

September 2014

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

Thomas K. Cheng

Follow this and additional works at: <http://scholarship.law.berkeley.edu/bblj>

Recommended Citation

Thomas K. Cheng, *An Economic Analysis of Limited Shareholder Liability in Contractual Claims*, 11 BERKELEY BUS. L.J. 112 (2014).
Available at: <http://scholarship.law.berkeley.edu/bblj/vol11/iss1/3>

Link to publisher version (DOI)

<http://dx.doi.org/https://doi.org/10.15779/Z386C6R>

This Article is brought to you for free and open access by the Law Journals and Related Materials at Berkeley Law Scholarship Repository. It has been accepted for inclusion in Berkeley Business Law Journal by an authorized administrator of Berkeley Law Scholarship Repository. For more information, please contact jcera@law.berkeley.edu.

**An Economic Analysis of Limited Shareholder Liability
in Contractual Claims**

Thomas K. Cheng[†]

This Article evaluates the economic basis for limited liability in contractual claims and proposes the introduction of unlimited liability for such claims against closely held corporations. It argues that the existing justifications for limited liability are unconvincing, and that unlimited liability is an economically more efficient rule for these corporations in light of savings in monitoring costs and more efficient allocation of risks. It rejects the frequently made argument that limited liability is justified in contractual claims because the contractual counterparty had a prior opportunity to negotiate for modifications. This argument demonstrates a fundamental misunderstanding of the nature of the bargaining process between a corporation and its various groups of contractual creditors, many of which are simply not in a position to negotiate for modifications to the default rule. It further examines some of the implementation problems for unlimited liability and suggests possible solutions for them.

[†] Associate Professor, Faculty of Law, The University of Hong Kong; B.A. (Yale), J.D. (Harvard), B.C.L. (Oxon); Attorney & Counsellor, New York State.

I. Introduction	116
II. Classification of Voluntary Creditors	120
III. The Efficient Bargain Theory and Negotiation Costs	124
A. Bargaining Power and Negotiation Costs	124
B. Contractual Bargains and Externalization of Default Risks to Contractual Creditors	129
C. Veil Piercing as a Substitute for Unlimited Liability	132
IV. Monitoring Costs	134
A. A Closer Look at Information Costs and Monitoring Costs	137
B. Monitoring Costs in a Closely Held Corporation	139
1. Information Costs of the Various Corporate Claimants in a Closely Held Corporation	139
2. A Change of Liability Rule and the Monitoring Level in a Closely Held Corporation	140
C. Monitoring Costs in a Publicly Held Corporation	145
1. Information Costs of the Various Corporate Claimants in a Publicly Held Corporation	145
2. A Change of Liability Rule and the Monitoring Level in a Publicly Held Corporation	148
D. Monitoring Costs in Parent-Subsidiary Relationships	152
V. Risk Allocation	154
A. Risk Allocation in a Publicly Held Corporation	155
B. Risk Allocation in a Closely Held Corporation	158
C. Risk Allocation in Parent-Subsidiary Relationships	160
VI. Insurance and Shareholder Liability Rules	161
A. Inferiority of Creditor-Provided Shareholder Liability Insurance ...	161
B. Inadequacy of Corporate Default Insurance for Creditors Under Limited Liability	163
VII. Capital Markets-Related Defenses for Limited Liability	165
A. Limited Liability is Indispensable to an Efficient Capital Market and Diversification	165
B. Limited Liability Facilitates the Market for Corporate Control	168
VIII. Enforcement Issues Facing an Unlimited Liability Rule	169
A. Procedural Obstacles for Implementation	169
1. Domestic Personal Jurisdiction	169
2. Choice of Law	171
3. International Shareholders	171
B. Judgment Collection Costs	172
C. Arbitrage Activities	173

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

D. Summary 175

IX. A Proposal 175

 A. Introduction of Unlimited Liability for Closely Held
 Corporations 175

 B. Retention of Limited Liability for Publicly Held Corporations 177

 C. Timing for Recognition of Liability 178

X. Conclusion 180

I. INTRODUCTION

Limited liability is one of the most firmly established rules of corporation law. Despite its relatively short lineage—it only became widely accepted in the mid-nineteenth century—its validity as a legal rule is rarely questioned outside of academic circles. The rule does occasionally admit exceptions. Under the veil-piercing doctrine, courts hold shareholders responsible for the liabilities of the corporation. Veil piercing, however, generally requires some fraudulent or inequitable conduct, or blatant disregard for the integrity of the corporation that has resulted in harm to creditor interests.¹ Absent these circumstances, there is no mistake that limited liability is the rule. Commentators have not embraced limited liability wholeheartedly, however. As early as the 1940s, Professor Berle propounded the concept of enterprise liability, arguing that members of a corporate group should be liable for each other's debts.² Professor Landers resurrected this argument in the mid-1970s and engaged in a spirited debate with then-Professor Posner about the liability of a corporate parent for its wholly owned subsidiaries.³ Apart from Berle, Landers, and Blumberg, there has seemed to be a consensus that limited liability is a sound rule for contractual liabilities.⁴

1. *See, e.g.*, *Automotriz del Golfo de California v. Resnick*, 306 P.2d 1 (Cal. 1957) (defendants intentionally undercapitalized corporation); *Consolidated Sun Ray, Inc. v. Oppenstein*, 335 F.2d 801 (8th Cir. 1964) (parent had absolute control over and intentionally undercapitalized subsidiary); *Henderson v. Rounds & Porter Lumber Co.*, 99 F.Supp. 376 (W.D. Ark. 1951) (defendant manipulated corporation's affairs and used it as a mere instrumentality); *Luckenbach S.S. Co. v. W.R. Grace & Co.*, 267 F. 676 (4th Cir. 1920) (characterizing defendants' scheme to compartmentalize liability as "unconscionable"); *Mull v. Colt*, 31 F.R.D. 154 (S.D.N.Y. 1962) (stating that "it would be a gross inequity to allow such a flimsy organization to provide a shield for personal liability"); *My Bread Baking Co. v. Cumberland Farms, Inc.*, 233 N.E.2d 748 (Mass. 1968) (defendant acted in bad faith by refusing to return plaintiff's bakery racks after termination of contract); *Tynes v. Shore*, 185 S.E. 845, 847 (W.Va. 1936) (noting that the corporation "is merely a corporate simulacrum appropriated to his personal business"); *Weisser v. Mursam Shoe Corp.*, 127 F.2d 344 (2d Cir. 1942) (finding that the defendants ignored corporate formalities and intentionally shifted funds out of corporation).

2. *See*, Adolf A. Berle Jr., *The Theory of Enterprise Entity*, 47 COLUM. L. REV. 343 (1947).

3. Jonathan M. Landers, *A Unified Approach to Parent, Subsidiary, and Affiliate Questions in Bankruptcy*, 42 U. CHI. L. REV. 589 (1975) (hereinafter Landers I); Richard A. Posner, *The Rights of Creditors of Affiliated Corporations*, 43 U. CHI. L. REV. 499 (1976); Jonathan M. Landers, *Another Word on Parents, Subsidiaries, and Affiliates in Bankruptcy*, 43 U. CHI. L. REV. 527 (1976) (hereinafter Landers II). Landers believed that unlimited liability should apply to parent-subsidiary situations, Richard A. Posner, *The Rights of Creditors of Affiliated Corporations*, 43 U. CHI. L. REV. 499 (1976) and Posner disagreed (Richard A. Posner, *The Rights of Creditors of Affiliated Corporations*, 43 U. CHI. L. REV. 499, 502, 515 (1976)).

4. Posner, *supra* note 3, at 501-05; Paul Halpern, Michael Trebilcock & Stuart Turnbull, *An Economic Analysis of Limited Liability in Corporation Law*, 30 U. TORONTO L.J. 117, 147-49 (1980); Frank R. Easterbrook & Daniel R. Fischel, *Limited Liability and the Corporation*, 52 U. CHI. L. REV. 89, 104-07 (1985); David W. Leebron, *Limited Liability, Tort Victims, and Creditors*, 91 COLUM. L. REV. 1565, 1568 (1991); Henry Hansmann & Reinier Kraakman, *Toward Unlimited Shareholder Liability for Corporate Torts*, 100 YALE L.J. 1879, 1919-20 (1990); David H. Barber, *Piercing the Corporate Veil*, 17 WILLAMETTE L. REV. 371, 381 (1980); Robert W. Hamilton, *The Corporate Entity*, 49 TEX. L. REV. 979, 984-85 (1971). *But see* Roger E. Meiners, James S. Mofsky & Robert D. Tollison, *Piercing the Veil of Limited Liability*, 4 DEL. J. CORP. L. 351 (1979). Meiners et al. argue that the choice of liability rules does not matter because parties can always structure their economic transactions to neutralize the effects

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

A number of arguments have been advanced in defense of limited liability for contractual claims.⁵ First, it saves negotiations costs because it is the liability arrangement which contractual parties generally prefer.⁶ If corporation law adopts it as the default rule, contractual parties need not incur the time and the resources to negotiate for it.⁷ Second, limited liability saves monitoring costs.⁸ Under limited liability, monitoring of corporate managers will be mostly done by the creditors, which are generally assumed to have lower information costs than the shareholders.⁹ Third, corporate default risks rest on the creditors under limited liability, which is believed to be an efficient arrangement because creditors are better able to diversify their risks than shareholders.¹⁰ Lastly, limited liability is pivotal to the functioning of the capital markets. Under unlimited liability, the value of stock will vary depending on the wealth of the owner.¹¹ Shares will cease to be fungible and will not be traded freely.¹² The consensus on the efficiency of limited liability for contractual claims starkly contrasts with the prevailing academic attitude toward the liability rule for tort liabilities. Professors Hansmann and Kraakman famously proposed unlimited liability for corporate torts.¹³ They argue that limited liability allows corporations to externalize their accident costs to tort victims, creating insufficient incentives for them to take precaution and leading to an excessively level of activity.¹⁴ Other commentators share this view.¹⁵ Even opponents to Hansmann and Kraakman's proposal seem to concede on its theoretical soundness.¹⁶ They have objected to it largely on practical grounds. They argue that enforcement costs under an unlimited liability regime will be prohibitive;¹⁷ that the procedural obstacles involved in obtaining personal jurisdiction over out-of-state and

of the choice of legal rules. 4 DEL. J. CORP. L. at 359-60.

5. Commentators have repeatedly challenged the validity of limited liability for corporate tort claims. In fact, the academic consensus seems to be that there are no persuasive theoretical justifications for limited liability for these claims. Hansmann & Kraakman, *supra* note 4; Leebron, *supra* note 4; Halpern et al., *supra* note 4, at 145-47.

6. Posner, *supra* note 3, at 505-07.

7. *Id.*

8. *Id.* at 507-09; Easterbrook & Fischel, *supra* note 4, at 95; Halpern et al., *supra* note 4, at 133-36.

9. Posner, *supra* note 3, at 509; Easterbrook & Fischel, *supra* note 4, at 99-100; Halpern et al., *supra* note 4, at 133-35.

10. Posner, *supra* note 3, at 509. *But see* Easterbrook & Fischel, *supra* note 4, at 91 (disputing Posner's claim that creditors are better risk-bearers).

11. Easterbrook & Fischel, *supra* note 4, at 95-96; Halpern et al., *supra* note 4, at 127-31.

12. Easterbrook & Fischel, *supra* note 4, at 95-6; Halpern et al., *supra* note 4, at 127-31.

13. Hansmann & Kraakman, *supra* note 4, at 1879-82.

14. *Id.* at 1883.

15. Halpern et al., *supra* note 4, at 145-47; Leebron, *supra* note 4, at 1584-87.

16. Janet C. Alexander, *Unlimited Shareholder Liability Through a Procedural Lens*, 106 HARV. L. REV. 387, 390 (1992) ("Limited liability for tort claims allows the corporation to externalize some of the costs of its risk-taking behavior.")

17. Joseph A. Grundfest, *The Limited Future of Unlimited Liability: A Capital Markets Perspective*, 102 YALE L.J. 387, 392-405 (1992).

foreign shareholders will be insurmountable;¹⁸ and that unlimited liability will not give corporate managers incentives to internalize accident costs because of the arbitrage activities between shareholders who are beyond the creditors' reach and those who are within it.¹⁹

Contrary to the academic consensus, limited liability is not as efficient a liability arrangement for contractual liabilities as is generally assumed. Much of the existing literature focuses on financial creditors, especially institutional financial creditors, in the context of public corporations, which offer the most persuasive case for the application of limited liability.²⁰ These creditors are sophisticated and possess considerable bargaining power vis-à-vis the debtor corporation. They are in a much better position to request the information and protection they desire and are better risk bearers than shareholders due to their ability to diversify their investments. Largely ignored in the literature are other voluntary creditors, such as individual financial creditors, trade creditors, employees, and perhaps even consumers,²¹ who lack either the incentive or the bargaining power, or both, to investigate credit risks and to obtain the requisite level of protection. Trade creditors and employees often have high information costs and poor ability to diversify, and are thus inefficient monitors and risk bearers as compared to shareholders. Therefore, a thorough re-examination of the theoretical basis for limited liability, covering different types of creditors, is in order. It is also important to distinguish close corporations from public corporations for the purpose of this examination. The monitoring costs and risk-bearing abilities of the corporate claimants of a close corporation diverge from their counterparts of a public corporation in significant ways. There is a glaring dearth in the existing literature of any thorough analysis of the suitability of limited liability for contractual liabilities of a close corporation.

Also overlooked in the existing literature is the importance of bargaining power in negotiations. Defenders of limited liability have pointed to the prevalence of limited liability as evidence of its efficiency and general desirability by contractual parties. Based on this presumed efficiency, they argue that corporate liability rules should let contractual parties approximate this result in the most cost-effective manner, i.e., to set their preferred outcome as the default

18. Alexander, *supra* note 16, at 394-404.

19. Grundfest, *supra* note 17, at 382-90.

20. *See, e.g.*, Easterbrook & Fischel, *supra* note 4, at 104-09; Posner, *supra* note 3, at 507-16. The existing literature on limited liability has been excessively focused on financial creditors and the corporate finance perspective. Commentators have tended to overlook the interests of these creditors when analyzing the limited liability principle. The fact is that limited liability implicates other creditors as well. Many veil-piercing cases do not involve financial creditors, such as banks, who are often savvy enough to obtain protection by way of security or personal guarantees. *See, Stark v. Coker* 20 Cal.2d 839 (CA. 1942), *Empire Steel Corp. of Texas, Inc. v. Superior Court of Los Angeles Cnty.*, 366 P.2d 502 (Cal. 1961), *Automotriz Del Golfo De California S. A. De C. V. v. Resnick*, 306 P.2d 1 (Cal. 1957).

21. This Article will not cover consumers, as there are disputes as to whether consumers should be classified as voluntary or involuntary creditors. *See supra* text accompanying note 27.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

rule. If the default rule were set to be unlimited liability, contractual parties would simply alter it by negotiation. The prevalence of limited liability, however, is more plausibly explained as a reflection of the relative bargaining powers of contractual parties than as an expression of the parties' desired outcome. Trade creditors and employees accept limited liability, not because it is what they prefer, but because it is too costly to negotiate to alter it. The fact that financial creditors, which generally wield the most bargaining power among the various types of creditors, are the only ones that consistently succeed in obtaining personal guarantees from shareholders substantiates this interpretation.²² Related to the notion of bargaining power is the relationship between the default legal rule and negotiation costs. Contrary to the presumption in the existing literature, negotiation costs are not symmetrically aligned. Negotiating to alter the default rule is costlier and more difficult than negotiating to preserve it. Therefore, it matters to the negotiating parties what the default legal rule is. The asymmetrical alignment of negotiation costs further undermines the assertion that the prevalence of limited liability attests to its economic efficiency. Creditors may have been discouraged from negotiating for its alteration because of the high negotiation costs involved.

