rules filter out the cases that were filed solely as attempts to forestall non-bankruptcy actions by imposition of the automatic stay. Of course, these rules might also eliminate cases where the court or key parties decided that liquidation under state debtor-creditor law was preferable, but the purpose of this paper is to study the relative merits of two forms of federal business liquidation and inquiries about the relative merits of state collection mechanisms must await another paper. The second rule identifies the business liquidations in the sample, even

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<sup>28</sup> This was accomplished by simple review of the debtor’s name and removing, for example, debtors with names like “Orleans Plaza Associates” or “Jackson & Jackson.”

<sup>29</sup> Although the general partner in a limited partnership retains unlimited liability, this problem is easily avoided through use of a corporation as the general partner. The precise number of limited partnerships is unknown, since entities with names ending in “Limited” or “Ltd.” may be either limited partnerships or corporations. *See, e.g.*, Del. Gen. Corp. Law §102(a)(1); Del. Rev. Unif. Ltd. P’ship Act § 17-102(4).

<sup>30</sup> A similar sample drawn today would undoubtedly include many more Limited Liability Companies, but use of “LLCs” for small businesses was just becoming common in 1994.

where the cases were not self-identified as liquidations. In doing so, however, the sample does draw in cases that could just as well be seen as reorganizations. For example, a debtor that sells all of its assets to a new entity and then liquidates is covered in this study, whereas such a case could also be seen as reorganizations – indeed, every early American railroad reorganization followed this basic form. In this study I choose to follow the legal entities rather than the assets, to avoid having to decide how to classify the many cases where a debtor sells most, but not all, of its assets.

The sample cases are distributed among 23 districts from Hawaii to New Hampshire. The Eastern District of Louisiana and the District of New Jersey have the largest numbers of cases in the sample, with 42 and 37 cases, respectively, while Nebraska is the smallest district with four cases. In part the frequency and distribution of cases in this sample may be driven by factors exogenous to the study. For example, California has a highly developed assignment for the benefit of creditors statute, which may decrease the use of the Bankruptcy Code to liquidate businesses in that State. Similarly, the districts may vary in their receptiveness to chapter 11 liquidation cases – and if debtors or their attorneys know that any attempted chapter 11 liquidation is

likely to be converted to chapter 7, they will avoid the bankruptcy court altogether.

It should be acknowledged at the outset that my sample only provides for an imperfect comparison among federal procedures. An ideal sample for studying the choice of procedures would be comprised solely of firms that had already decided to liquidate. The cases in my sample only partially fit this bill, since some of the chapter 11 debtors may have entered bankruptcy intending to reorganize only to find afterward that reorganization was infeasible.<sup>31</sup> Unfortunately, the theoretically optimal sample is virtually impossible to construct in practice because firms that file chapter 11 petitions have good reasons to uniformly claim that they expect to reorganize, regardless of their true intentions. For example, a firm that enters chapter 11 openly announcing its intent to liquidate would destroy its ability to conduct “going concern” sales of its assets and might induce a creditor or the United States Trustee to file a motion to convert. Thus I use a sample of chapter 11 cases that actually liquidated, but this may cloud the examination of the second part of the liquidation decision if we believe that debtors who enter chapter 11 intending to liquidate are

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<sup>31</sup> It seems reasonable to assume that the chapter 7 debtors intended liquidation from the outset.

fundamentally different from debtors who decide to liquidate at some subsequent point in time.

Because of the study design, cases in low population districts had a higher probability of being selected; given that up to 50 chapter 11 cases were picked from each district, a case in a district with 50 chapter 11 cases had a higher chance of selection than a case in a district with 100 such cases. This suggests the need to weight the sample the correct for the “over sampling” of cases from low population districts. To be sure, this presupposes a meaningful difference between the cases in high and low population districts – a difference that is not easily found in the sample.

There is a statistically significant difference in creditor recovery between the low and high population districts, *but not* in case duration. Debtor size, as measured by assets and debtors, are not significantly different among the high and low population districts when chapter 7 and chapter 11 cases from the two groups are compared. It is thus unclear whether the difference in recoveries is meaningful – what hypothesis related to population size of the district would account for this while holding case length and debtor size constant? – or simply the result of random chance.

Notably, the median recovery and interquartile range of both the high and low population districts is zero – that is, the apparent difference is driven by the extremes, or the “tails” of the curve. In particular, the unsecured creditor recovery in two small population states – Wisconsin and North Carolina -- far exceeds the recovery in any other district, big or small. If these two districts are removed from the sample, the apparent difference between the big and small population districts on recovery is no longer statistically significant.

