I Introduction

The costs of corporate reorganization are strangely compelling in a financial crisis, or even a run of the mill recession. The hundreds of millions of dollars paid by "bankrupt" or "insolvent" firms like Lehman Brothers, or Enron before it, merely to address their situation often seems quite odd to the casual reader of the *Wall Street Journal*, who still thinks of bankruptcy as the equivalent of corporate death.[1]

A similar phenomenon can be seen in the academic literature, dating back to at least Modigliani and Miller in 1958, and the notion that a firm's capital structure amounts to little more than slices in a pie.[2] In this world, debtor-firms are typically discussed relative to a backdrop of complete contracts and zero transactions cost s.[3] Accordingly, firms that encounter financial distress – that is, having liquid assets insufficient to meet current fixed claims – simply renegotiate their obligations and proceed accordingly.[4] Slight deviations from the background assumptions can be assumed and then addressed by neatly automated responses.[5] That Kmart, a large discount store chain, would pay more than $134 million to professionals to do so is inconsistent with this idealized understanding of the world, and thus each dollar spent is deemed evidence of inefficiency.

Of course, both views of "bankruptcy" are based on basic misunderstanding or gross oversimplification. Both assume that financial distress is costless, whereas even liquidation does not happen by itself.[6] Indeed, only abandonment of a distressed firm might be costless – if we limit our conception of cost to actual "out of pocket" expenditures by the debtor-firm.[7]

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1 Throughout I follow American practice and use "bankruptcy" to refer to the insolvency or failure of a business entity – typically a corporation – cognizant of the fact that in some jurisdictions bankruptcy only refers to the financial distress of individuals.

2 Franco Modigliani & Merton H. Miller, *The Cost of Capital, Corporation Finance, and the Theory of Investment*, 48 Am. Econ. Rev. 261, 297 (1958). See generally John D. Ayer, *The Role of Finance Theory in Shaping Bankruptcy Policy*, 3 Am. Bankr. Inst. L. Rev. 53 (1995) ("Modigliani and Miller argue . . . that under defined assumptions it makes no difference what the debt-equity structure might be-the value of the firm remains the same in any event.").

3 *See* Robert A. Haugen & Lemma W. Senbet, *The Insignificance of Bankruptcy Costs to the Theory of Optimal Capital Structure*, 33 J. Fin. 383, 386 (1978). See also Jonathan B. Berk et al., *Human Capital, Bankruptcy, and Capital Structure*, 65 J. Fin. 891 (2010).

4 See, e.g., Barry E. Adler, *Finance's Theoretical Divide and the Proper Role of Insolvency Rules*, 67 S. Cal. L. Rev. 1107, 1131 (1994).

5 *E.g.*, Barry E. Adler & Ian Ayres, *A Dilution Mechanism for Valuing Corporations in Bankruptcy*, 111 Yale L.J. 83 (2001); Lucian Arye Bebchuk, *A New Approach to Corporate Reorganizations*, 101 Harv. L. Rev. 775 (1988).

6 *See* Donald R. Korobkin, *The Unwarranted Case Against Corporate Reorganization: A Reply to Bradley and Rosenzweig*, 78 Iowa L. Rev. 669, 720 (1993).

7 *Cf.* Kathryn R. Heidt, *The Automatic Stay in Environmental Bankruptcies*, 67 Am. Bankr. L.J. 69, 121 (1993).

More broadly, understanding the cost of a corporate reorganization system is important because debtor-firms face the reality of a world with incomplete contracts, incomplete information, uncertain asset values, and complex capital structures that highlight the many ways in which assumptions about capital structure irrelevance or managerial rationality, or both, fail.[8] Given these truths, and the added reality of asset market disruptions,[9] it is generally thought that reorganization structures are important tools to avoid excessive and economically disruptive liquidation of firms' assets.[10] And if given a choice of possible approaches to reorganization, the cost of any particular system, weighed against its benefits, provides an obvious metric for evaluation.

In this context, a study of the costs of chapter 11 of the United States Bankruptcy Code is important along at least two dimensions. First, such a study is important within the United States, as it provides important information for policymakers and creditors about the efficiency of the present system and how it might compare with possible alternatives.[11] Second, and perhaps more importantly, given the economic relevance of the United States, which remains the largest single economy, and its relatively long history of corporate reorganization,[12] the cost of chapter 11 can provide important information in other jurisdictions seeking to remodel their own business bankruptcy systems.[13]

This study provides an examination of chapter 11 costs using two datasets. First, I examine a dataset comprised of more than 900 randomly selected chapter 11 cases filed in 2004. In addition, I also utilize a dataset of 97 large chapter 11 cases, also filed in 2004. Both datasets are amongst the largest, if not the largest, datasets ever used in a study of chapter 11 costs. Considered together, these two

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8 *See* Douglas G. Baird & Donald S. Bernstein, *Absolute Priority, Valuation Uncertainty, and the Reorganization Bargain*, 115 Yale L.J. 1930 (2006); 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, 126 (1990) ("Current law provides a complex legal environment in which representatives of thousands of creditors and shareholders bargain over the disposition of billions of dollars in assets.")