Focusing on these deficiencies in the existing literature, this Article proposes a re-thinking of the appropriate liability rule for corporate contractual liabilities. The ensuing analysis goes beyond a narrow focus on financial creditors of public corporations and encompasses all three main types of voluntary creditor of both close and public corporations. It analyzes how a shift to unlimited liability affects negotiations costs, monitoring costs, risk allocation, and the functioning of capital markets, and examines the various implementation problems associated with an unlimited liability regime. It concludes that unlimited liability is a superior rule for closely held corporations while limited liability should be maintained for publicly held corporations.²³

22. See, *N.L.R.B. v. Fullerton Transfer & Storage Ltd., Inc.*, 910 F.2d 331, 334-35 (6th Cir. 1990). In this case, the only contractual obligations of the failed corporation that were personally guaranteed by the shareholders were long-term commercial loans. The guarantee was given "at the insistence of the lending institution." *Id.* at 334. Meanwhile, the employees were owed wages and pension contributions. See also *Fisser v. Int'l Bank*, 282 F.2d 231 (2nd Cir. 1960); *Empire Steel Corp. of Texas, Inc. v. Superior Court of Los Angeles Cnty.*, 366 P.2d 502 (Cal. 1961); *Automotriz*, *supra* note 1. In *Fisser*, a trade creditor tried but failed to obtain guarantee by the parent corporation for a subsidiary's contractual obligations. 282 F.2d at 235, 239. In *Empire Steel*, a trade creditor negotiated for contractual protections that preserved its security interest over the goods delivered, but still failed to protect itself from non-performance of the contract. The defendant corporation failed to take delivery of the goods. 366 P.2d at 503-05. In *Automotriz*, defendant corporation had been experiencing financial difficulties, and the plaintiff trade creditor knew to take precautions. However, it failed to obtain personal guarantees from the controlling shareholder, and was merely given casual assurances. 306 P.2d at 3-4.

23. The unlimited liability rule analyzed in this Article is the pro rata rule, and not the joint liability rule. Numerous commentators have noted that a pro rata rule avoids many difficulties with unlimited liability. See, e.g., Hansmann & Kraakman, *supra* note 4, at 1892-94; Leebron, *supra* note 4, at 1578-84; Philip I. Blumberg, *Limited Liability and Corporate Groups*, 11 J. CORP. L. 573, 627-29 (1986); Stephen B. Presser, *Thwarting the Killing of the Corporation: Limited Liability, Democracy, and Economics*, 87

This Article is divided into ten parts. Part II defines different types of voluntary creditors. Part III critiques the so-called efficient bargain theory, which argues that limited liability is the preferred outcome of contractual parties reached through negotiations. The deficiencies of the theory will be noted, especially its lack of attention to the importance of bargaining power in contractual negotiations and the asymmetrical alignment of negotiation costs. Part IV compares the information costs of the various corporate claimants, especially between the shareholders, on the one hand, and the various voluntary creditors, on the other hand, concluding that aggregate monitoring costs in closely held corporations are lower under unlimited liability. Part V delves into the impact of the choice of liability rule on risk allocation in close and public corporations. The main argument is that the risk-bearing abilities of the various corporate claimants must be evaluated in light of their entire investment portfolio. This is especially important for a public corporation, whose investors have more opportunities to diversify. Part VI examines the interface between corporate liability rules and the insurance market, and rejects the argument that voluntary creditors are superior providers of liability insurance to insurers. Part VII rebuts the various capital-market-related defenses that have been advanced for limited liability. In particular, it shows that unlimited liability will not undermine the functioning of the capital markets and will not render diversification impossible. Part VIII addresses the myriad implementation problems of an unlimited liability rule, and acknowledges that some of these problems are intractable for publicly held corporations. Part IX contains a summary of the proposal put forward in the Article, together with a discussion of the appropriate time frame for the recognition of liability. Part X concludes the Article.

II. CLASSIFICATION OF VOLUNTARY CREDITORS

Voluntary creditors should not be treated as a monolith. The archetypal voluntary creditor is the financial creditor, which can range from a sophisticated financial institution making loans or purchasing bonds from a corporation to a retail individual bondholder.²⁴ For the purpose of this Article, the former will be called a sophisticated financial creditor²⁵ and the latter an individual financial creditor. A trade creditor supplies goods or services to a corporation and

NW. U. L. REV. 148, 159-64 (1992).

24. An individual is unlikely to be making loans to a publicly held corporation. Closely held corporations still count some individuals as private lenders. See Lucian Arye Bebchuk & Jesse M. Fried, *The Uneasy Case For The Priority Of Secured Claims In Bankruptcy: Further Thoughts and A Reply To Critics*, 82 COR. L. REV. 1279-1348 (1997).

25. Sophisticated financial creditors include banks and savings institutions, insurance companies, pension funds, mutual funds, private trusts and endowments, and investment companies. MARGARET M. BLAIR, *OWNERSHIP AND CONTROL: RETHINKING CORPORATE GOVERNANCE FOR THE TWENTY-FIRST CENTURY* 147-65 (1995).

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

may become a creditor because the good or service is supplied on credit.²⁶ An employee may become a creditor for wages in arrear or for compensation for work-related injuries. Furthermore, a consumer may become a creditor following injuries sustained as a result of a faultily manufactured product.²⁷ That different voluntary creditors wield disparate degrees of bargaining power is a fact well-recognized by commentators.²⁸ The courts have also taken note of this fact and given more leeway to less sophisticated voluntary creditors to pierce the corporate veil, and vice versa.²⁹ An institutional financial creditor possesses greater bargaining power for a number of reasons. First, it possesses greater expertise and experience than other voluntary creditors. Second, the credit extended by an institutional financial creditor is likely to have a greater liability impact on a corporation than the credit extended by a trade creditor or an em-

26. A supplier who sells his good or service “cash-on-delivery” will not become a creditor. There are cases when the distinction between a financial creditor and a trade creditor is not so clear. One example is a landlord, especially one giving a long-term lease. Even though he does not extend loans or financial credit to the corporation and should not be considered as a financial creditor, he is likely to be different from other trade creditors in that he has a much longer-term relationship with the corporation and will have much greater incentives to investigate and monitor the corporate tenant. *See Oppenstein*, 335 F.2d at 808-810; *Mursam*, 127 F.2d at 345. However, these two cases seem to suggest otherwise, as the landlord in both of them did not undertake much investigation prior to signing the lease. In *Mursam*, the landlord signed the lease with a corporation that the defendants had formed specifically for the purpose of leasing the premise, without conducting any investigation on the background of corporation. 127 F.2d at 345.

27. Commentators disagree as to whether consumers should be treated as voluntary or involuntary creditors. Easterbrook and Fischel believe that they are voluntary creditors, while Blumberg argues that consumers should be classified as involuntary creditors. *See Easterbrook & Fischel*, *supra* note 4, at 104-05; Blumberg, *supra* note 23, at 618. The present discussion will focus on the other types of voluntary creditors.

28. Robert C. Clark, *The Duties of the Corporate Debtor to its Creditors*, 90 HARV. L. REV. 505, 543-45 (1977); Cathy S. Krendl & James R. Krendl, *Piercing the Corporate Veil: Focusing the Inquiry*, 55 DENV. L.J. 1, 33-34 (1978); Blumberg, *supra* note 23, at 616-22. Dean Clark noted that, “when the contract creditors are in a weak bargaining position, for example, small shippers claiming damages for breach of contract against a carrier, or where the complex of interrelated corporations is such that ordinary customers or creditors of one member of the complex might naturally be lulled [sic] into thinking that more assets were behind the contract or loan than the balance sheet of that member later shows, the courts have occasionally pierced the veil in favor of those customers or creditors.” ROBERT CLARK, CORPORATE LAW 76 (1986). Clark proceeded to observe that “[t]his interference with the ostensibly consensual arrangements is based on a perception of unequal bargaining power[.]” *Id.* at 76-77.

29. *See also* Am. Disc. Corp. v. Saratoga W., Inc., 537 P.2d 1056, 1059 (Wash. Ct. App. 1975); *Zaist v. Olson*, 227 A.2d 552 (1967); *Moore & Moore Drilling Co. v. White*, 345 S.W.2d 550 (Tex. Civ. App. 1961); *Yacker v. Weiner*, 263 A.2d 188, 190-91 (N.J. Super. Ct. Ch. Div. 1970); *Luckenbach*, *supra* note 1. In *Yacker*, the subcontractors in a construction project failed to obtain adequate protection against fraudulent practices by the contractor who owned the real estate, even though the fraudulent practice at issue was characterized by the court as very common in the industry. The court noted that the contractor would use its bargaining power to pressure the subcontractors to forego extra protection given by a statute. 263 A.2d at 190-191 In *Moore*, the contract was for oil drilling and the defendant corporation was a one-man corporation. Even then, given the substantial amount involved and the higher risks with a one-man corporation, the trade creditor plaintiff did not obtain adequate protection in the initial contractual negotiation. 345 S.W.2d at 552-553. In *Luckenbach*, the contract was a ship charter and involved considerable amount of money. The trade creditor was also sophisticated. Yet it failed to investigate the relationship between affiliated corporations and did not ask for a guarantee from the adequately capitalized one. 267 F. at 677-678.

ployee.³⁰ Third, the process of a financial credit transaction is such that a financial creditor is more likely to negotiate his or her terms of credit explicitly than other voluntary creditors.³¹ The difference is particularly stark between sophisticated financial creditors and employees, most of whom, with the exception of very senior and sophisticated ones, do not take into account the likelihood of default when negotiating for their remuneration, unless the employer's financial problems are already known.³² Even if an employee was aware of such risks and was minded to negotiate for compensation for them, he or she would have great difficulty accomplishing that.³³ In light of these facts, commentators have suggested that shareholder liability should apply for employee claims.³⁴ In fact, until the 1960s, some six states still provided for shareholder liability for unpaid wages of corporate employees.³⁵

Information costs vary across different groups of creditors. This is due to their varying degrees of bargaining power and disparate abilities to obtain and analyze sensitive financial information from the debtor corporation.³⁶ Information costs can be divided into access costs and analysis costs. Access costs refer to the costs incurred by a creditor to obtain information from the debtor corporation. A debtor may resist requests for sensitive financial information from a creditor, who will have to incur time and expenses to negotiate with the debtor for access to such information. Moreover, an inexperienced creditor may not know what information to request, and thus may need to make multiple requests to obtain the information it needs. Such repeated requests entail time and costs. Analysis costs refer to the costs incurred by the creditor to process and analyze the information obtained from the debtor. An experienced creditor will have lower analysis costs, given the expertise it has accumulated as a repeat player.³⁷

30. A corporation is likely to purchase supplies or hire employees much more frequently than taking on a major loan. The hiring of a key employee, such as a CEO, of course is a different matter. In any case, the impact of a single employee's wages on the firm's liability is likely to be much smaller than a major loan.

31. This point is acknowledged by Posner as well, who observes that financial creditors are more likely to be specialists in credit and the credit they extend is likely to be in a larger amount. Posner, *supra* note 3, at 522-23.

32. One can imagine that if a manager is brought in to help salvage a failing company, his wages may take into account the probability of corporate failure and default. Cf. Larry E. Ribstein, *The Deregulation of Limited Liability and the Death of Partnership*, 70 WASH. U. L. Q. 417, 442 (1992) (asserting that creditors, including employees, will adjust their prices to reflect the risk of default). Easterbrook, Fischel and Posner all made similar arguments. Easterbrook & Fischel, *supra* note 4, at 105; Posner, *supra* note 3, at 506.

33. In most cases, if an employee believed that the risk of default was high, he or she would be more likely to choose a different employer rather than ask for higher wages to compensate for the default risk. Most employees are likely to be risk averse. Alfie Kohn, *Why Incentive Plans Cannot Work*, 71 HARVARD BUSINESS REVIEW 6 (1993).

34. Halpern et al., *supra* note 4, at 149-50.

35. For further information, see Blumberg, *supra* note 23 at 601-03.

36. Posner, *supra* note 3, at 522-23.

37. At this juncture, it is important to distinguish incentive to investigate from information costs.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

A financial creditor will likely have lower access costs and analysis costs than trade creditors and employees. Because of the relative size of loan transactions—as compared to purchase of supplies or an employment contract—a financial creditor is likely to have greater bargaining power than do other types of creditors. This greater bargaining power will give a financial creditor better access to the accounting books of the corporation. Meanwhile, a trade creditor will unlikely be given much access to confidential financial information. A trade creditor would generally need to rely on knowledge or hearsay from within the industry to piece together a picture of the debtor corporation’s financial situation.³⁸ A financial creditor is also likely to be a repeat player.³⁹ It is less likely to incur the extra time and costs from multiple and redundant requests for information. Moreover, by virtue of being a repeat player, a financial creditor is likely to have more opportunities to accumulate expertise in credit evaluation, which will lower its analysis costs. Several commentators have noted that a creditor’s level of sophistication should affect a court’s willingness to uphold limited liability in a corporate transaction.⁴⁰ This suggests that there is a strong case for imposing unlimited liability on a corporate transaction with a trade creditor or an employee.⁴¹

Some commentators have confused the two concepts. Posner argues that the difference between a financial creditor’s and a trade creditor’s information costs may be due to the former’s greater incentive to investigate. Posner, *supra* note 3, at 522-523. While it is true that a financial creditor probably has both a greater incentive to investigate and lower information costs, it is unclear how a greater incentive to investigate would lower information costs. For a more detailed exposition on these concepts, see *infra* Section 0.

38. However, Halpern et al. believe that trade creditors and employees may actually have lower information costs than financial creditors. They assert that, “trade creditors usually deal with a number of companies and become very knowledgeable about the firm and its industry” and that, “[e]mployees, being creditors of the firm, may be able to monitor the activities of the firm more cheaply than insurance companies or outside suppliers of credit.” Halpern et al., *supra* note 4, at 139. They, however, acknowledge that not every employee will have the same privileged access to information. *Id.*

39. It is reasonable to assume that a bank would make more loans than an employee switches jobs. United States Department of Labor, Bureau of Labor Statistics, Labor Force Statistics from the Current Population Survey, *Tenure of American Workers*, available at http://www.bls.gov/opub/ted/2012/ted_20120920.htm (the median employee tenure was 4.6 years in 2012 in United States); see also United States Department of Labor, Bureau of Labor Statistics, *Number of jobs held by individuals from age 18 to age 46 in 1978 to 2010 by educational attainment, sex, race, and Hispanic or Latino ethnicity*; Board of Governors of the Federal Reserve System, *Assets and Liabilities of Commercial Banks in the United States*, available at <http://www.federalreserve.gov/releases/h8/current/default.htm>.

40. Barber, *supra* note 4, at 386; Krendl & Krendl, *supra* note 28, at 34 (“It seems to us that creditors who have behaved reasonably and who have not knowingly assumed the risks—because of their lack of financial sophistication—should not be held to the higher standard.”)

41. In light of similar considerations, Posner has suggested that there should be a presumption against veil piercing requested by a financial creditor, but a presumption for it for non-business creditors when the corporation has made a misrepresentation to the creditor. Posner, *supra* note 3, at 522-23.