Nevertheless, because there is some difference in the districts when sorted by census population, and omitted and unobservable variables are an issue in most empirical legal studies, I present weighted versions of the descriptive results throughout this paper. I calculated these weights as the inverse of the sampling fraction, scaled to make the weighted observations add to the sample size. These weighted results do not change the “take away” results for any of the following tables, but the underlying numbers (e.g., the means) are influenced by the weighting. Given the constraints on using weighted variables in the leading statistical packages,<sup>32</sup> the reader should keep in mind that the standard errors reported in this

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<sup>32</sup> I use SPSS and Stata in this paper. The vast majority of the analysis was done in Stata.

paper are likely subject to a greater degree of inaccuracy than might be expected with unweighted data.<sup>33</sup>

### B. *Descriptive Statistics*

As noted, the sample consists of 449 bankruptcy cases filed in 1994. 247 cases in the sample started in chapter 7, while 202 began in chapter 11. However, the vast majority of the chapter 11 cases ultimately converted to chapter 7, as show in Table 1.

**Table 1: Result in Chapter 11 Cases**

	Frequency	Cumulative Percent
Converted to Chapter 7	159	78.7
Plan confirmed	43	100.0
Total	202	

Eighty-one of the 159 chapter 11 debtors who ultimately converted to chapter 7 got far enough into the chapter 11 process to file a plan, but, as the table makes plain, many of those plans were never implemented.

Table 2, set forth below, provides some basic descriptive information about the firms in the sample. Recall that dollar

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<sup>33</sup> In particular, in some instances Stata does not support the use of probability weights, which forces the use of analytical weights, which leads to somewhat greater imprecision in calculating the standard errors. The basic version of SPSS is even less helpful in its treatments of weighted data, as it assumes the use of frequency weights, which can lead to even greater problems in the calculation of standard errors.

figures presented throughout the paper are from 1994.<sup>34</sup> The results on this table are weighted.

**Table 2: Weighted Descriptive Statistics of Sample Cases**

<i>Type of Case</i>	Assets	Debt	Secured/Total Debt	Debt/Assets
<i>Chapter 7 Cases (total number of observations)</i>	240	235	233	181
<i>Mean</i>	81,296.57	333,596.30	0.16	82.97
<i>Standard Error</i> <sup>35</sup>	15,110.43	37,548.29	0.02	31.28
<i>Median</i>	5,000.00	138,507.00	0.00	5.25
<i>Standard Deviation</i>	234,089.80	575,604.30	0.27	420.78
<i>Chapter 11 Cases</i>	40	38	38	37
<i>Mean</i>	11,100,000.00	10,100,000.00	0.47	2.97
<i>Standard Error</i>	3,701,759.00	2,359,216.00	0.05	1.05
<i>Median</i>	1,080,019.00	2,077,445.00	0.45	1.24
<i>Standard Deviation</i>	23,400,000.00	14,500,000.00	0.33	6.38
<i>Converted Case</i>	147	143	143	134
<i>Mean</i>	1,056,110.00	1,391,503.00	0.36	9.70
<i>Standard Error</i>	206,386.50	229,847.80	0.03	4.99
<i>Median</i>	191,689.00	536,544.00	0.23	2.12
<i>Standard Deviation</i>	2,502,303.00	2,748,580.00	0.38	57.71
<i>Total</i>	427	416	414	352
<i>Mean</i>	149,531.00	396,236.80	0.17	80.44
<i>Standard Error</i>	84,873.33	65,355.47	0.01	22.03
<i>Median</i>	5,200.00	148,502.00	0.00	4.96
<i>Standard Deviation</i>	1,753,821.00	1,332,995.00	0.28	413.34

<sup>34</sup> Using the average annual CPI to adjust for inflation, \$1 in 2005 would have been the equivalent of about \$0.78 in 1994 or, stated alternatively, \$1 in 1994 would now be worth about \$1.28.

<sup>35</sup> Standard errors and standard deviations are frequent sources of confusion. The standard deviation describes the variability among individual cases in a sample; the standard error of the mean describes the uncertainty of how the sample mean represents the population mean. That is, standard errors help us understand the degree of uncertainty associated with our estimate of the mean – estimate, because we are calculating the mean from a sample rather than the entire population – whereas standard deviations explain how dispersed the data under consideration is, using the familiar rule most (about 95%) of the data should be within about two standard deviations of the mean.