9 *See, e.g.*, Andrei Shleifer & Robert W. Vishny, *Liquidation Values and Debt Capacity: A Market Equilibrium Approach*, 47 J. Fin. 1343 (1992); Todd C. Pulvino, *Do Asset Fire Sales Exist? An Empirical Investigation of Commercial Aircraft Transactions*, 53 J. Fin. 939 (1998).

10 United States v. Whiting Pools, Inc., 462 U.S. 198, 203 (1983) ("In proceedings under the reorganization provisions of the Bankruptcy Code, a troubled enterprise may be restructured to enable it to operate successfully in the future... . Congress presumed that the assets of the debtor would be more valuable if used in a rehabilitated business than if 'sold for scrap.'"). *See* Frank H. Easterbrook, *Is Corporate Bankruptcy Efficient?*, 27 J. Fin. Econ. 411 (1990); Elizabeth Warren, *Bankruptcy Policymaking in an Imperfect World*, 92 Mich. L. Rev. 336 (1993); Elizabeth Warren & Jay L. Westbrook, *Contracting Out of Bankruptcy: An Empirical Intervention*, 118 Harv. L. Rev. 1197 (2005).

11 *Cf.* Elizabeth Warren & Jay Lawrence Westbrook, *The Success of Chapter 11: A Challenge to the Critics*, 107 Mich. L. Rev. 603, 612-40 (2009).

12 *See generally* Stephen J. Lubben, *Railroad Receiverships and Modern Bankruptcy Theory*, 89 Cornell L. Rev. 1420 (2004) (discussing the early history of American corporate reorganization, which dates back to the second half of the nineteenth century).

13 Jay Lawrence Westbrook, *A Global Solution to Multinational Default*, 98 Mich. L. Rev. 2276, 2278-79 nn.2-15 (2000) (detailing bankruptcy reform efforts throughout the world).

datasets provide important insights not only on the very large cases that are the subject of most theoretical inquiry, but also for the more typically smaller chapter 11 cases that might be more comparable with bankruptcy or insolvency cases in other jurisdictions.

Chapter 11 is part of a larger system of American business bankruptcy. The current Bankruptcy Code was enacted in 1978,[14] replacing the prior Bankruptcy Act, which had been in place since 1898, although with substantial amendments enacted during the 1930s.[15] Chapters 1, 3, and 5 provide general provisions that apply in all types of bankruptcy cases, personal and business. Chapter 7 provides the kind of liquidation bankruptcy proceeding that can be found in any developed economy: A trustee takes charge of the debtor's assets, sells them, and pays out the proceeds to creditors according to a set statutory scheme. Chapter 11 can be used for either reorganization or liquidation, but the default rule is that the debtor stays "in possession" of its own bankruptcy estate, with a trustee appointed only in cases of gross mismanagement.

Under both chapters 7 and 11, debtors enjoy the protection of an automatic stay, which prohibits most collection efforts as soon as the bankruptcy petition is filed. And while chapter 11 is often derided as overly long and overly expensive, such simple descriptions of chapter 11 ignore the dynamic nature of the process, which is no longer as it was when first enacted in 1978.[16]

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The aim of this study is on one level descriptive. I describe the nature of chapter 11 costs, and how those costs are distributed in chapter 11 cases. Moreover, I develop models of chapter 11 direct costs that can be used to predict chapter 11 costs *ex ante* and evaluate chapter 11 costs *ex post*.

And the goal of the study is also to provide specific information about the components of chapter 11 cost. In particular, in Chapters 5 and 6 I look at the cost associated with bankruptcy attorneys and financial advisors. Taken together, these two groups of professionals account for almost 60% of total chapter 11 costs.

Another goal of this study is to provide baseline information for considering both the efficiency of chapter 11 and the cost of future chapter 11 cases. The models presented in this paper allow for a prediction of what a typical chapter 11 case should cost. Future cases that fall outside the prediction intervals warrant extra scrutiny and even criticism. And the cost information presented herein provides

14 Bankruptcy Reform Act of 1978, Pub. L. No. 95-598, 92 Stat. 2549 (1978) (effective Oct. 1, 1979). The Bankruptcy Code is codified as title 11 of the United States Code. 11 U.S.C. §§ 101-1330. Chapter 11 is one subpart of title 11, which contains the entire Code.

15 Bankruptcy Act of 1898, ch. 541, 30 Stat. 544, amended by the Chandler Act of 1938, ch. 575, 52 Stat. 840 (repealed 1979).

16 David A. Skeel, Jr., *Creditors' Ball: The "New" New Corporate Governance in Chapter 11*, 152 U. Pa. L. Rev. 917, 918 (2003) ("The endless negotiations and mind-numbingly bureaucratic process that seemed to characterize bankruptcy in the 1980s have been replaced by transactions that look more like the market for corporate control.").

a basis for comparing chapter 11 to other American corporate transactions, as well as other corporate reorganization systems, both theoretical and actual systems in use in other jurisdictions.