III. THE EFFICIENT BARGAIN THEORY AND NEGOTIATION COSTS

A. *Bargaining Power and Negotiation Costs*

One of the most commonly asserted justifications for the application of limited liability to contractual claims is what this author calls the efficient bargain theory.⁴² The crux of this theory is that the corporation and its various creditors would have bargained for limited liability even if it were not the default liability arrangement. Altering it would only create transaction costs, as parties would need to negotiate for it instead of being given it as the background corporation law rule.⁴³ Therefore, the current rule is economically efficient. Professors Easterbrook and Fischel best capture the essence of this theory when they declared that “[t]here is little role for distributional arguments when all of the parties are in privity, for they can strike their own bargains and are apt to contract around any unwelcome rule purportedly designed for their benefit.”⁴⁴ This idea that corporation law, especially the limited liability rule, is a set of background rules which parties are free to contract around is echoed by then-Professor Posner, who asserts that “[t]hus a corporation law is inefficient if it fails to provide standard implied contract terms that accord creditors the sorts of protections against default that they would normally insist upon in an express negotiation. Such a law can be criticized for creating avoidable costs of explicit negotiation.”⁴⁵ These views are not confined to the Chicago School. Other commentators less steeped in the law and economics tradition have expressed similar views.⁴⁶ Adherents to the efficient bargain theory believe that

42. In the discussion that follows in this section, the corporation is assumed to be a closely held corporation. With respect to the applicability of the efficient bargain model and negotiation costs, there is little difference between a closely held corporation and a publicly held corporation. The focus is on the interaction between the corporation as an entity and the outside creditors. The constituent members of the corporation do not affect the analysis. When the discussion shifts to information costs, monitoring costs, and comparative risk bearing, the type of corporation matters. The information costs and risk-bearing abilities of the shareholders vary according to the type of corporation at issue. Andres Almazan, Jay C. Hartzell, Lara T. Starks, *Conflicts of Interest and Monitoring Costs of Institutional Investors: Evidence from Executive Compensation*, Working Paper, University of Texas at Austin (2004) at 11.

43. One implication of this argument is that when two parties have agreed on a set of contractual terms after honest and fair negotiations, the courts should not retrospectively revise those terms and expand the scope of recovery by imposing shareholder liability. Courts have also expressed this view in a number of cases. *See, e.g.*, *DeWitt Truck Brokers v. W. Ray Flemming Fruit Co.*, 540 F.2d 681 (4th Cir. 1976) (arguing same); *Hanson v. Bradley*, 10 N.E.2d 259 (Mass. 1937) (arguing that a contractual claimant should bear a higher burden in a veil-piercing case because of prior opportunities to negotiate).

44. Easterbrook & Fischel, *supra* note 4, at 106.

45. Posner, *supra* note 3, at 506-07.

46. Warner Fuller, *The Incorporated Individual: A Study of One-Man Company*, 51 HARV. L. REV. 1373, 1403 (1938) (arguing that in the context of contractual veil-piercing cases, courts should try to approximate what the parties would have done *ex ante*); Leebron, *supra* note 4, at 1588-89 (positing that in the absence of tort liabilities, contractual creditors and shareholders could negotiate for the optimal liability rule to suit their risk preferences); Barber, *supra* note 4, at 381 (asserting that a contractual party would have the opportunity *ex ante* to determine the creditworthiness of the corporation and ask for appropriate protection); Hamilton, *supra* note 4, at 984-85 (arguing that in a voluntary creditor situation, the creditor assumes the risk of default if it had reason to doubt the creditworthiness of the corporation

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

the prevalence of limited liability in corporate contracts attests to the efficiency of the rule.⁴⁷ If contractual parties preferred unlimited liability, more contracts providing for shareholder liability would be observed.⁴⁸ If the default rule were shifted to unlimited liability, contractual parties would still prefer limited liability and negotiate for it.⁴⁹ While negotiation may be relatively low-cost for financial creditors, it would be very burdensome for trade creditors and employees, who have high negotiation costs.⁵⁰ Therefore, the legislature can save all involved substantial transaction costs by choosing limited liability as the default legal rule.⁵¹

The efficient bargain theory is based on the flawed premise that when two parties are in privity, they will bargain for whatever contractual term that is mutually beneficial to them. Therefore, their negotiation outcome must represent their best interests.⁵² The only relevant concern in the design of legal rules is to minimize the transaction costs that the parties incur to reach this outcome. Little empirical evidence exists that suggests that creditors of a corporation prefer limited liability. In fact, such a preference would seem counter-intuitive. Holding interest rate constant, one would expect creditors to prefer the best credit protection possible, which is available under unlimited liability.⁵³ The reality is that even when two parties have an opportunity to negotiate, they will not obtain the contractual terms that they both desire. In most contractual negotiations, the two parties have antagonistic interests, as they try to maximize their benefits from the contract. A seller seeks to sell its product at a higher price, while the buyer vies for a lower price. Likewise, a seller who sells goods to a corporation on credit seeks assurances that it will be paid under all circumstances, while the buyer strives to limit the credit protection it gives to the seller.⁵⁴ The outcome of the negotiation depends on the parties' skills and bargain-

and did not ask for protection).

47. Posner, *supra* note 3, at 509.

48. This kind of negotiation in fact happens on a regular basis. Sophisticated financial creditors often obtain personal guarantees from shareholders of a closely held corporation to protect themselves from the higher default risks. Easterbrook, *supra* note 4, at 103.

49. Posner, *supra* note 3, at 516.

50. *Id.*

51. *Id.*

52. Posner argues that, "[t]o the extent that the terms implied by corporation law accurately reflect the normal desires of transacting parties, they reduce the cost of transactions." *Id.* at 506.

53. This interest rate would be explicitly negotiated in the case of financial creditors Posner, *supra* note 3, at 505. In the case of trade creditors and employees, one may argue that there is an implicit interest rate imputed in the price of goods sold to the corporation or the salary offered by the corporation to the employees. Christine Brown and Kevin Davis, *Credit Markets and the Sons of Gwalia Judgment*, *Agenda* 13.3 (2006): 239-252. at 239; Santiago Carbo-Valverde, Jose Manuel Mansilla-Fernandez, Francisco Rodriguez-Fernandez, *Monetary policy, implicit interest rate, and relative net trade credit* JEL E52 G32 (2013).

54. Posner argues that a creditor does not want to minimize its risks, but rather prefers to be adequately compensated for it. This is because the lower the risk is for the creditor, the lower the return is for the creditor. Posner, *supra* note 3, at 507-508. While this may be true for a financial creditor, who supplies capital to borrowers, it is probably not true for trade creditors and employees. These two groups

ing power.⁵⁵ A party with greater bargaining power is more likely to reach the outcome it desires. Bargaining power is circumstance-specific and depends on a host of factors such as the availability and accessibility of alternatives, the importance of the contract to the parties, the presence and number of competitors for the contractual opportunity, etc. Most important for our present purpose, bargaining power is crucially dependent on the background legal rule of the negotiation, namely limited liability.⁵⁶

The efficient bargain theory overlooks how the position of the default legal rule affects the parties' respective bargaining powers and negotiations costs, which in turn may change the negotiation outcome. This relationship is best illustrated by a numerical example. A party will incur the negotiation costs necessary to secure the desired negotiation outcome so long as the expected benefit from such an outcome exceeds the negotiation costs.⁵⁷ The expected benefit of the negotiation depends on the likelihood of success. For instance, assume that a supplier is contemplating whether to negotiate for a personal guarantee from the controlling shareholder for the payment of certain goods in the amount of \$50,000. He estimates the default risk to be 2%. Assume that in the event of default, the corporation will miss the entire payment. Meanwhile, the controlling shareholder has sufficient personal assets to cover this \$50,000 liability. A personal guarantee from the controlling shareholder will hence be worth \$1,000 to the supplier. Further assume that the supplier believes that he has a 20% chance of obtaining the personal guarantee through negotiation and that the costs of negotiation are \$400.⁵⁸ This supplier will forego the guarantee because taking

are not suppliers of capital and prefer certainty of payment. *But see* Benjamin S. Wilner, *The Exploitation of Relationships in Financial Distress: The Case of Trade Credit*, *The Journal of Finance*, Vol. 55, No. 1 (Feb., 2000), 153, 154 ("Consistent with the evidence of Evans (1998), trade creditors, desiring to maintain an enduring product market relationship, grant more concessions to a customer in financial distress than would be granted by lenders in a competitive credit market. Anticipating these larger renegotiation concessions, the debtor firm agrees to pay a higher interest rate to a trade creditor than to a credit market lender.").

55. The subsequent discussion will ignore the skill aspect of the negotiation process. The negotiation skills of the corporation and its contractual creditors are so context-specific that it is difficult to draw general conclusions about them.

56. Duncan Kennedy, *Form and Substance in Private Law Litigation*, 89 HARV. L. REV. 1685, 1748-51 (1976) ("In particular, bargaining power is a function of the legal order. All individualist rules restrain or liberate that power. Changes in the rules alter its pattern. The outcome of bargaining will therefore be radically different according to whether we allow a state of nature, enforce a much more regulatory individualist regime, or a still more regulatory altruist one. All the outcomes are equally 'natural.' The question is which one is best.").

57. Posner also recognizes this point, noting that where the negotiations are significant, parties will accept the default terms imbedded in corporate or bankruptcy law even though they would have negotiated for something different. Posner, *supra* note 3, at 506. Posner argues that this is merely an exception to the efficient bargain model. Posner, *supra* note 3, at 506. Contrary to his belief, this situation is likely to be common for trade creditors and employees. It is more than an exception to a general rule. Easterbrook and Fischel, *supra* note 4, at 104-105.

58. These costs may be in the form of the time his employees must spend to prepare for the negotiation, the time of the actual negotiation itself, and perhaps the legal fees incurred to consult a lawyer on the feasibility and advisability of obtaining such a guarantee.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

into account the likelihood of success he incurs \$400 for an expected benefit of \$200.

Negotiation costs are determined by a host of factors, one of which is the parties' relative bargaining power, which, in turn, depends on the default legal rule.⁵⁹ When a supplier with low bargaining power wants to negotiate against the default legal rule to obtain a shareholder personal guarantee, its negotiation costs are likely to be high. This, in turn, means that its expected benefit from the negotiation will need to rise in order for the negotiation to be worthwhile. If the expected benefit remains unchanged, the supplier will eschew the negotiation and accept limited liability as the governing rule in its contract with the corporation. Contrary to the efficient bargain theory, the fact that most contracts incorporate limited liability is not a representation of the general preference of contractual parties. Nor is it evidence of the rule's efficiency. It is an empirical observation from which normative conclusions cannot be drawn. It merely reflects the prevalent balance of bargaining power between contractual parties. In most instances, the negotiation costs are too high for the contractual creditor to attempt to alter the rule. Even Posner acknowledges this fact, conceding that where "the costs of explicitly negotiating the question of extent of liability are high in relation to the stakes involved ... whatever term is implied as a matter of corporate or bankruptcy law will control the parties' relations even if it is contrary to what the parties would have negotiated in a world of zero transaction costs."⁶⁰

One further flaw in the efficient bargain theory is the erroneous assumption that it is as costly to negotiate for an exception to the default legal rule as it is to negotiate to preserve that rule. The reality is that it is more costly for the creditor to negotiate for shareholder liability when limited liability is the default rule than for that creditor to preserve shareholder liability when unlimited liability is the norm. In other words, negotiation costs are aligned asymmetrically. If the default legal rule coincides with its desired outcome, the party would only need to expend modest negotiation costs to preserve it. Meanwhile, the party would need to incur substantially greater costs to negotiate for a deviation from the default position. In fact, most negotiation costs will be incurred by the party seeking to change the status quo.

Let us return to the example in the previous paragraph. Assume that the de-

59. The default legal rule interacts with the parties' relative bargaining power to determine negotiation costs. If the default rule was unlimited liability, and it was the debtor corporation that was trying to negotiate around it, the corporation would incur considerable negotiation costs. The negotiation costs for the creditor would be fairly low. The negotiation costs for the corporation would be higher than if the default rule was limited liability, but given its greater bargaining power vis-à-vis the trade creditors and the employees, its negotiation costs should be lower than if a trade creditor or an employee tried to negotiate against a default rule of limited liability. The costs incurred from negotiating against a default rule depend on the party at issue.

60. See Posner, *supra* note 3, at 506.

fault legal rule is now unlimited liability, which the supplier would like to preserve. If the corporation acquiesces to it, the supplier will need to incur negligible negotiation costs to maintain the status quo. It is only when the corporation seeks to alter it that the supplier will need to negotiate the liability term with the corporation. Even then the party seeking to change the status quo, the corporation, will likely incur considerably more negotiation costs than the supplier. This asymmetric alignment of negotiation costs means that the position of the default legal rule does matter to the creditors. It is not true, as some proponents of the efficient bargain theory have argued, that these creditors can always negotiate for the liability rule they desire regardless of the position of the default rule. While the theoretical possibility exists, the costs involved in the negotiation vary depending on that position. Creditors may be deterred by the prohibitive negotiation costs from bargaining for an alternative liability arrangement.

At a more fundamental level, the problem with the efficient bargain theory (and most transaction cost analyses of limited liability) is that it focuses on the minimization of the aggregate negotiation costs of the two parties while taking the preferred liability rule of the parties as a given. Based on empirical observations, the preferred rule is taken to be limited liability. The problem with this somewhat circular approach is twofold. First, the empirical prevalence of limited liability cannot be interpreted as a reflection of the contractual parties' preferences for the reasons highlighted above. Many creditors may prefer unlimited liability but may find it too costly to negotiate for it. Therefore, while proponents of the theory may be able to say that limited liability is the rule that minimizes negotiation costs, there is no basis for them to conclude that it is also the rule that represents the parties' preferences. Second, the theory presumes that the parties' preferred negotiation outcomes are agnostic to changes in negotiation costs. In fact, the theory does not provide much of an account of how parties formulate their preferences and how the default legal rule affects this formulation process by way of its impact on negotiation costs. What the theory propounds is a static minimization process, whereby once the parties' preferred outcomes have been ascertained, the task for the legislator is to choose the liability rule that minimizes negotiation costs. Given the assertion that limited liability is the preferred outcome in most cases, the choice for the legislator is obvious. The reality is that as negotiation costs change, they may rise above or fall below the parties' expected benefits from the negotiation, causing the parties' preferred outcomes to change. A party that has initially ruled out attempting a certain outcome may change its mind after the negotiation costs have fallen below the expected benefits of negotiation. What complicates the matter further is that negotiation costs vary according to the default legal rule. Therefore, the minimization process is dynamic. Minimization of negotiation costs does not take place after the preferred liability rule has been ascertained. The

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

preferred rule may in fact change as negotiation costs are being minimized. Given the diversity of contractual creditors of a corporation and their disparate bargaining powers, it is very difficult to conclude in the abstract which liability rule is most efficient from a negotiation cost perspective.

B. Contractual Bargains and Externalization of Default Risks to Contractual Creditors

Another argument in defense of limited liability for contractual claims is that creditors are adequately compensated for whatever default risks they voluntarily agreed to take on *ex ante*.⁶¹ The interest rate charged by a financial creditor includes return for the use of capital and compensation for the default risk.⁶² Presumably, in the context of a trade creditor, the price the creditor charges for its goods implicitly includes compensation for non-payment by the corporation.⁶³ One may argue that an employee does the same in the wage he demands for his service.⁶⁴ Therefore, limited liability does not externalize the costs of business failure.⁶⁵ The outside creditors already have been adequately compensated. The corollary of this line of argument is that if a creditor has not been adequately compensated for a certain business risk, limited liability does result in the externalization of business risks to outside creditors, which most commentators agree is undesirable. Assume for the sake of the present argument that all kinds of creditors, including trade creditors and employees, do in fact take into account default risks in the returns they demand.⁶⁶ Even then, they would only demand compensation for risks that they anticipate. They would not demand compensation for risks that they fail to anticipate. If they were not aware of a risk at the time of negotiation, they clearly would not demand compensation for it.