The table does show that the sample is uneven; there are key differences among the cases when sorted by chapter. As might be expected, the firms that seek chapter 7 relief from the inception of their bankruptcy cases are generally much smaller, as measured by asset size, than the firms that begin in chapter 11. The gap between chapter 7 and 11 is not quite as large when we look at debt levels, although the numbers again show that the biggest chapter 11 cases are substantially larger than the corresponding chapter 7 cases. By both measures the chapter 11 cases that eventually convert fall between straight chapter 7 or chapter 11 cases, although these converted cases are still larger than the typical chapter 7 case.

Taken as a whole, this Table raises the potential problem of endogenous variables; that is, differences between the groups' baseline characteristics may influence the variables under study. In particular, because of the unbalanced nature of the sample as outlined above, characteristics peculiar to the firm might drive the results in the two key areas I wish to study. For example, can I really be sure that creditor recovery is substantially different in chapter 11 if the firms that file under chapter 11 are much larger in terms of assets or debts?

In essence, the initial selection between chapter 7 or 11 is nonrandom. Chapter 11 might be receiving debtors that are in better financial condition or otherwise more able to absorb the fixed cost components (if any) of bankruptcy. Any apparent “benefit” of chapter 11 instead might be the consequence of the stronger firms that file under chapter 11. In short, there is a selection bias that we must account for before we can draw firm conclusions about the efficacy of chapter 11 or 7 as a liquidation device.

To address this potential problem and “rebalance” the sample, I adopt a matching approach to the data.<sup>36</sup> A matching approach mimics random assignment to the relevant category (in this case, chapter 7 or 11) through the construction of a control group after the fact. Under this approach, cases in chapter 7 are paired with a case sharing similar characteristics in chapter 11. The effect of liquidation procedures choices can then be calculated as the average difference in outcomes between the two chapters.

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<sup>36</sup> For an extensive and very readable discussion of the matching techniques described herein, see Lee Epstein et al., *The Supreme Court During Crisis: How War Affects only Non-War Cases*, 80 NYU L. REV. 1, 65-69 (2005). See also E. Michael Foster, *Propensity Score Matching: An Illustrative Analysis of Dose Response*, 41 MED. CARE 1183, 1184-85 (2003) (<http://www.unc.edu/~emfoster/papers/doser2.pdf>); Xianghong Li & Shelly Zhao, *Propensity Score Matching and Abnormal Performance After Seasoned Equity Offerings*, Working Paper, at 7-11 (2005) (<http://ssrn.com/abstract=451740>).

Matching data in this way is a recognized statistical technique, used frequently when evaluating the benefits of a voluntary government program or medical treatment where the participants may be self-selecting (e.g., cancer screening).<sup>37</sup>

There are some problems with use of this approach in connection with this sample. First, any matching approach assumes that the effects of unobservable variables are minimal.<sup>38</sup> In this paper I match cases based on a variety of apparently relevant financial characteristics, but to the extent debtors choose chapter 11 or 7 for significant non-financial reasons, such as the consequence of alternative state law procedures, matching will produce results that assign more significance to the difference in chapters than is warranted. For legal studies, where sample sizes are often inherently small because of a limited universe of relevant cases, an additional concern rests in the inherent tension between the desire to match cases based on a rich array of factors and the need to maintain a sufficiently large sample size. Propensity score

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<sup>37</sup> The classic article is Rajeev H. Dehejia & Sadek Wahba, *Causal Effects in Nonexperimental Studies: Reevaluating the Evaluation of Training Programs*, 94 J. AM. STAT. ASS'N 1503 (1999).

<sup>38</sup> For a good, plain English, discussion of the issues discussed in this paragraph, see Zhong Zhao, *Sensitivity of Propensity Score Methods to the Specifications*, IZA Discussion Paper No. 1873 (2005) (<http://ftp.iza.org/dp1873.pdf>).

matching, which collapses all relevant factors into a single index and matches cases based on that index<sup>39</sup> reduces the problem, but given the small sample sizes used in almost all legal studies,<sup>40</sup> it remains an issue and there is some risk that inappropriate matches might result.<sup>41</sup>

Thus, I matched the cases in the sample by chapter of original filing, using a propensity score technique.<sup>42</sup> Four variables formed the basis of the match: assets, debt, the ratio of secured debt over total debt, and the debt to asset ratio of the debtor.<sup>43</sup> This provides a sub-sample of 292 cases, equally balanced between chapter 7 and chapter 11, with greatly reduced differences between the two

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<sup>39</sup> See Foster, *supra* note 33.