With respect to general business risks, most creditors should correctly anticipate the nature of risks involved.⁶⁷ Risks, however, differ in kind and in de-

61. Posner, *supra* note 3, at 501-02.

62. *Id.*

63. Ribstein, *supra* note 32, at 442.

64. *Id.*

65. Hansmann & Kraakman, *supra* note 4, at 1919-20; Leebron, *supra* note 4, at 1584.

66. See *Fullerton*, 910 F.2d 331. In this case, the Sixth Circuit implied that employees do take into account the risk of default when contracting with the employer. The employees were employed by one corporation of the shareholders while the bulk of the assets of operation were held by another corporation. 910 F.2d at 333-334. In refusing to pierce the veil, the court noted that the employees were in no way misled into believing that their employer owned those assets. 910 F.2d at 340. However, the court stopped short of saying that the employees demanded wages that were commensurate with the default risks they had undertaken given their employer's lack of assets.

67. *Arnold v. Phillips*, 117 F.2d 497 (5th Cir. 1941) (business failed due to poor investment decision); *Barlow v. Budge*, 127 F.2d 440 (8th Cir. 1942) (business failed because of Great Depression); *Empire Steel Corp.*, 56 Cal.2d 823 at 827-828 (general business difficulty caused business to fail); *Lowendahl v. Baltimore & Ohio R.R. Co.*, 247 A.D. 144 (N.Y. App. Div. 1936); *aff'd*, 6 N.E.2d 56 (N.Y. 1936) (shareholder fraud and Great Depression led to business failure); *Luckenbach*, 267 F. at 676 (cor-

gree. Even if a creditor correctly anticipates the nature of the risk involved, it may fail to appreciate the full extent of the possible risk.

A numerical example will illustrate this point. A financial creditor is negotiating a three-year loan to a petrochemical firm that produces plastic materials, for which oil is the single most important input in production. The creditor undertakes a diligent investigation of the corporation's business, including consultation of outside experts, and correctly anticipates that the corporation would be in trouble if the price of crude oil rose. In fact, the creditor is aware that this is the greatest operational risk for this corporation. Further assume that the loan was being negotiated in the beginning of 2007, when the price for crude oil was still hovering below \$60 per barrel⁶⁸ and before it began its incredible hike to close to \$150 per barrel in the summer of 2008.⁶⁹ Based on the then-current price for crude oil of roughly \$60 per barrel, the creditor anticipated the business risks of the corporation for a range of prices up to \$120 per barrel, double the then-prevailing price. The creditor then demanded an interest rate that would compensate it for this range of anticipated business risks. As is well known, within a year and a half, crude oil price in nominal terms reached an all-time high of \$147.25 in July 2008, beyond the upper limit anticipated by this creditor.⁷⁰ The creditor had correctly anticipated the nature of risk, but not the extent of it. The interest rate the creditor had demanded did not compensate it for the risk that materialized.

As a result, the corporation's business failed and was unable to repay the loan. This creditor now seeks to recover from the shareholders, believing that it had borne the loss of a business failure for which it had not been adequately compensated. Absent factors that lead the courts to pierce the veil—such as inadequate capitalization, shareholder domination, non-observance of corporate formalities, etc.—it is unlikely that this creditor will succeed. The court may reject this creditor's veil-piercing plea by telling the creditor to stick with the

poration was intentionally inadequately capitalized for its expected liabilities); *In re Lumber Inc.*, 124 F.Supp. 302 (D. Or. 1954) (business failed because of heavy losses from bad accounts and unauthorized transactions by executives); *Mursam Shoe Corp.*, 127 F.2d at 345-46 (corporation failed because of deliberate undercapitalization); *Fullerton Transfer*, 910 F.2d 331 at 333 (business failed because of labor strike); *Oppenstein*, 335 F.2d at 804-05 (subsidiary failed because it was never operated as viable corporation); *Sutton v. Reagan & Gee*, 405 S.W.2d 828 (Tex. Civ. App. 1966) (corporation collapsed due to commodity speculation by officer with corporate funds); *Yacker*, 263 A.2d 188 at 190-191 (subsidiary intentionally undercapitalized and court noted prevalence of defendant's practice in industry).

68. Derrick Ho, *Oil Prices Rise Above \$53 a Barrel*, THE WASHINGTON POST (Jan. 15, 2007), available at <http://www.washingtonpost.com/wp-dyn/content/article/2007/01/15/AR2007011500019.html> (noting that oil prices were about \$53 in January 2007).

69. Gideon Spanier, *Oil Hits \$146 as Paulson Says There's No Quick Fix*, EVENING STANDARD (July 3, 2008), available at http://www.thisismoney.co.uk/markets/article.html?in_article_id=445225&in_page_id=3.

70. *Oil Price Hits Record High on Iran, Dollar Concerns*, THOMPSON FINANCIAL NEWS, July 11, 2008, available at <http://www.iiss.org/whats-new/iiss-in-the-press/press-coverage-2008/july-2008/oil-price-hits-record-high-on-iran-dollar-concerns/>.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

bargain it has made.⁷¹ However, this sophisticated but hapless creditor had conducted a diligent investigation of the credit risks and demanded what it thought would be an appropriate return for the loan. In this case, the costs of business failure, which is due to no fault of any party involved but to unpredictable crude oil prices, have been externalized.

To say that a contractual creditor is always fully compensated for the default risks it bears is to underestimate the complexities and unpredictability of business reality and to overestimate the ability of even the most sophisticated creditors to predict the future.⁷² The fact that even the most sophisticated creditors may make mistakes about predicting default risks does not necessarily justify shareholder liability. The courts may still say that the creditor should bear the costs of its own mistakes and place the burden of unanticipated default risks on the creditor. That may be a justifiable rule if a conscious decision is made that the legal regime should encourage entrepreneurship and business activities by shifting unanticipated business risks onto outside creditors.⁷³ If these are the justifications for limited liability, they should be asserted explicitly. It is misleading to insist that there is no externalization of business risks in voluntary credit transactions.

Another problem with the argument that contractual creditors are adequately compensated for the default risks they voluntarily agree to take on is that it presumes that all contractual creditors are risk-neutral and indifferent between receiving risk-adjusted compensation now or receiving full protection in the event of default later. Financial creditors and perhaps many trade creditors probably fall within the category of risk-neutral creditors. They may very well be indifferent between present risk-adjusted compensation and future full payment. However, this is untrue of many employees. Given the importance of salary in most employees' income portfolio, many of them are likely to be risk averse and prefer to receive their full salaries in the event of default instead of risk-adjusted compensation at present. The risk aversion of employees means

71. *Fisser*, 282 F.2d 231 at 239; *In re John Koke Co.*, 38 F.2d 232 (1930); *Moore & Moore Drilling Co. v. White*, 345 S.W.2d 550 (Tex. Civ. App. 1961); *Hanson v. Bradley*, 10 N.E.2d 259 (Mass. 1937); *DeWitt Truck Brokers v. W. Ray Flemming Fruit Co.*, 540 F.2d 681 (4th Cir. 1976). *But see* *First Nat. Bank in Canyon v. Gamble*, 132 S.W.2d 100 (Tex. Comm'n App. 1939) (piercing veil even though parties received what they had exactly bargained for); *Automotriz*, 306 P.2d at 3-5 (piercing veil on grounds that defendants conducted business as individuals).

72. The recent financial crisis and the failure of practically all the major investment banks and other sophisticated financial institutions to anticipate and prepare for it is a cautionary tale against such naïve optimism. Yuliya Demyanyk and Iftekhar Hasan, *Financial Crises and Bank Failure: A Review of Prediction Methods*, Working Paper of Federal Reserve Bank of Cleveland (2009), at 14-15 (referring to the Asian crisis, the Russian bank crisis, and the Brazilian bank crisis); Steven Radelet and Jeffrey Sachs, *The Onset of the East Asian Financial Crisis*, Working Paper 6680 of the National Bureau of Economic Research (1998), at P.1; Barry Eichengreen, *Predicting and Preventing Financial Crises: Where Do We Stand? What Have We Learned?* Working paper for the Kiel Week annual conference (2002) at P.2.

73. See E. Merrick Dodd, *The Evolution of Limited Liability in American Industry: Massachusetts*, 61 HARV. L. REV. 1351 (1948).

that the adequacy of compensation argument advanced by proponents of limited liability will not apply to them. Risk allocation between employees and the shareholders will be discussed in greater detail in Section 0.

Contractual creditors often attempt to preempt unanticipated risks by imposing contractual constraints on the corporation.⁷⁴ In a loan agreement, for example, there are often covenants that restrict the debtor's ability to take on new debts or to dissipate its assets. Such covenants or restrictions are usually only found in financial credit agreements. A trade creditor will rarely be able to negotiate for such protection. Nor does it have the time or the resources to monitor compliance with these covenants. Employees are almost never able to negotiate for such protection. Even for financial creditors, these covenants are only as effective as the monitoring itself. The effectiveness of financial creditors in monitoring a debtor corporation as compared to shareholders will be discussed in the Section IV.

C. Veil Piercing as a Substitute for Unlimited Liability

Defenders of limited liability may argue that even if contractual parties can never accurately predict the future, and that limited liability shifts unanticipated and uncompensated default risks onto outside creditors, it is not necessary to jettison the whole rule. The corporate veil doctrine can be used to fill in the gap. The courts may allow a creditor to pierce the veil if it can show that the reason for business failure was unanticipated and the risk was thus uncompensated. These defenders may point to cases in which the courts have rejected the plaintiff's plea to pierce the veil on the grounds of honoring the original bargain as further evidence that the courts follow this approach.⁷⁵ While there are undoubtedly some such cases, a review of the case law shows that the courts do not consider the nature of the risk involved and the adequacy of compensation in deciding whether to pierce the veil. Cases in which the court tells the plaintiff to abide by the original bargain are usually ones in which corporate misconduct is absent.⁷⁶

One can imagine cases in which the creditor at issue has fully anticipated fraud risks and was adequately compensated for them. Sophisticated financial creditors must factor in corporate fraud and misconduct when setting the rate of return. By this line of argument, the court should refuse to pierce the veil even in the presence of an outright fraud. Yet this author is not aware of any case in which the court has actually done this. According to Professor Thompson's survey of corporate veil cases published in 1991, the presence of fraud or misrepresentation is the most predictive factor for veil piercing. He found that

74. Halpern et al., *supra* note 4, at 133.

75. *See supra* note 71 and cases cited therein.

76. *See supra* note 71 and cases cited therein.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

courts had pierced the veil in 94% of the cases in which misrepresentation was found,⁷⁷ and that courts had refused to pierce the veil in over 92% of the cases in which fraud or misrepresentation was absent.⁷⁸ Given the importance the courts have attached to fraud and misrepresentation, it would be difficult to imagine a court willing to countenance limited liability on the grounds that the creditors had been adequately compensated for fraud risks. The courts are unlikely to enforce the corporate veil doctrine solely based on the criterion of whether the risk is anticipated or not. As such, the doctrine cannot be used as a gap-filling measure in lieu of unlimited liability.

Using veil piercing as a gap-filling measure poses serious practical difficulties as well. The first issue is whether the accuracy of risk assessment should be judged by a subjective or an objective standard. Given that the aim is to compensate the creditor for uncompensated risks, a subjective standard would seem more appropriate. By this line of argument, when deciding whether to pierce the veil, the courts should focus on whether the particular creditor has anticipated that risk, instead of whether a reasonable creditor would have done so. However, absent evidence of a systematic *ex ante* analysis of default risks, which is likely only performed by sophisticated financial creditors, it would be very difficult for courts to determine what risks the creditor at issue had anticipated.⁷⁹ Therefore, an objective standard would likely be applied. Under this standard, the inquiry would be what a reasonably cautious and sophisticated creditor would have anticipated under the circumstances of the original negotiation. Such an inquiry would be difficult for the courts to undertake. A further objection to using veil piercing as a gap-filling measure is the mismatch between the harm to be remedied and the remedy itself. If the goal is to compensate creditors for an unanticipated business risk, for the sake of theoretical consistency, the remedy should not be shareholder liability, but the shortfall in *ex ante* interest payments. This remedy would most likely be unsatisfactory to the creditor. One may justify the imposition of shareholder liability on the grounds that it provides the corporation incentives to cooperate with the creditors to arrive at the most adequate compensation *ex ante*.⁸⁰ This argument unrealistically

77. Robert B. Thompson, *Piercing the Corporate Veil: An Empirical Study*, 76 CORNELL L. REV. 1036, 1064 (1991) [hereinafter Thompson I].

78. *Id.* at 1065.

79. The question of whether compensation is adequate has been deliberately set aside. Once the courts are willing to accept arguments about inadequate compensation for unanticipated risks, it is conceivable that disappointed creditors would challenge *ex post* the adequacy of compensation for anticipated risks. However, courts should resist the temptation to open this Pandora's box. It would be clearly beyond a court's expertise to determine whether particular compensation is adequate for the risk anticipated. Moreover, doing so would be an open invitation for contractual parties to revisit and renegotiate their agreements *ex post* through judicial intervention. Allowing a court to pierce the veil on the grounds for inadequate compensation for an anticipated risk would be implicitly to allow the courts to reengineer the *ex ante* contract negotiation environment.

80. Posner has argued that misrepresentation should be a basis for veil piercing because it will provide corporations with the incentive to supply accurate information. Posner, *supra* note 3, at 520-23.

expects parties to a transaction to negotiate in a spirit of cooperation, ready to divulge full information to each other in order to arrive at an accurate compensation. The reality is likely to be far from this ideal.

The unsatisfactory nature of the theoretically consistent remedy of interest payment shortfall is due to the fact that veil piercing is an *ex post* judicial remedy. If the objective of the remedy were to approximate what the parties would have done *ex ante*, theoretical consistency dictates that the remedy be limited to what the aggrieved party would have demanded. Such a remedy will be deficient for the creditor once the default risk materializes. The party will want full compensation for the default itself. In sum, the problem of the externalization of business risks cannot be adequately addressed by an *ex post* remedy. Once it is accepted that externalization is undesirable, the only feasible solution is to impose unlimited shareholder liability as the background legal rule *ex ante*.

IV. MONITORING COSTS

Much of the discussion about the merits of limited liability has focused on its effects on the corporate stakeholders' information and monitoring costs. To many commentators, these costs are one of the most decisive justifications for limited liability.⁸¹ It is important first to specify why shareholders and creditors monitor. A shareholder's paramount concern is the value of his investment, which requires monitoring of corporate managers for fraud and mismanagement. As for creditors, Section 10 distinguishes between anticipated and unanticipated risks. Creditors will focus their monitoring on unanticipated risks, risks for which they were not compensated. It has not been specified, however, what exactly comprises anticipated and unanticipated risks.⁸² Posner also classifies the risks facing a creditor into anticipated and unanticipated risks.⁸³ According to him, anticipated risks are default risks that can be discovered by a creditor *ex ante*. Unanticipated risks result from a corporation's deliberate effort to reduce the assets available to satisfy a creditor's claims, or management opportunism. Posner was not explicit about what exactly are meant by anticipated risks. However, in light of their juxtaposition with management opportunism and his statement that assessment of these risks "requires accurate information about the existing and expected assets and liabilities of the

81. See e.g. *id.* at 507-09; Halpern et al., *supra* note 4, at 133-36; Easterbrook & Fischel, *supra* note 4, at 94-95.

82. The distinction between anticipated and unanticipated risks has a long history. Ever since Frank Knight's pioneering work on risks, commentators have drawn a distinction between risk and uncertainty. FRANK H. KNIGHT, RISK, UNCERTAINTY AND PROFIT 19-20 (1921). Risk is the assessment of probability based on repeated instances of an event, while uncertainty refers to unique circumstances that are not susceptible to measurement due to their lack of repetitions over time. *Id.* at 19-20 Nothing in the nature of risks confines them to default risks and uncertainty to management opportunism. Risk and uncertainty differ not by the nature of the event that gives rise to them, but their predictability. *Id.*

83. Posner, *supra* note 3, at 508.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

borrowing corporation”, anticipated risks can be surmised to refer to the general business risks of a corporation.⁸⁴ Posner hence equates anticipated risks with general business risks and unanticipated risks with risks of corporate managerial opportunism.

One problem with this approach is that it presumes that creditors always fully anticipate general business risks while management opportunism is never anticipated. This seems to be premised on the belief that creditors can accurately predict the risks of business failure *ex ante* based on the information available then, which would in turn depend on the highly implausible assumption of perfect information on the part of creditors. In reality, it is likely that there will be general business risks that cannot be anticipated, which must be borne by the creditor under limited liability. As previously argued, risks differ in kind and in degree. Recall the example of the financial creditor extending a loan to the plastics manufacturer. Even the most seasoned creditor may misjudge the extent of general business risks. In fact, the corporate management may do the same. As Posner acknowledged, assessment of anticipated risks requires information about expected assets and liabilities.⁸⁵ Expectations about future assets and liabilities are contingent on expected future business performance of the corporation and may turn out to be wrong. Meanwhile, it is equally unrealistic to assume that creditors do not anticipate management opportunism at all. If corporate scandals in recent years have taught creditors anything, it is that even the ostensibly best-managed corporations may turn out to be victims of massive managerial fraud. Therefore, it is highly unlikely that creditors do not anticipate at least some of these risks and seek compensation for them. Anticipated risks are risks that were correctly anticipated by the creditor, nothing more and nothing less. Creditors will monitor unanticipated risks, which comprise both general business risks and management opportunism risks. The same is also true of shareholders.⁸⁶

84. *Id.*

85. *Id.*

86. Even tort claimants, the corporate claimant group with the narrowest focus in monitoring, could be interested in more than mere accident risks if they had the opportunity to monitor the tortfeasor corporation. Most commentators have situated their discussions of tort claimants in scenarios in which *ex ante* monitoring of the tortfeasor is impossible. This may be due to the prevalence of taxicab company cases in the veil-piercing case law. There is practically no way for a taxicab passenger to monitor the accident risks of a taxicab company *ex ante*. See *Black & White, Inc. v. Love*, 367 S.W.2d 427 (Ark. 1963); *Mull v. Colt*, 31 F.R.D. 154, 156-57 (S.D.N.Y. 1962); *Walkovszky v. Carlton*, 223 N.E.2d 6 (N.Y. 1966). However, this need not be the only tort situation in which limited liability is implicated. Assume that there is a corporation, Alpha, which operates a factory on a piece of land. Adjacent to it is another corporation, Beta, which produces explosives, a dangerous good that has high accident risks. Alpha will have a clear incentive to monitor Beta's accident risks. It will likely also scrutinize Beta's general financial well-being to ensure that Beta is not judgment proof. This is because even though Alpha will purchase insurance coverage, a full coverage for all potential losses would be very expensive to purchase. Alpha would purchase insurance coverage up to a point, based on its own estimates of accident risks and its expected losses. Beyond that, it will have to look to Beta for recovery. Unlike the traffic accident scenario that is the paradigmatic tort situation, here the identity of the future tortfeasor is

The general argument based on monitoring costs for limited liability is that a shift to unlimited liability would increase aggregate monitoring costs of the corporate claimants as a whole, which would be wasteful from a social perspective. Under limited liability, a shareholder will have low incentives to monitor because its maximum loss is limited to the value of its investment.⁸⁷ Creditors will have heightened incentives to monitor corporate managers because their maximum recovery is limited by the corporate assets, which can be squandered by mismanagement or fraud.⁸⁸ On balance, limited liability still results in lower aggregate monitoring costs because the reduction in shareholder monitoring costs will more than offset the increase in creditor monitoring costs.⁸⁹ There are two reasons for this. First, shareholders are the residual claimants of a corporation and their investment will be the first to be wiped out should the corporation's business go awry.⁹⁰ Therefore, their incentive to monitor is stronger than the creditors' in the first place. Second, financial creditors have lower information costs than do shareholders due to those creditors' superior understanding of default and insolvency risks.⁹¹ It would be more cost-effective to shift the burden of monitoring to the financial creditors. It is also argued that under unlimited liability, shareholders would need to extend their monitoring to cover fellow shareholders' wealth.⁹² Neither shareholders nor creditors would need to monitor shareholder wealth under limited liability. This is an unequivocal reduction in monitoring costs that tips the balance in favor of limited liability.

Much of the analysis of the economic efficiency of limited liability has focused on public corporations.⁹³ While studies of the application of unlimited liability to tort claims have extended to closely held corporations,⁹⁴ Halpern et al are among the very few scholars who have examined the issue of limited liability for contractual claims in closely held corporations.⁹⁵ What follows is a detailed analysis of the effect of liability rules on information and monitoring

known in advance and monitoring is possible. In such case, even a tort claimant will be interested in more than mere accident risks. See Kristin Bohlken, *Fitting the Square Peg of Alternative Toxic Tort Remedies into the Round Hole of Traditional Tort Law*, 1 DRAKE J. AGRIC. L., 1, 2-3 (1996).

87. Easterbrook & Fischel, *supra* note 4, at 94-95.

88. *Id.* at 99.

89. *Id.*

90. *Id.*

91. Halpern et al., *supra* note 4, at 124-25.

92. *Id.* at 136; Easterbrook & Fischel, *supra* note 4, at 95.

93. Easterbrook and Fischel's analysis is specifically focused on publicly held corporations. Easterbrook & Fischel, *supra* note 4, at 93-94. The same is true of Halpern et al.'s analysis. Halpern et al., *supra* note 4, at 133-38. However, Halpern et al.'s analysis does contain a brief mention of information costs of claimants in closely held corporations. *Id.* at 135. Posner's analysis does not seem to have made an express distinction between close and public corporations. However, given that his Article was largely a response to Landers' proposal for unlimited liability between a corporate and its wholly owned subsidiaries, Posner's discussion of monitoring and information costs should apply to close corporations. Posner, *supra* note 3, at 505-09.

94. See e.g. Leebron, *supra* note 4, at 1626-36; Hansmann & Kraakman, *supra* note 4, at 1882-94.

95. See Halpern et al., *supra* note 4, at 135.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

costs in a close corporation, followed by a similar analysis for a publicly held corporation.

A. A Closer Look at Information Costs and Monitoring Costs

Before examining how a change of liability rule affects monitoring costs, it is important to define a number of key concepts. There seems to be confusion in the existing literature about information costs, monitoring costs, and the incentive to monitor; commentators have sometimes facetiously equated them.⁹⁶ Section I explains that information costs are the costs of obtaining and analyzing each unit of information and consist of access costs and analysis costs. They are determined by the ease of access to information and the sophistication of the monitoring party. Greater bargaining power on the part of the monitoring party allows it to obtain information from the corporation more cheaply. Greater financial sophistication on the part of the monitoring party reduces the costs incurred by that party to analyze the information.

The level or quantity of monitoring engaged in by each claimant group is determined by that group's incentive to monitor, which depends on a variety of factors, such as the default liability rule, the priority of a creditor's claim in the event of bankruptcy, and the amount of credit at stake. The incentive to monitor increases as the amount at stake or the risk of loss increases. Incentive to monitor can perhaps be understood as monitoring intensity. There is also the distinct concept of scope of monitoring, which refers to the range of issues in which a particular claimant group is interested to monitor.⁹⁷ Scope of monitoring affects the overall monitoring level.⁹⁸ A wider range of issues to be monitored necessitates a higher level of monitoring. Monitoring costs refer to the total costs incurred by a claimant group on monitoring the corporation. It equals the product of the group's monitoring level and information costs. As each claimant group has different information costs, firm-wide monitoring costs will be minimized by shifting monitoring activity to the group with the lowest information costs. This can be achieved by giving that group a greater incentive to monitor and a

96. See e.g. Easterbrook & Fischel, *supra* note 4, at 99. In a section with the heading "Relative Monitoring Costs," much of their discussion focuses on the incentives and interests of the various corporate stakeholders to monitor the corporation.

97. Take the example of a secured creditor. This creditor would probably only be concerned with the state of the security asset. The scope of its monitoring activity is hence small. See Anthony Townsend Kronman and Thomas H. Jackson, *Secured Financing and Priorities Among Creditors*, 88 YALE L.J. 1143, 1153 (1979) ("A secured creditor can focus his attention on the continued availability of his collateral and is largely free to disregard what the debtor does with the remainder of his estate. By restricting his attention in this way, the secured creditor can reduce the number and complexity of his monitoring tasks and thus achieve a substantial savings in monitoring costs.")

98. The scope of monitoring may also affect the information costs of individual claimant groups. Given the limited capacity of a corporate claimant to keep track of information from the corporation, if it needs to monitor a wider range of issues, its monitoring capacity will need to be spread more thinly. This will result in higher costs for analyzing information on a per unit basis.

wider scope of monitoring. That claimant group will then provide the bulk of the monitoring for the firm, keeping firm-wide monitoring costs at a minimum.

The choice of liability rule affects monitoring costs in three ways. First, it does so by altering the incentive to monitor. Liability rules alter incentives to monitor by shifting default risks among the claimant groups and adjusting their expected losses in the event of default. A creditor that may recover its debts from the shareholders will be less vigilant in monitoring the corporation. A shareholder who may become personally liable for the corporation's debts will have greater incentives to monitor. If a liability rule shifts the incentive to monitor from a group with high information costs to a group with low information costs, it achieves savings in monitoring costs on a firm-wide basis and is an economically efficient rule. Second, the choice of liability rules affects monitoring costs by adjusting the scope of monitoring. If a claimant group has to monitor a wider range of issues than before, it will incur higher monitoring costs. Third, monitoring costs are affected due to the impact of the choice of liability rules on information costs. A change in liability rule may alter information costs by shifting the relative bargaining power between the corporation and its creditors. For example, a corporation desiring to contract around unlimited liability will have to be more ready to furnish information to the creditor to persuade the latter to forego shareholder liability. It will thus be less costly for the creditor to gather information from the corporation. It is this third effect on information costs that commentators have largely overlooked. They have assumed that information costs remain constant after a change of liability rule. This means that when analyzing how a potential change of liability rule affects monitoring costs, one cannot simply focus on changes in the incentives to monitor and the scope of monitoring. One must also consider the effects on the information costs of the various claimant groups.

A change in liability rule will have a disparate impact on the monitoring costs within a close corporation compared to a public corporation. In particular, there are important differences in the character of the shareholder in these two corporations that bear on the issue of monitoring costs. The financial creditors of these two corporations also differ. A close corporation does not issue bonds to the general public and hence does not have public individual financial creditors or retail bondholders. However, it may have private individual financial creditors—individuals who extend loans to a corporation—which a public corporation is unlikely to have. These private lenders are likely to be family members or friends of the owners of the corporation.⁹⁹ It is difficult to generalize

99. See *Stark v. Coker*, 129 P.2d 390, 391 (Cal. 1942). In this case, even though it was not clear whether the private lender had personal relationships with the shareholders, the lender already owned shares in the corporation when extending the loan. The lender was not a stranger to the corporation. See also Niels Bosma & Jonathan Levie, *Global Entrepreneurship Monitor 2009 Global Report* 52, available at http://www.gemconsortium.org/about.aspx?page=pub_gem_global_reports (noting that funding

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

about these lenders because their access to information and level of sophistication may vary widely, depending on the individual at issue and his relationship with the owners of the corporation.¹⁰⁰ Therefore, they will be left out of the subsequent analysis. In light of the distinctions between the corporate claimants in a close corporation and a public corporation, there will be separate analyses for these two corporations.¹⁰¹

The foregoing discussion suggests that the economic efficiency of a liability rule should be determined by whether overall monitoring costs are lower than under the alternative rule. A change of liability rule results in savings in firm-wide monitoring costs if the incentives to monitor are shifted to the cost-effective monitors and the change does not result in an increase in overall monitoring level.

B. Monitoring Costs in a Closely Held Corporation

1. Information Costs of the Various Corporate Claimants in a Closely Held Corporation

Let us first consider which claimant group in a close corporation has the lowest information costs. Recall that information costs consist of access costs and analysis costs. The analysis begins with a comparison between a shareholder and a sophisticated financial creditor. In general, the number of shareholders in a closely held corporation is small and management tends to be informal. It is thus relatively easy for a shareholder to obtain information about the financial status of the corporation. These costs contrast starkly with the access costs of the passive shareholders of a public corporation, who generally have limited access to important financial information. In particular, access costs should be very low for a shareholder who is actively involved in the management of a closely held corporation. After all, such a shareholder needs access to financial information in order to manage the corporation. Access costs may be higher for a passive shareholder. Still, given the size of the corporation, these costs should be kept to a manageable level. Access costs for a controlling shareholder should be very low, given the small size of the corporation and the control wielded by the shareholder. In the extreme case of single-shareholder corporations, these costs become negligible. In terms of analysis costs, an active shareholder will have little problem in understanding the information

from start-up businesses tend to come from family and friends).

100. See *First Nat. Bank in Canyon v. Gamble*, 132 S.W.2d 100, 121 (Tex. Comm'n App. 1939) (detailing an illiterate but skilled cattle handler in poor health who entrusted his finances with defendant and lent money).

101. Much of the existing literature on monitoring costs has focused on public corporations. See Easterbrook & Fischel, *supra* note 4, at 99-100; Halpern et al., *supra* note 4, at 133-36; Leebron, *supra* note 4, at 1605-08.

which he needs to manage the corporation. His analysis costs should be very low. Analysis costs may be higher for a passive shareholder, depending on his level of financial sophistication. On balance, shareholders of a closely held corporation should have lower information costs than do sophisticated financial creditors.

As compared to the remaining creditors, shareholders again should have lower information costs largely for the same reasons stated above. An employee may have easy access to information in a closely held corporation, especially if the corporation is small and informally managed. While access costs may be low, an employee's analysis costs are likely to be high for want of financial expertise as compared to the shareholders, especially the active ones. A shift to unlimited liability should lower the access costs of trade creditors and, to a lesser extent, employees. With unlimited liability as the default rule, these two creditor groups will acquire greater bargaining power, which means that they should be able to obtain information with less expenditure of time and resources on negotiation. However, this enhanced bargaining power may not be of much assistance to employees in light of their already privileged access to information. A change in liability rule will not alleviate their analysis costs, which are their greater challenge. Despite some of the creditors' more favorable bargaining positions under unlimited liability, shareholders in a close corporation are still likely to have lower information costs than contractual creditors, especially if most of the shareholders are active in management.¹⁰²

2. A Change of Liability Rule and the Monitoring Level in a Closely Held Corporation

How a shift to unlimited liability changes the monitoring level of various corporate claimants depends on its impact on their incentives to monitor and scope of monitoring. After a shift to unlimited liability, shareholders will have increased incentives to monitor the corporate management due to their greater potential liability exposure. There has been extensive discussion about whether shareholders will extend the scope of their monitoring to the wealth of other shareholders. It has been conclusively shown that this will only happen under a joint unlimited liability regime.¹⁰³ Under a pro rata rule, shareholders will have little incentive to monitor other shareholders' wealth as they will only be liable for their prorated share of the corporation's outstanding liabilities.¹⁰⁴ In any case, the costs of obtaining information about the other shareholders' wealth are likely to be much lower in a close corporation than in a public corporation.