<sup>40</sup> I am referring to quantitative, rather than qualitative, social science work. “Small” here is used relative to the standard sample sizes used in the social sciences, which often include thousands of cases. See, e.g., James E. Lubben et al., *Performance of an Abbreviated Version of the Lubben Social Network Scale among Three European Community-Dwelling Older Adult Populations*, 46 GERONTOLOGIST 503 (2006) (study of three groups totaling more than 7,500 observations, with smallest of the three sub-samples containing 2,000 observations).

<sup>41</sup> That is, because matching is typically based on the “closeness” of the propensity scores, a small sample could result in matched pairs that have very different scores.

<sup>42</sup> In particular, I used nearest-neighbor matching, with no replacement (i.e., each case is only used once) and common support in the tails (essentially dropping certain extreme matches, which reduces the risk of an inappropriate match). See generally A. COLIN CAMERON & PRAVIN K. TRIVEDI, MICROECONOMETRICS: METHODS AND APPLICATIONS 871-78 (2005).

<sup>43</sup> In all instances this information is obtained from the debtor’s schedules. I implicitly assume that errors in these figures are uniformly distributed among the sample.

halves along the four financial factors used as the basis for the matching.

Table 2A repeats the basic information from Table 2 for this newly matched set of cases. Note that Table2A reports the data via three categories, whereas the matching technique was performed on the two basic chapter choices that a debtor-firm faces at the inception of bankruptcy. I will use this matched sub-sample for the remainder of the paper.

Table 2A: Weighted Descriptive Statistics of Sample Cases, Post-Matching

<u>Type of Case</u>	<u>Assets</u>	<u>Debt</u>	<u>Secured/Total Debt</u>	<u>Debt/Assets</u>
Chapter 7 Cases ( <i>total number of observations</i> )	146	146	146	146
<i>Mean</i>	137,084.00	290,978.90	0.20	13.62
<i>Standard Error</i>	23,802.25	40,471.56	0.02	3.50
<i>Median</i>	34,558.00	133,513.00	0.02	4.11
<i>Standard Deviation</i>	287,603.70	489,019.80	0.28	42.33
Chapter 11 Cases	25	25	25	25
<i>Mean</i>	414,477.60	848,300.20	0.23	4.03
<i>Standard Error</i>	96,356.52	136,257.90	0.05	1.73
<i>Median</i>	223,200.00	553,312.00	0.22	1.66
<i>Standard Deviation</i>	481,782.60	681,289.60	0.24	8.66
Converted Case	121	121	121	121
<i>Mean</i>	669,732.30	1,052,392.00	0.33	10.31
<i>Standard Error</i>	90,097.57	113,727.40	0.03	5.43
<i>Median</i>	189,960.00	415,994.00	0.16	2.25
<i>Standard Deviation</i>	991,073.20	1,251,001.00	0.36	59.76
Total	292	292	292	292
<i>Mean</i>	154,905.40	317,063.70	0.20	13.48
<i>Standard Error</i>	20,279.15	32,023.91	0.02	2.51
<i>Median</i>	35,300.00	135,879.00	0.03	4.00
<i>Standard Deviation</i>	346,530.30	547,224.70	0.29	42.84

Note that matching the data has brought up the average asset size of the chapter 7 cases while reducing the size of the two groups that start in chapter 11, greatly reducing the substantial gap among the groups when compared on this measure. Similar effects are seen along the other financial characteristics, yet the overall characteristics of the pre and post-matching sample are generally quite similar.

### C. *Creditor Recoveries*

From a creditor's perspective, the amount recovered on the debt owed is an obvious way to measure the efficacy of either chapter 7 or 11 as a liquidation tool. It is also an obvious way to measure the efficiency of the liquidation tools, inasmuch as the return to creditors can indicate the degree to which value is lost during liquidation, either through wealth transfers or simple destruction of asset value due to the method of redeploying assets.

But it is much harder to measure creditor recoveries than might appear at first blush because creditors obtain value from the estate in a variety of ways, not all of which are easily observed. First, creditors can obtain a recovery through the obvious means: direct payments from the estate. But a creditor might also receive partial payment of their claim early on in the case under the "necessity of payment" or critical vendor doctrines,<sup>44</sup> which allow the debtor to pay certain creditors that are vital to ongoing operations. Alternatively, if the creditor is secured, a creditor could receive partial payment by obtaining court permission to retrieve collateral from the debtor,<sup>45</sup> or through abandonment of the collateral to the

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<sup>44</sup> Stephen J. Lubben, *Some Realism About Reorganization: Explaining the Failure of Chapter 11 Theory*, 106 DICK. L. REV. 267, 295-96 (2001).