102. Although the information costs of shareholders and sophisticated financial creditors may not be very close. Easterbrook and Fischel, *supra* note 4, at 100.

103. Leebron, *supra* note 4, at 1605; Hansmaan & Kraakman, *supra* note 4, at 1893.

104. Leebron, *supra* note 4, at 1607-08.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

The choice between a joint liability rule and a pro rata rule is hence not as important for the former as it is for the latter.

Before discussing how a shift to unlimited liability may change the creditors' incentives to monitor, a few preliminary observations are in order. First, most trade creditors have weaker incentives to engage in rigorous monitoring than do financial creditors. This is partly due to the shorter-term nature of trade credit, and partly due to the smaller size of trade credit as compared to loans and other forms of financial credit. There are obviously exceptions, and some trade creditors may be so reliant on one particular corporation that they have strong incentives to monitor. A car parts supplier that supplies 50% of its output to one car manufacturer is likely to monitor the manufacturer's financial health closely. However, it remains true that trade creditors in general have lower incentives to monitor than do financial creditors. Second, one wonders why an employee would bother to monitor his or her employer in the first place. Unlike a financial creditor, an ordinary employee does not have the bargaining power to request an employer to undertake covenants or offer other credit protection in the employment contract. While a financial creditor monitors compliance with these covenants, an employee does not have a similar monitoring tool. In fact, most employees do not even have the bargaining power to negotiate for a higher salary as compensation for his employer's higher default risks.¹⁰⁵ He has to take an employer as it is. The only feasible *ex ante* strategy for an employee against an employer's default risks, before entering into an employment contract, is to look for another job. This suggests that an employee should have few incentives to monitor. However, this overlooks another possible response by an employee in the event of imminent default: leave the company. As soon as an employer is in arrear for wages, an employee can terminate the relationship and walk away to cut his loss. The most an employee will lose is his current month's wages.¹⁰⁶ In fact, an employee should have

105. A senior employee will have greater bargaining power to do that.

106. This is a slight simplification because an employee will also stand to lose his pension benefits and perhaps the value of his stock options. However, with respect to both kinds of liability, there is not much an employee can do even if he discovers default risks. Most stock options are likely to have a lockup period and the employee will not be able to exercise them until the options become vested. Aswath Damodaran, *Employee Stock Options and Restricted Stock: Valuation Effects and Consequences*, 10 (September 2005), available at <http://people.stern.nyu.edu/adamodar/pdfiles/papers/esops.pdf>. Pension benefits are less likely to be affected by the employer's fortune because pensions are usually managed by a third-party fund manager and can be carried over to the next employer. OECD, *Pension Markets in Focus*, at 8-9.

Another possible source of liability for an employer to an employee is compensation for work-related injuries. In fact, many employee veil-piercing cases involve workers' compensation. See, e.g., *Craig v. Lake Asbestos of Quebec, Ltd.*, 843 F.2d 145 (3d Cir. 1988); *Dixie Coal Mining & Mfg. Co. v. Williams*, 128 So. 799 (Ala. 1930); *Doughty v. CSX Transp. Inc.*, 905 P.2d 106 (Kan. 1995); *Elenkrieg v. Siebrecht*, 144 N.E. 519 (N.Y. 1924). However, this type of liability is strictly speaking non-contractual, and is a kind of contingent statutory liability that arises in the context of a contractual relationship. See *Elrac, Inc. v. Exum*, 961 N.E.2d 643, 645 (N.Y. 2011) (distinguishing worker's compensation liability and contractual liability). Certain types of employee may take into account an employer's

strong incentives to monitor his employer because his salary is likely to account for a large portion of his overall income portfolio. The impact of a default on him would be substantial.

A shift to unlimited liability will reduce a corporation's creditors' incentives to monitor in a few important ways. These reductions will apply to creditors of all kinds. Now that unlimited liability has expanded the pool of assets available to the creditors, a creditor need not scrutinize the corporation's business as closely as it would under limited liability.

To provide a clear example: even if a corporation is running a small operating loss and may be unable to repay some of its debts, the creditor can always turn to the shareholders. Under unlimited liability, a creditor will become concerned only when corporate liabilities exceed corporate assets to such an extent that even shareholder assets may become insufficient. Another reason for a reduction in incentives to monitor is that under unlimited liability, a creditor need not be as vigilant as it otherwise would be about shareholder misappropriation of corporate assets. Such shareholder misconduct is detrimental to creditor interests because once the funds leave the corporation and go into the shareholders' own accounts, limited liability puts the funds out of the creditors' reach. Certainly, existing corporation law and bankruptcy law already provide some protection against such shareholder misconduct.¹⁰⁷ For instance, the Model Business Corporation Act prohibits the distribution of dividends if the corporation will, after the distribution, become unable to pay its debts as they fall due or if its total assets will fall below its total liabilities.¹⁰⁸ Every state corporation law statute also imposes some form of restriction on excessive dividend distribution.¹⁰⁹ These restrictions, however, are inadequate in most cases.¹¹⁰ Unlim-

ability to pay such compensation when choosing employment, especially for jobs that entail significant risks of work-related injuries. However, these jobs only account for a small portion of employment, and this kind of contingent liability should not affect the crux of the analysis. Sherry L. Baron, Andrea L. Steege, Suzanne M. Marsh, Cammie Chaumont Menéndez, John R. Myers, *Nonfatal Work-Related Injuries and Illnesses — United States, 2010*, Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report (2013), available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a6.htm> (In 2012, the U.S. civilian labor force comprised an estimated 155 million workers. In 2011, approximately 3 million workers in private industry and 821,000 workers in state and local government experienced a nonfatal occupational injury or illness); United States Department of Labor, Bureau of Labor Statistics, *Occupational Injuries and Illnesses*, available at <http://www.bls.gov/news.release/osh.toc.htm>.

107. Legal doctrines that target such shareholder opportunistic conduct include fraudulent conveyance under the state fraudulent conveyance statutes, equitable subordination under bankruptcy law, minimum legal capital requirements under some state corporation law statutes, and even the veil-piercing doctrine. Vicki L. Yrazabal, Cause of Action Under 11 U.S.C. § 510(c)(1) for Equitable Subordination of Claim in Bankruptcy, 2 COA2d 707 [Ed. Note: I'm not sure what 2 COA2d 707 refers to] (2014); Richard A. Booth, *Capital requirements in United States corporation law*, VILLANOVA UNIVERSITY LEGAL WORKING PAPER SERIES 102 (2005).

108. MODEL BUS. CORP. ACT § 6.40 (2002).

109. MODEL BUS. CORP. ACT ANN. § 6-244-6-245 (2002).

110. Dean Clark noted the "porosity of ordinary corporation law's barriers against outflows of a corporation's minimum cushion of capital for creditors," and observed that "[m]ost lenders to corporation,

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

ited liability renders these restrictions much less important. By removing the formal separation of shareholder assets from corporate assets, unlimited liability eliminates the primary reason that creditors are concerned about shareholder misconduct. If a shareholder has siphoned off corporate funds through an improper dividend distribution, and the corporate assets consequently become insufficient to meet a liability, the creditors may recover the funds directly from the shareholder. It is of course possible for the shareholder to render himself judgment-proof by shifting his assets beyond the reach of the corporation's creditors.¹¹¹ In that case, the creditors will remain unpaid. Unlimited liability hence does not entirely eliminate concerns about shareholder misappropriation of corporate assets. Yet it should reduce creditor incentives to monitor for such misconduct as compared to under limited liability.

While unlimited liability reduces the creditors' incentives to monitor the corporate management, it will increase their scope of monitoring because they now need to monitor the shareholders' personal wealth.¹¹² The precise magnitude of this increase, however, may be smaller than expected. Even if unlimited liability becomes the default liability rule, a creditor generally should determine the creditworthiness of a corporation based on its assets and operations. The shareholders' assets remain the shareholders' until and unless the corporation's assets fall short of its liabilities. These assets can only be reached after the creditor initiates some judgment collection proceedings against the shareholders. Some shareholders may be beyond the creditor's reach because of jurisdictional issues.¹¹³ This means that reaching for shareholder assets would be seen as an exceptional step even under unlimited liability, and that shareholder assets would be mainly viewed as backup assets for the corporation. Informed by this view of the relationship between corporate and shareholder assets, a creditor will, before extending a loan or trade credit to the corporation, compare the corporation's assets with its liabilities and to examine its cash flow. Once satisfied that the corporation has sufficient assets to cover its liabilities and sufficient cash flow to cover its debts as they fall due, the creditor will then check to make sure that shareholder assets are sufficient to cover any potential shortfall

if at all sophisticated, do not rely on the statutory capital cushions . . . [and] will bargain to obtain security interests or protective provisions in their loan agreements containing more effective restrictions on dividends and other distributions." Clark, *supra* note 28, at 557.

111. The shareholder may do so through the use of offshore accounts, trusts or other more sophisticated financial devices. See Lynn M. LoPucki, *The Death of Liability*, 106 YALE L.J. 1, 32-38 (1996).

112. Information about the shareholders' personal wealth will be more costly to obtain on a per unit basis than information about the corporation. This may be exacerbated by the fact that under unlimited liability, the shareholders will have incentives to shift their assets beyond the creditors' reach when the corporation approaches insolvency. Hansmann & Kraakman, *supra* note 4, at 1910.

113. The creditor may not be able to get a court to exercise personal jurisdiction over out-of-state shareholders. See Alexander, *supra* note 18, at 394-404; Meiners et al., *supra* note 4, at 363. Admittedly, this is likely to be a less serious concern for a close corporation, whose shareholders are less dispersed than those of a public corporation.

between corporate assets and liabilities.¹¹⁴ After this initial credit check process, the creditor will focus its monitoring on the corporation, with the knowledge that its loan or trade credit is backed up by a pool of shareholder assets. The creditor is unlikely to monitor the shareholders' assets closely.

Furthermore, it is important to recall the reason that a creditor monitors corporate assets. Take the example of a financial creditor: one main reason that a financial creditor monitors is because the corporation is required either by law or by the covenants in the loan agreement to preserve its assets for the corporation's creditors' benefit. The creditor monitors to ensure that the corporation complies with these requirements. In the event of violation, the creditor may bring suit to seek redress. The corollary is that if the corporation were not under any obligation to preserve its assets, the creditor would have much less reason to monitor. Even if the corporation were dissipating its assets, there would be nothing the creditor could do about it as long as the corporation is meeting its interest payments. Similarly, under unlimited liability, if the shareholders of a corporation are under no legal obligation to preserve their assets for the corporate creditors, the creditor will achieve little by monitoring the shareholders.

Current statutes do not impose any such obligation on the shareholders. This author does not propose any change in this regard even if unlimited liability were to be adopted. A financial creditor may conceivably impose covenants on the shareholders in its loan agreement with the corporation. But the creditor will not do so to all shareholders. It will target the shareholders with the deepest pockets under a joint liability rule or those with the largest shareholdings under a pro rata liability rule.¹¹⁵ Moreover, the creditor will only do so if the extra credit protection it can obtain from these covenants outweighs the costs of monitoring these shareholders. In short, a financial creditor will only choose to monitor a shareholder if it is economically efficient for it to do so. If experience with shareholder personal guarantees is any indication, such monitoring is likely to be rare. Under the present regime of limited liability, a financial creditor sometimes requires a shareholder to provide a personal guarantee. The creditor rarely imposes covenants on the shareholder or prohibits the shareholder from making use of his own assets as part of such a guarantee. As a result, financial creditors perform little monitoring of shareholder assets. If this is the case under creditor-constructed unlimited liability, there is no reason to think that it

114. The creditor will examine the shareholders' assets in the aggregate under a joint liability rule, under which any shareholder can be called upon to satisfy the corporation's total liabilities. Leebron, *supra* note 4, at 1578-1579. The examination will be more complicated under a pro rata liability rule, which would require the creditor to verify that each shareholder's assets are sufficient to cover his prorated share of the corporate contractual liabilities. *Id.*

115. It will also consider whether jurisdictional issues will pose an insurmountable obstacle to reaching for that shareholder's assets. If so, the creditor is unlikely to choose to monitor that shareholder. See Alexander, *supra* note 16, at 393-418 (discussing jurisdictional obstacles to implementing unlimited liability); Meiners et al., *supra* note 4, at 363.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

will be any different under a legislatively imposed unlimited liability regime. The likely lack of restrictions on shareholder dissipation of their personal assets means that contractual creditors are unlikely to engage in much monitoring of shareholder assets.

In sum, even after taking into account the presence of passive shareholders and the reduction in trade creditors' access costs as a result of their greater bargaining power under unlimited liability, shareholders as a whole should have the lowest information costs in a close corporation. This means that an economically efficient liability rule will shift default risks to the shareholders so that they will perform the bulk of monitoring. This is exactly what happens under unlimited liability. Under unlimited liability, shareholders will have greater incentives to monitor the corporate management, whereas creditors of all kinds will have fewer incentives to do the same. Moreover, for the various reasons suggested above, creditors will not monitor shareholder wealth in any significant manner. Therefore, a shift to unlimited liability is likely to result in a reduction in the firm-wide monitoring costs within a close corporation. Unlimited liability is an economically efficient rule for close corporations from a monitoring cost perspective.

C. Monitoring Costs in a Publicly Held Corporation

The argument for limited liability in a public corporation is largely similar to that for a closely held corporation. The efficiency of limited liability is asserted on the grounds that it lowers aggregate monitoring costs and shifts the incentives to monitor to creditors (especially financial creditors), which have lower information costs than shareholders. In the context of a publicly held corporation, the information cost advantage of financial creditors is more pronounced than in close corporations. With the exception of sophisticated institutional investors, shareholders in public corporations are passive investors who are unlikely to have much expertise in analyzing financial information.¹¹⁶ Therefore, it is argued that creditors are the preferred monitors of corporate management in a publicly held corporation. Limited liability is hence the economically efficient rule.

1. Information Costs of the Various Corporate Claimants in a Publicly Held Corporation

In a publicly held corporation, financial creditors come in a greater variety than they do in a close corporation. A public corporation can raise funds through bank loans, which come from financial institutions, or bond issuance. Corporate bondholders can be retail investors as well as sophisticated financial

¹¹⁶ Easterbrook & Fischel, *supra* note 4, at 100.

institutions, although the latter group accounts for the majority of bondholding.¹¹⁷ This greater variety of financial creditors will have bearing on the subsequent analysis about information and monitoring costs. A financial institution, whether in the capacity of a commercial lender or a bondholder or even shareholder, will have the lowest analysis costs among all investors. Its greater sophistication—it is likely to possess industry-specific expertise—allows it to analyze the information more cost-effectively. In fact, to the extent that monitoring requires information that is not publicly available, a financial institution will enjoy a substantial advantage in access costs. The larger size of its investment or lending gives it stronger bargaining power to demand information. Information costs for retail investors, whether in bonds or shares, will be higher in comparison as they lack the sophistication and access of information of financial institutions. Therefore, for a public corporation, the analysis about information costs can no longer be forced into the dichotomy of creditors and shareholders.¹¹⁸ A financial institution can be a commercial lender, bondholder, and shareholder at the same time.¹¹⁹ A retail investor can at least be the latter

117. Corporate bondholders generally tend to be sophisticated institutional investors.

118. Leebron argues that the information costs for shareholders are higher than creditors, and therefore that limited liability is the preferable rule for contractual liabilities. Leebron, *supra* note 4, at 1607. He observes that “[i]f, on the other hand, the risk is management fraud on contractual or financial creditors, then the consequence of unlimited liability would likely be to increase shareholder monitoring without any efficiency gains. It seems clear that the financial or contractual creditor is a better monitor in this case than a passive shareholder.” Leebron, *supra* note 4, at 1606. It is presumed that by a passive shareholder, Professor Leebron refers to a retail investor in shares who does not engage in active monitoring of the corporation. *Id.* at 1606. There is no denying that a financial creditor, especially an institutional one, will have lower information costs than an individual shareholder. However, there is no reason to assume that all shareholders are passive. As noted earlier, institutional investors straddle both shareholders and creditors. If the argument is that shareholders have higher information costs, it is unjustified to focus solely on passive retail shareholders. Moreover, there are retail investors investing in corporate bonds, hence qualifying as financial creditors. It is doubtful that their information costs would be lower than institutional shareholders. Thomas J. Chemmanur et al., *Institutional Investors and the Information Production Theory of Stock Splits*, 12 (October 2012), available at https://www2.bc.edu/~chemmanu/paper/Split_CHH_JFQA2.pdf. Therefore, Leebron’s argument oversimplifies the comparison of information costs between shareholders and creditors.

In fact, this oversimplification extends to his argument about the monitoring costs with respect to tort liabilities. He agrees that a shift to unlimited liability may increase the monitoring costs of shareholders. *Id.* at 1605-06. He argues, however, that “[e]ven if shareholders would increase monitoring of managers in order to control tort risk—perhaps through financial intermediaries—it is likely that this would be a positive development since it is not claimed that others, least of all potential tort victims, are in a better position to monitor the firm’s tort risks.” *Id.* at 1606. Potential tort victims arguably have the highest information costs. A comparison with them does not prove much. One group glaringly omitted by Leebron was the creditors. And there is no reason to assume that creditors are more costly monitors than shareholders regarding tort risks. Therefore, his defense of unlimited liability for tort claims based on monitoring costs is feeble at best.

119. Easterbrook & Fischel, *supra* note 4, at 100. Easterbrook and Fischel strangely assume that shareholders are individuals whereas creditors are banks and institutional investors, which seems to contradict real-life experience, where plenty of institutional investors are shareholders. They proceed to explain that institutional investors would gravitate toward debt rather than equity because of the lower coordination costs and the reduced free-riding of monitoring among creditors. *Id.* They assume that there are fewer creditors in each class and therefore each creditor will capture more of the benefits of monitoring. *Id.* It is unclear whether this is true. Corporate bondholders are certainly numerous, even though they may not necessarily be as numerous as shareholders. Moreover, as there is no reason to believe that

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

two. Instead, it is the identity of the investor rather than its classification as a shareholder or a financial creditor that matters for our analysis of information and monitoring costs.

What underscores the importance of the identity of the investor for our present purpose is the fact that the distinction between shareholders and creditors in a public corporation is not as clear-cut as it initially seems.¹²⁰ Shareholders and bondholders, indeed, both receive returns for their investments in the corporation, one in the form of dividends, and the other in the form of interest payments. They both bear risks for a loss of their investment, although to different extents. In theory, shareholders are the residual claimants of the corporation, and their upside is unlimited should the corporation's business be successful. In reality, shareholders are unlikely to see the day when the corporation's assets are sold off and they are paid for their residual claims. The main sources of returns for their investment are dividends and appreciation of share prices. This is not much different from the situation of a corporate bondholder. It is true that shareholders have to manage through election of directors. In practice, individual shareholders of a public corporation exercise negligible control over corporate decisions. Furthermore, once hybrid financial instruments such as convertible bonds¹²¹ enter the picture, the dichotomy between shareholders and bondholders breaks down. Professor Leebron has declared that "[t]here is no reason that inheres in the relationship of shareholders and long-term creditors that suggests one or the other should bear the risk of enterprise failure."¹²² Despite some differences in the focus of their monitoring, which will be explained below, the distinction between shareholders and financial creditors in a public corporation is not as important as is generally assumed. This further bolsters the suggestion that in a public corporation it is the identity of the investor that matters in our analysis. As mentioned earlier, institutional investors have lower information costs than individual investors.

The information costs of trade creditors of a publicly held corporation should not be significantly different from those of their counterparts of a close corporation. As compared to other corporate claimants in a public corporation, the information costs of trade creditors should be higher than those of the institutional investors and lower than those of the individual investors. Employees

monitoring by a creditor can only be free-ridden by a creditor, or vice versa. There are issues of common concern to both shareholders and creditors, the monitoring of which can be free-ridden by both. Therefore, apart from their erroneous factual premise, their theoretical explanation based on coordination costs is also problematic.

120. Leebron, *supra* note 4, at 1589-90.

121. Convertible bonds are "bond[s] that may be converted into another form of security, typically common stock, at the option of the holder at a specified price for a specified period of time." STEPHEN A. ROSS, RANDOLPH W. WESTERFIELD & JEFFREY JAFFE, *CORPORATE FINANCE* 871 (4th ed. 1996).

122. Leebron, *supra* note 4, at 1589. This statement was made in the context of a discussion about imposing unlimited shareholder liability for corporate torts. The possibility of exposing financial creditors themselves to corporate (tort) liabilities will not be explored in this Article.

in a public corporation have higher information costs than those in a closely held corporation. Analysis costs will be high for these employees for the same reasons as employees in a close corporation. Moreover, unlike his close corporation counterpart, an employee in a public corporation will not have easy access to information from within the firm. Unless the employee at issue is a very senior one, he or she is unlikely to have privileged access to corporate information that bears on default risk before such information becomes public knowledge. As far as information costs are concerned, the position of an employee is comparable to that of an individual investor, and is hence poorer than both an institutional investor and a trade creditor.

2. A Change of Liability Rule and the Monitoring Level in a Publicly Held Corporation

Similar to close corporations, one argument advanced against adopting unlimited liability for public corporations is that it will expand the scope of monitoring of all claimants to include shareholder wealth. As noted earlier, the argument that unlimited liability compels shareholders to monitor the wealth of other shareholders has been persuasively rejected in the literature. A pro rata unlimited liability rule will address this concern. As for creditor monitoring of shareholder wealth, the arguments made in the previous section in the context of a close corporation apply equally here. Creditors should see shareholder assets merely as backup and should be unlikely to engage in close monitoring of them. Creditors are also unlikely to monitor shareholder assets closely because there is little they can do to halt diversion of shareholder assets.¹²³ One major difference between close and public corporations in terms of creditor monitoring of shareholder wealth is the significantly greater number of shareholders involved in a public corporation. To the extent that the creditors engage in such monitoring, they will need to cast a much wider net in a public corporation than

123. It may be argued that with the potentially huge number of shareholders in a public corporation, monitoring of shareholder assets will be prohibitively costly, even if engaged with relatively low intensity. Hansmann & Kraakman, *supra* note 4, at 1906. To the extent that it is true, it will be ameliorated by the fact that the shareholders of a public corporation are likely to be more dispersed. Many of them will be beyond the jurisdictional reach of the plaintiffs, in which case the creditors will have little reason to monitor them. Moreover, if the number of shareholders that need to be monitored turns out to be substantial, creditors will inevitably have to strategize and focus on the larger shareholders. Monitoring costs may indeed be high if creditors attempt to monitor every single shareholder of a publicly held corporation. The reality is that this is unlikely to happen. Nor is it necessary. Take the example of a creditor that is owed \$1 million by a public corporation. There is a shareholder who owns 0.1% of the corporation's shares. If the costs of monitoring this particular shareholder for the duration of the loan exceed \$1000, the creditor will simply omit him from the monitoring list. Or assume that the monitoring costs are the same for all the shareholders, and equal \$5000. This creditor would only monitor shareholders with a shareholding of over 0.5%. Obviously the larger is the size of the credit, the greater is the number of shareholders that will be monitored. In fact, this kind of determination will not be confined to situations where the number of shareholders is large. It will be done in every instance of creditor monitoring of shareholder wealth. Therefore, the actual number of shareholders that need to be monitored will be substantially smaller than the entire shareholder pool.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

in a close corporation. The presence of large institutional investors as shareholders in public corporations, which are likely to own the largest shareholdings, will simplify this monitoring task for the creditors somewhat. Given the prominence and general availability of information about these institutional investors, creditors need not expend considerable costs to obtain information about them. Furthermore, many of them are already subject to government regulation that will largely obviate the need for creditor monitoring. Pension funds, mutual funds, and other financial institutions, which are subject to elaborate and rigorous government regulation, are unlikely to require much creditor monitoring. In the end, the magnitude of shareholders in a public corporation means that a shift to unlimited liability will likely result in a considerable increase in monitoring costs due to the need of creditor monitoring of shareholder wealth.

The discussion about changes in incentives to monitor the corporate management will focus on the dynamics between shareholders and financial creditors first. Following a change of liability rule, the incentive to monitor the corporate managers will shift from financial creditors to shareholders.¹²⁴ The analysis must also consider the relative information costs of these two claimant groups. As mentioned earlier, the comparison should not be between shareholders and financial creditors but between institutional and individual investors. Institutional investors have lower information costs than individual investors. To the extent that a shift to unlimited liability results in more monitoring being done by individual investors, aggregate monitoring costs will rise. Conversely, aggregate monitoring costs will fall if more monitoring is done by institutional investors instead. There are generally more individual investors in shares than in corporate bonds.¹²⁵ Therefore, it may seem that a shift to unlimited liability would result in more monitoring by individual investors, and hence higher aggregate monitoring costs. However, this conclusion is tempered by the fact that individual investors may not engage in much monitoring at all because of free-riding.

Whatever effect a change of liability rule may have on an individual investor's incentive to monitor will be blunted by free-riding. Individual investors are prone to free ride on the institutional investors' monitoring effort.¹²⁶ Regardless of whether an individual investor holds shares or bonds, the presence

124. Easterbrook & Fischel, *supra* note 4, at 99. Meiners et al. disagree, however, and argue that investors will not engage in monitoring because all they have to do is to look at the stock price, which captures the collective expectations of investors with respect to publicly traded securities. Meiners et al., *supra* note 4, at 363. This argument is clearly flawed because if no investors monitor, their expectations about future stock prices would be uninformed and wrong. There is no reason to expect the market price to be accurate.

125. BLAIR, *supra* note 25, at 148 (noting that financial institutions generally hold more than 80% of corporate bonds and almost half of corporate equities).

126. MARK J. ROE, *STRONG MANAGERS WEAK OWNERS* 9-12 (1996).

of financial institutions in his class of investors will induce him to free ride on the monitoring by these institutions.¹²⁷ This is true regardless of the liability regime. Even if a shift to unlimited liability increases individual shareholders' incentives to monitor the corporate managers, the increase will be negligible due to this free riding effect. This is especially so given that the prorated judgment that may be collected from an individual shareholder in the event of corporate default is likely to be outweighed by the collection enforcement costs.¹²⁸ The likelihood of liability exposure for an individual shareholder may be too low to justify increased monitoring. Moreover, free-riding need not be confined to within the same class of investors. Even though shareholders and financial creditors do not share precisely the same scope of monitoring,¹²⁹ they are similarly concerned about the general financial health of the corporation. As long as there is some overlap in their scope of monitoring, some inter-group free riding will occur. In light of such intra-group and inter-group free riding, individual investors of either shares or bonds will have few incentives to monitor.¹³⁰ The analysis should thus focus on institutional investors, both as shareholders and financial creditors.

Institutional shareholders will have increased incentives to monitor following a shift to unlimited liability. This increase will be tempered by the fact that they already monitor the corporation for its performance and profitability. Meanwhile, the availability of a greater pool of assets to satisfy their claims means that institutional financial creditors will reduce their monitoring of corporate managers. It is not entirely clear whether the increase in monitoring level by institutional shareholders will be outweighed by the decrease in monitoring level by sophisticated financial creditors. There has been some discussion in the literature about whether the increase in shareholder incentive will exactly offset the decrease in creditor incentive after a shift to unlimited liability.¹³¹

127. It may be argued that institutional and individual investors may have different interests in their monitoring. See Almazan, Andres, Jay C. Hartzell, and Laura T. Starks, *Conflicts of interest and monitoring costs of institutional investors: Evidence from executive compensation*, Working Paper, University of Texas at Austin, 1 (2004), available at <http://www.haas.berkeley.edu/groups/finance/almazanhartzellstarks%20may%2004.pdf>. Both types of investors, however, should be concerned about the financial viability of the corporation. At least as far as creditor monitoring is concerned, the divergence of interests between these two groups should be insignificant.

128. Leebron, *supra* note 4, at 1610-11.

129. For example, bondholders and financial creditors generally are concerned about the corporation's incurrence of new debts and compliance with contractual covenants. The latter, at least, is unlikely to concern the shareholders.

130. Given that there are generally fewer individual investors in corporate bonds than in shares, the prevalence of free-riding will have a greater impact on the aggregate monitoring costs of shareholders than financial creditors. United States Census Bureau, Banking, Finance, & Insurance: Stocks, Bonds Equity Ownership (2012), available at http://www.census.gov/compendia/statab/cats/banking_finance_insurance/stocks_and_bonds_equity_ownership.html (in 2010, the total holdings in equities and corporate bonds by the household sector were \$8,513.6 billion and \$1,918.6 billion respectively).

131. Leebron, *supra* note 4, at 1606-07. Easterbrook and Fischel are actually concerned about the converse of the problem—whether under limited liability, the increase in creditor incentive to monitor will exactly offset the decrease in shareholder incentive to monitor. Easterbrook & Fischel, *supra* note 4,

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

Easterbrook and Fischel posit that exact offsetting will not occur because the shareholders' incentive to monitor is stronger in the first place given their status as residual claimants. Whatever change in the shareholders' incentives in response to a change in liability rule will be greater than the corresponding change in the creditor incentives. Aggregate monitoring costs will thus be higher under unlimited liability.

It is not clear that this will necessarily be the case. Priority of claims in the event of bankruptcy is only one determinant of incentives to monitor. Investors invest to make profit, not to minimize losses.¹³² Regardless of the priority of their claims in bankruptcy, shareholders will monitor the corporation for its profitability. This monitoring will be ongoing, and will encompass the monitoring effort to minimize losses. Therefore, the fact that shareholders are residual claimants does not mean that they have greater incentives than financial creditors to monitor the corporation. These two groups merely monitor different aspects of the corporation. Shareholders focus more on the profitability of corporate investments. Financial creditors pay closer attention to the cash flow and the solvency of the corporation. Posner, in fact, argued that decrease in creditor monitoring should outweigh increase in shareholder monitoring.¹³³ In the end, it is probably impossible to arrive at any *a priori* conclusion about the change in overall monitoring level of institutional investors as a whole after a shift to unlimited liability. Given that the same institutional investors can be both shareholders and financial creditors, there is no reason to expect that the information costs of institutional shareholders will differ from those of institutional financial creditors. Therefore, the change in overall monitoring costs for the institutional investors following an adoption to unlimited liability is indeterminate.

Similar to their counterparts in a close corporation, trade creditors of a public corporation subject to unlimited liability will have weaker incentives to monitor the corporate management because of their possible recourse to shareholder assets. And similar to financial creditors of a public corporation, trade creditors will not engage in significant monitoring of shareholder wealth, for the same reasons that were given above. In fact, trade creditors are likely to have even weaker incentives than financial creditors to monitor shareholder wealth because of the short-term nature of their credit. Therefore, the monitoring costs for trade creditors should be lower under unlimited liability. The analysis is largely the same for employees.