<sup>45</sup> 11 U.S.C. § 362.

creditor.<sup>46</sup> Finally, creditors can indirectly recoup pre-bankruptcy losses by increasing prices to the post-bankruptcy debtor,<sup>47</sup> or by otherwise altering the debtor-creditor relationship going forward.

To control for some of these factors, I focus on recoveries to unsecured creditors, which we can view as the lower bound of recoveries to creditors in general.<sup>48</sup> And here a word on methodology is in order.

Initially the vast majority of the chapter 7 cases did not have any data on distributions to unsecured creditors. To investigate this issue further, I examined trustee reports from a sub-sample of 10% of the relevant cases. The apparent cause of the problem was immediately apparent – in every case selected, the trustee had reported that there were no assets available for distribution to creditors. An example of this kind of trustee report is reproduced as Figure 1. While the initial coding in the database was technically correct inasmuch as the report lacks any express information on payments to unsecured creditors, the plain import

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<sup>46</sup> 11 U.S.C. § 554.

<sup>47</sup> This could arguably be seen as a violation of the automatic stay, 11 U.S.C. § 362(a)(6), but bankruptcy courts may have a difficult time discerning the motive for the price increase.

<sup>48</sup> To be sure this ignores the effects of payments made under the so-called “necessity of payment” doctrine, Lubben, *Railroad Receiverships*, *supra* note 5 at 1148, but there are few very large cases in the sample, so the effect is arguably trivial.

of a report like this is that unsecured creditors received nothing. Accordingly, extrapolating from my sub-sample, I recoded the missing values for all chapter 7 cases in this variable to zero. The net result of this recoding was to depress the mean recovery for chapter 7 unsecured creditors since the sample now includes many cases with "0" recovery.

Figure 1 -- Sample Trustee Report

UNITED STATES BANKRUPTCY COURT  
MIDDLE DISTRICT OF FLORIDA  
ORLANDO DIVISION

FILED  
CLERK, U.S. BANKRUPTCY COURT

FEB 14 1994

CASE NO: 94-00031-6J7

MIDDLE DISTRICT OF FLORIDA  
ORLANDO DIVISION

In the matter of:

NARSCO, INC

Debtor(s)/

FINAL REPORT AND ACCOUNT OF TRUSTEE  
IN CASE WHERE NO DISTRIBUTION IS MADE

JAMES E. C. PERRY, Trustee of the estate of the Debtors, reports that he has neither received any property nor paid any money on account of this estate; that he has made diligent inquiry into the financial affairs of the debtor and the existence and location of property belonging to the estate; and that any and all property in the estate are either (a) properly claimed (except, (b) so encumbered by valid liens that they are burdensome or of inconsequential value to the estate, or (c) minimal value.

The Trustee incorporates by reference schedules A and B filed by the debtor, as the inventory of the debtor's property. All property has been allowed as exempt or abandoned under Section 554(c), Bankruptcy Code.

WHEREFORE, the Trustee in the above-entitled case certifies that he has performed all other and further duties required of him in the administration of said estate; and prays that this report be approved and that the said estate be closed; that the trustee be discharged from and relieved of his trust; and that the bond of said trustee be cancelled and the surety or sureties thereon be released from further liability thereunder, except any liability which may have accrued during the time such bond was in effect.

DATED: February 9, 1994

  
\_\_\_\_\_  
JAMES E. C. PERRY, Trustee  
605 East Robinson Street, Suite 630  
Orlando, Florida 32802  
(407) 122-

cc: U.S. Trustee, 135 W. Central Blvd., Suite 620, Orlando, FL 32801

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I examined unsecured creditor recoveries for three types of cases in the sample: chapter 7 cases, chapter 11 cases, and cases that converted from chapter 11 to chapter 7.<sup>49</sup>

**Table 4: Unsecured Creditor Recovery (As a Percentage Of Total Claim), Weighted, Post-Matching**

<u>Type of Case</u>	<u>Unsecured Creditor Recovery (%)</u>
Chapter 7 Cases ( <i>total number of observations</i> )	146
<i>mean</i>	0.751
<i>Standard Error</i>	0.605
<i>Median</i>	0.000
<i>Standard Deviation</i>	7.314
Chapter 11 Cases	25
<i>mean</i>	20.803
<i>Standard Error</i>	7.069
<i>Median</i>	0.000
<i>Standard Deviation</i>	35.344
Converted Case	121
<i>mean</i>	9.330
<i>Standard Error</i>	2.226
<i>Median</i>	0.000
<i>Standard Deviation</i>	24.482
Total	292
<i>mean</i>	1.097
<i>Standard Error</i>	0.519
<i>Median</i>	0.000
<i>Standard Deviation</i>	8.860

The average unsecured creditor in chapter 7 is unlikely to get more than a token payment on their claim, about three quarters of one percent of the face value of the claim, and most chapter 7 cases

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<sup>49</sup> No cases in the sample converted from chapter 7 to chapter 11.

offer no payment whatsoever. These results are largely consistent with Bris' recent multi-year study of business cases in New York and Arizona. That study found that chapter 7 cases had a mean (median) return to junior creditors of 1.1% (0%), based on a study of 115 chapter 7 cases in the two jurisdictions.<sup>50</sup> This study confirms similar results over a wider geographic scope.

These results also highlight the important, joint role played by both chapters in the American liquidation scheme. Considering chapter 7 alone would likely lead one to conclude that liquidation in the United States is substantially less efficient than the systems in place in other developed economies,<sup>51</sup> but such an approach would again fall into the trap of assuming a binary liquidation-reorganization division between chapters 7 and 11.<sup>52</sup> Moreover, this emphasizes the need for systemic evaluation bankruptcy systems, in contrast to the more typical "chapter by chapter" approach typically seen in the literature.<sup>53</sup>

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<sup>50</sup> See Arturo Bris et al., *supra* note 2, at 1287-89.

<sup>51</sup> See Oscar Couwenberg & Abe de Jong, *Costs and Recovery Rates in the Dutch Liquidation-Based Bankruptcy System* (Draft of June 2006) (Working Paper on file with author).

<sup>52</sup> See *supra* note 5 and text.

<sup>53</sup> See Oscar Couwenberg, *Survival Rates in Bankruptcy Systems: Overlooking the Evidence*, 12 EUROPEAN J. L. & E. 253, 254 (2001).

The converted cases provide marginally better returns (state them), but the figures for all cases that end in chapter 7 are unlikely to give unsecured creditors much comfort. Chapter 11 liquidating plans, on the other hand, return a more respectable 20% to unsecured creditors – although the standard error is rather large, and the proper number could be as low as 6.9% or as high as 34.7%.<sup>54</sup> Of note is that the median return to unsecured creditors in all liquidation cases, including chapter 11 liquidation plans, is zero. This means that at least half of the unsecured creditors will suffer a complete loss, regardless of the procedure the debtor uses to liquidate.

#### D. *Time to Resolution*

Another way to examine the choice among liquidation tools is to look at the time to resolution, especially since there is some evidence that duration correlates with cost.<sup>55</sup> Beyond cost, and its

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<sup>54</sup> If independent samples are taken repeatedly from the same population, we can estimate that the true value we are seeking will fall within a range, known as the confidence interval. The confidence interval is often termed the “margin of error” in the popular press. Confidence intervals are usually calculated so that the probability of finding the desired value within the interval is 95%, and this is the standard I use throughout the paper. This interval is equal to the mean  $\pm$  1.96 times the standard error. See G. SNEDECOR & W. COCHRAN, *STATISTICAL METHODS* 65-67 (8th ed. 1989).

<sup>55</sup> See Lopucki and Doherty, *supra* note 11, at 128 (finding that time and costs were correlated in a sample of chapter 11 reorganizations). *But see*

possible *ex ante* effects on the price of debt, delays in the liquidation context can also be seen as inefficient inasmuch as delay hinders the use of the debtor's assets in some more viable project going forward, thus depressing social wealth.<sup>56</sup>

In chapter 7, time to resolution means the time from case filing to the final trustee report and the closing of the case. In chapter 11, I consider the case to run from case filing to plan confirmation,<sup>57</sup> although many would argue that chapter 11 cases should also be measured to the date the case is closed.

I reject measuring the endpoint as case closure in chapter 11 for two reasons. First, there may be tactical reasons to keep a firm in chapter 11, under the jurisdiction of the bankruptcy court, that have nothing to do with the liquidation or reorganization of a

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Daniel M. Covitz, *et al.* *Are Longer Bankruptcies Really More Costly?* Working Paper (2006) (<http://ssrn.com/abstract=891486>). The latter paper emphasizes the important point that the typical assumption in bankruptcy scholarship that time correlates with cost may ignore the component of case duration which is exogenous to the debtor.

<sup>56</sup> Cf. Stephen J. Lubben, *The Microeconomics of Chapter 11*, Part 2, 4 INT'L. CORP. RESCUE 87 (2007) (arguing that *ex ante* costs are virtually irrelevant to consideration of modern chapter 11).

<sup>57</sup> Accord Stephen P. Ferris & Robert M. Lawless, *The Expenses of Financial Distress: The Direct Costs of Chapter 11*, 61 U. PITT. L. REV. 629, 637 (2000) ("Consistent with other studies, we measured time in reorganization as the time from filing through confirmation of the chapter 11 plan.").

debtor.<sup>58</sup> There is little reason to believe that these post-confirmation issues exist in chapter 7, so including this time would essentially “stack the deck” against chapter 11. Second, and closely related to the first point, is that even though the case remains open, the terms of the confirmed plan may provide that many of the provisions of the Bankruptcy Code no longer apply to the debtor. For example, in the reorganization context it is common to provide that professionals no longer have to file fee applications after plan confirmation.<sup>59</sup> In short, post-confirmation a debtor has some ability to “pick and choose” which parts of the Bankruptcy Code are applicable, clouding the issue of whether this

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<sup>58</sup> For example, the debtor may wish to retain its ability to assume and assign agreements in connection with a sale of assets.

<sup>59</sup> For example, section 42.13 of the Enron’s confirmed plan provided that:

From and after the Confirmation Date, the Reorganized Debtors shall, in the ordinary course of business and without the necessity for any approval by the Bankruptcy Court, (a) retain such professionals and (b) pay the reasonable professional fees and expenses incurred by the Debtors or the Reorganized Debtors, as the case may be, the Creditors’ Committee and the ENA Examiner related to implementation and consummation of or consistent with the provisions of the Plan, including, without limitation, reasonable fees and expenses of the Indenture Trustees incurred in connection with the distributions to be made pursuant to the Plan.

Supplemental Modified Fifth Amended Joint Plan of Affiliated Debtors Pursuant to Chapter 11 of the United States Bankruptcy Code at page 115, In re Enron Corp. (Bankr. S.D.N.Y. July 2, 2004) (on file with author).

period should really be considered as part of the time spent in “chapter 11.”

The use of the confirmation date might be objectionable if the chapter 11 cases showed continued use of the special powers that the Bankruptcy Code provides – such as a case that was kept open to pursue preferences or fraudulent transfer actions needed to fund the plan.<sup>60</sup> But the sample show little evidence of these sorts of actions at any point during the cases; there were only three chapter 11 cases in the sample with fraudulent transfer or preference actions at any point during the case.<sup>61</sup>

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<sup>60</sup> *See* 11 U.S.C. §§ 547-548.

<sup>61</sup> One of these chapter 11 cases had both a fraudulent transfer and a preference action. These types of actions were rare throughout the sample – only seven cases had fraudulent transfer or preference actions; two had both. In more recent years courts have seemingly been more willing to allow debtors to transfer these types of suits to third parties, which may increase the prevalence of avoidance actions since debtors no longer face the problem of bringing suit against a valued trade creditor or lender.

Table 5: Days to End of Case, Weighted, Post-Matching

<u>Type of Case</u>	<u>Days to End of Case</u>
Chapter 7 Cases ( <i>total number of observations</i> )	123
<i>mean</i>	631.64
<i>Standard Error</i>	49.80
<i>Median</i>	457.00
<i>Standard Deviation</i>	552.32
Chapter 11 Cases	18
<i>mean</i>	369.06
<i>Standard Error</i>	33.99
<i>Median</i>	375.00
<i>Standard Deviation</i>	144.20
Converted Case	26
<i>mean</i>	1,875.40
<i>Standard Error</i>	46.93
<i>Median</i>	1,796.00
<i>Standard Deviation</i>	239.30
Total	167
<i>mean</i>	640.09
<i>Standard Error</i>	43.32
<i>Median</i>	457.00
<i>Standard Deviation</i>	559.86

As shown in Table 5, that the average business liquidation takes just under two years. Chapter 11 liquidation takes approximately a year. This is broadly consistent with findings for chapter 11 reorganizations.<sup>62</sup>

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<sup>62</sup> See Ferris & Lawless, *supra* note 56, at 638 (finding median time to reorganization of 395 days). See also Steven H. Ancel & Bruce A. Markell, *Hope in the Heartland: Chapter 11 Dispositions in Indiana and Southern Illinois, 1990-1996*, 50 S.C.L. REV. 343 (1999).

The surprising numbers in Table 5 relate to the converted cases, which apparently take much longer than either the chapter 7 or chapter 11 liquidation cases. Indeed, on average the converted cases take three to five times as long as the other cases. The reasons for this dramatic difference are unclear. The only other paper to examine the issue of time in bankruptcy in this context found broadly similar results after controlling other case characteristics.<sup>63</sup>

It is worth considering if there is a self selection problem at work here. The cases in which debtors attempt to reorganize in the face of opposition or skepticism from a significant portion of the claimants would seem especially likely to be both long and prone to stalemates. If creditors refuse to yield, the result would be an eventual conversion to chapter 7. It is difficult to conclude in the abstract whether these represent cases of thwarted reorganizations or rather what practitioners variously refer to as “debtor’s syndrome” or “terminal optimism” – that is, managerial self-delusion and overconfidence

At the very least, the many cases where plans were filed but never confirmed cautions against attaching too much significance

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<sup>63</sup> See Arturo Bris et al., *supra* note 2, at 1270-71.

to the debtor's ability to produce a draft of a plan. But we must also be careful about drawing strong conclusions about the converted cases, since even if these cases are individualistically problematic, they may be a necessary part of a larger bankruptcy process. For example, it may be that the use of chapter 11 for some period of time before a chapter 7 liquidation is ultimately efficient in some subset of cases. A sample that focuses solely on liquidation cannot address this subject.

### III. Liquidation Decisions – Concluding Thoughts

Liquidating a firm involves multiple decisions, which are too easily submerged in the general concept of the “liquidation decision.” For purposes of this paper these decisions can be seen as involving three basic decisions:

1. The initial decision to liquidate
2. The initial choice of liquidation procedures
3. The subsequent decision to complete the initial procedure or adopt a new procedure, a decision which can be repeated until an irreversible decision is made.

As this paper has shown, each of these decisions has important implications for the firm and its creditors. The empirical results of this paper are important for American policymakers, but should also caution international readers engaged in the process of revising their own corporate reorganization systems. In recent years many nations have rushed to adopt corporate reorganization systems inspired by chapter 11.<sup>64</sup> But as the cases in this article highlight, there is likely a need in any reasonably developed economy for a range of procedures – a simple binary choice

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<sup>64</sup> For example, a comprehensive reform of French bankruptcy law, known as the Business Safeguard Act was enacted on July 26, 2005 and became effective on January 1, 2006. See Eric Cafritz & James Gillespie, *French Bankruptcy Law Reform Assessed*, INT’L FIN. L. REV. (Dec. 2005).

between liquidation and reorganization is apt to miss a fair number of distressed debtors whose future prospects are unclear at the point of bankruptcy.<sup>65</sup> The interaction between liquidation and reorganization regimes is at least as important as the decision to adopt an option for corporations to reorganize.

Moreover, it is arguable that the ability to threaten liquidation is a needed component of any system of corporate reorganization, be it chapter 11 or some other system.<sup>66</sup> Absent such an option to convert – or threaten conversion – a debtor has little power to negotiate a reorganization plan.<sup>67</sup>

On the other hand, the extreme length of time associated with converted cases supports shifting more power away from the debtor, especially in very large cases where the capital structure is typically far too complex to specify recovery to particular claimants, thus leaving the incentives of various parties open to reinterpretation. While it seems likely that the well-known quest for the one, true residual claimant is misguided, it may be that an independent assessment of the debtor's viability, as is commonly

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<sup>65</sup> See generally Oscar Couwenberg, *Survival Rates in Bankruptcy Systems: Overlooking the Evidence*, 12 EUROPEAN J. L. & E. 253 (2001).

<sup>66</sup> See Lubben, *Railroad Receiverships and Modern Bankruptcy Theory*, *supra* note 4, at 1424-25.

<sup>67</sup> See Stephen J. Lubben, *Out of the Past: Railroads & Sovereign Debt Restructuring*, 35 GEO. J. INT'L L. 845, 856-57 (2004).

done in Canada under the Companies' Creditors Arrangement Act<sup>68</sup> or Switzerland in a debt restructuring proceeding under the *Schuldbetreibungs und Konkursgesetz*,<sup>69</sup> would be warranted. This would further check the debtor's abuse of its conversion option in marginal cases, where the court might be unable to evaluate the value of the option with sufficient precision.

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<sup>68</sup> R.S.C. 1985, c. C-36, s.11.

<sup>69</sup> Available in English in STEPHEN V. BERTI, SWISS DEBT ENFORCEMENT AND BANKRUPTCY LAW - ENGLISH TRANSLATION OF THE AMENDED FEDERAL STATUTE ON DEBT (1998).