After this somewhat convoluted analysis, what remains to be determined is whether firm-wide monitoring costs will decrease under unlimited liability. We

at 99-100. They argue that exact offsetting will not materialize because shareholders, as residual claimants, will have a greater incentive to monitor *a priori*. *Id.* at 99. Therefore, the decrease in their incentive should be larger than the creditors' corresponding increase. *Id.*

132. Presser, *supra* note 23, at 159.

133. Posner, *supra* note 3, at 509.

have concluded that monitoring costs are likely to be lower for trade creditors and employees, and that there is unlikely to be substantial monitoring of shareholder wealth, at least not of the institutional and other regulated investors. What we were unable to conclude was whether the overall monitoring costs of shareholders and financial creditors would fall. This is largely due to the overlap of institutional and individual investors in both groups. It has been suggested that financial institutions account for 80% of corporate bond holdings and 50% of shareholdings. This may be interpreted as evidence that unlimited liability is inefficient, as it will shift the bulk of monitoring to shareholders that contain more individual investors with higher information costs. However, as suggested earlier, most individual investors are likely to free-ride the monitoring effort of institutional investors. Therefore, it is not clear that shifting monitoring to shareholders will necessarily raise the aggregate monitoring costs. In light of this indeterminacy about the changes of monitoring costs of shareholders and financial creditors, we are unable to determine whether the adoption of unlimited liability will reduce firm-wide monitoring costs. Adding to this indeterminacy is the fact that there will likely be some increase in monitoring costs by way of heightened creditor monitoring of shareholder wealth. This means that unlimited liability is unlikely to be an efficient rule from a monitoring cost perspective for publicly held corporations.

D. Monitoring Costs in Parent-Subsidiary Relationships

For the purpose of our analysis, subsidiaries are in many ways no different from the general corporation that has been analyzed thus far. The two main differences are that subsidiaries must have a controlling shareholder, and this shareholder must be a corporation. For example, a wholly owned subsidiary is merely a corporation with a single corporate shareholder. A partially owned subsidiary is a corporation with a controlling shareholder and other shareholders. Commentators have long noted that there is a stronger argument for applying unlimited liability to a corporate shareholder.¹³⁴ Therefore, the fact that the controlling shareholder is a corporation rather than an individual should not alter the outcome of the foregoing analysis. If anything, it should bolster the argument for applying unlimited liability. How the existence of a controlling shareholder affects monitoring costs requires a more detailed explanation.

Analysis of monitoring costs in parent-subsidiary relationships can be organized according to whether the subsidiary is wholly owned or partially owned, and if it is partially owned, whether it is publicly held or only privately owned. The discussion begins with wholly owned subsidiaries. As mentioned earlier, they are merely a variation of the single-shareholder corporations. It should be

¹³⁴ Easterbrook & Fischel, *supra* note 4, at 111; Landers, *supra* note 3, at 619; Krendl & Krendl, *supra* note 28, at 43.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

obvious that the corporate parent has lower information costs than any contractual creditor. Even for sophisticated financial creditors, such as institutional investors and lenders, access to information is likely to be more limited and costly than that of a corporate parent, which will have practically unfettered access to information from the subsidiary. Since the parent completely controls the subsidiary, it probably makes little sense to speak of shareholder monitoring of the corporate management. The same entity both monitors and is being monitored.

In terms of incentives to monitor, a change to unlimited liability in a wholly owned subsidiary will shift the incentives to the corporate parent, which would be efficient given the parent's information cost advantage. As for the scope of monitoring, a shift to unlimited liability will require creditors to monitor shareholder wealth. It was previously demonstrated that creditor monitoring of shareholder wealth is less onerous and costly than is generally assumed. In the context of a wholly owned subsidiary, this monitoring should be even less burdensome because there is only one entity for the creditors to monitor. The increase in monitoring costs resulting from this additional monitoring should be outweighed by savings from the reduced incentives of the creditors to monitor corporate management. On the whole, a shift to unlimited liability should result in lower firm-wide monitoring costs for wholly owned subsidiaries.

A partially owned subsidiary with private shareholders is for our purpose but a variation of a closely held corporation. The only meaningful difference is the existence of a controlling shareholder. For the purpose of monitoring cost analysis, the information cost advantages of a controlling shareholder over the contractual creditors should largely remain the same even though its control is no longer complete, as in the case of the corporate parent of a wholly owned subsidiary. The less-than-complete control should not undermine these advantages. The controlling shareholder of a partially owned subsidiary should still have unrivalled access to information. Moreover, as in the case of a wholly owned subsidiary, there should be little practical need for the controlling shareholder of a partially owned subsidiary to monitor the management, given its control of the corporation.

The remaining shareholders will have less ready access to information than does the controlling shareholder. Their information costs could perhaps be higher than those of the financial creditors, but should remain lower than those of the trade creditors and the employees. A shift to unlimited liability obviously will give these non-controlling shareholders greater incentives to monitor the management given that they do not control corporate decisions but are exposed to unlimited liability. Under pro rata unlimited liability, they will not need to monitor other shareholders' wealth. Creditor monitoring of shareholder wealth should be no different from the situation of a general closely held corporation. Such monitoring may in fact be made easier for the creditors by the existence

of a large shareholder. Creditors may focus their monitoring on the controlling shareholder, who alone will be responsible for a large portion of any potential shareholder liability claim, to economize on monitoring costs. In sum, the foregoing analysis again suggests that firm-wide monitoring costs will be lower under unlimited liability. To the extent that financial creditors have lower information costs than the non-controlling shareholders, there is perhaps a theoretical argument for exempting non-controlling shareholders from shareholder liability for the claims of financial creditors. Such an exemption may perhaps reduce monitoring costs. However, such an exemption will introduce excessive complication to the general rule. To avoid needless complication, it is best to apply a uniform rule for all shareholders and creditors.

Again, a public partially owned subsidiary mainly differs from a public held corporation by the existence of a controlling shareholder. In the case of a general public corporation, it was concluded earlier that the consequence in terms of monitoring costs following a shift to unlimited liability is indeterminate. This is due to the existence of institutional and individual investors within the ranks of both shareholders and financial creditors. This indeterminacy is alleviated in the case of a public partially owned subsidiary because one shareholder accounts for a large block of the shares. This shareholder will need to undertake little monitoring because of its control of the firm. This control also gives this shareholder a distinct information cost advantage over the financial creditors. This means that shifting the incentives to monitor corporate management to the shareholders will most likely result in a reduction in firm-wide monitoring costs. However, a shift to unlimited liability will still require creditors to monitor shareholder wealth. In the case of a public partially owned subsidiary, the presence of a controlling shareholder will substantially lessen the burden of this monitoring. Yet the sheer number of shareholders in a public corporation still leaves open the possibility that creditors must incur substantial costs to monitor shareholder wealth. The monitoring cost consequence of a shift to unlimited liability to public partially owned subsidiaries is thus still uncertain. Therefore, from a monitoring cost perspective, the argument for introducing unlimited liability is not convincingly established.

In sum, from a monitoring cost perspective, unlimited liability would be efficient for wholly owned subsidiaries and private partially owned subsidiaries, but not for public partially owned subsidiaries.

V. RISK ALLOCATION

The fundamental premise underpinning the examination of liability rules from a risk allocation perspective is that more corporate risks should be allocated to the claimant group with superior risk-bearing abilities. These abilities are in turn determined by the claimants' ability to diversify their portfolio. The

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

more capable is a particular claimant of diversifying, the greater are its risk-bearing abilities. Ability to diversify is contingent on a variety of factors, including the size of the risk to be diversified in relation to the remainder of the portfolio and access to funding. If shareholders turn out to be superior risk bearers, unlimited liability would be the efficient rule. If creditors were superior, then unlimited liability would be inefficient. The analysis below will begin with publicly held corporations, which have received more attention from commentators than closely held corporations.

A. Risk Allocation in a Publicly Held Corporation

There is little consensus in the literature on whether shareholders or creditors are better risk bearers in a public corporation. Posner argues that the prevalence of limited liability suggests that creditors are better risk bearers than shareholders.¹³⁵ This was contradicted by Easterbrook and Fischel, who argued that the fact that shareholders are the residual claimants of a corporation suggests otherwise.¹³⁶ Residual claimants, by definition, are the least risk-averse claimants of a corporation.¹³⁷ Both arguments are flawed. Posner's argument fails to take into account the inertia of a legal rule, especially one for which there is such a powerful constituency. Various commentators have recounted the historical origin of limited liability, focusing on how it was a concession made in the nineteenth century to industrialists to promote economic development of the nation.¹³⁸ Once a legal rule is established, it takes on tremendous inertia and is difficult to dislodge. Therefore, the prevalence of the limited liability rule on its own does not support the inference that shareholders are the most efficient risk bearers. In defense of Posner's argument, one may assert that creditors of a close corporation often negotiate for personal guarantees by the shareholders, which almost never occurs in a public corporation. This must suggest that creditors are better risk bearers in a public corporation. However, the reason for the absence of shareholder personal guarantees in a public corporation is likely to be the substantial transaction costs involved in obtaining

135. Posner, *supra* note 3, at 509. He posits that, "risk can often be borne more cheaply by creditors than by shareholders" because limited liability "is apparently highly efficient, judging by its prevalence." *Id.*

136. Easterbrook & Fischel, *supra* note 4, at 91.

137. The Supreme Court in *Anderson v. Abbott* seemed to have endorsed the view that shareholder were better risk bearers in a public corporation. 321 U.S. 349, 360-61, 363 (1944). In that case, a national bank attempted to insulate its shareholders from statutory liability by interposing a bank holding company between the shareholders and the bank. *Id.* at 352. The Court stated that the shareholders of the bank holding company "were given a fair picture of the nature of the enterprise which Banco [bank holding company] was about to launch" and that these shareholders "continued in that business through Banco which as a going concern lacked assets adequate as a reserve against contingent statutory liability. Its stockholders were in point of substance the only source of funds available to satisfy the assessments." *Id.* at 360-61, 363.

138. Blumberg, *supra* note 23, at 592-93.

them. It should not be construed as evidence of the creditors' superior risk-bearing abilities.

The flaw in Easterbrook and Fischel's argument is that it fails to take into account the diversification possibilities of a shareholder. Even though a shareholder is the residual claimant, he can minimize or even eliminate non-systematic risks unique to each corporation through diversification. Therefore, it would be incomplete to determine a shareholder's risk-bearing ability solely based on his holding of one corporation's shares. This ability can only be assessed in light of his entire portfolio. In fact, diversification is not limited to shareholders. It is also available to financial creditors. Corporate bondholders can diversify just as well as an equity investor. Even bank lenders can construct a diversified portfolio of bank loans, as no doubt most do. A bank lender may do so by lending to a diverse range of industries, some cyclical and some counter-cyclical. Therefore, again, a financial creditor's risk-bearing ability should not be evaluated solely in light of its loan to a particular corporation.

Unlike the previous discussion about monitoring, the distinction between institutional and individual investors is less important for diversification. While it is true that institutional investors have greater access to funding and the sheer size of their portfolios will allow them more room for diversification, the variety of financial products available to individual investors nowadays is such that even these investors should have little difficulty in constructing a diversified portfolio. Given the practically infinite variety of portfolios held by shareholders and financial creditors, it should be obvious that it is exceedingly difficult to make any *a priori* conclusions about the comparative risk-bearing abilities of shareholders and financial creditors.¹³⁹

An employee is much less capable of diversifying his risk exposure to the corporate employer than a shareholder. Given the importance of wage income in an employee's portfolio, there is unlikely to be any kind of diversification that can adequately address employer default risks. In fact, many employees are likely to be risk averse, and may prefer to be paid in full *ex post* than receiving risk-adjusted compensation *ex ante*. A trade creditor's ability to diversify is more difficult to generalize. The possibility of diversification depends on the particular trade creditor at issue. Some trade creditors may be so reliant on one or a handful of customers that their ability to diversify, and hence risk-bearing ability will be low. Some may supply their products to a sufficient number of customers so that none of them will account for a large part of the supplier's revenue. For example, an iron ore producer's ability to diversify is likely to be limited since iron ore can only be sold to a limited range of buyers, such as

139. Leebron agrees that "[t]here is no reason that inheres in the relationship of shareholders and long-term creditors that suggests one or the other should bear the risk of enterprise failure." Leebron, *supra* note 4, at 1589.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

steel producers. Meanwhile, a stationery supplier is likely to have considerably greater ability to diversify. In sum, we are unable to determine the relative risk-bearing abilities of shareholders, financial creditors and trade creditors. Shareholders, however, are superior risk bearers to employees.

The fact that unlimited liability shifts default risks to lower-cost risk bearers does not conclusively establish its superiority from a risk allocation perspective. Apart from allocating risks among the various corporate claimants, the choice of liability rule may change the aggregate risks of a corporation. It has been argued that limited liability reduces the overall enterprise risk and therefore increases the value of a corporation by putting a cap on the maximum losses of all corporate claimants, and that it shifts the risk of “a bounded loss” from shareholders to financial creditors.¹⁴⁰ This argument is unsound because limited liability does not in fact eliminate corporate risks and losses.¹⁴¹ They are merely shifted elsewhere.¹⁴² In the case of tort liabilities, they are borne by tort victims. In the case of contractual liabilities, the risks are often shifted to the contractual creditors. Limited liability may reduce overall business risks and increase total enterprise value,¹⁴³ but only at the expense of outside creditors. This is hardly a good reason to endorse limited liability.

Commentators have further argued that limited liability is superior from a risk allocation perspective because it facilitates the emergence of corporate debts.¹⁴⁴ Under unlimited liability, shareholders will place very strict limits on a corporation’s ability to borrow in light of the substantial risks of unapproved additional borrowing.¹⁴⁵ They will prefer to undertake the leverage themselves as opposed to allowing the corporation to do so.¹⁴⁶ The validity of this argument crucially depends on the shareholders’ ability to replicate the corporate leverage, and it is unlikely that they will be able to do that. A shareholder’s ability to replicate the corporate leverage will be limited by his creditworthiness.¹⁴⁷ He may not be able to borrow enough to replicate the corporate lever-

140. *Id.* at 1590-95.

141. *Id.* at 1593-94. Leebron himself acknowledges this point. *Id.*

142. *Id.* Leebron argues that risks in contractual liabilities are partially shifted to future financial creditors, which for some reason he finds acceptable. *Id.* This is inconsistent with his condemnation of the externalization of corporate tort risks. *Id.* at 1584, 1615, n.153, 1617, n.157. Both forms of risk externalization are inefficient. Risks in contractual liabilities are in fact shifted not only to future financial creditors, but also to current ones, especially trade creditors and employees. While future financial creditors may be sophisticated enough to protect themselves, there seems to be no defensible grounds for shifting corporate risks to trade creditors and employees.

143. *Id.* at 1594. This, to Leebron, is why limited liability is superior to unlimited liability for contractual claims.

144. *Id.* at 1592.

145. *Id.* at 1591.

146. *Id.* Leebron believes that “[u]nder a pro rata [unlimited liability] rule, the shareholder’s liability would arguably be exactly the same as under shareholder leverage and corporate leverage.” *Id.*

147. Leebron does not discuss the relevance of shareholder creditworthiness as a limitation on shareholders’ ability to replicate the corporate leverage. He focuses on the transactions costs for replicating the same leverage by numerous shareholders, and argues that these costs would be very high. *Id.* at

age at all, or only at very high costs. Moreover, shareholders will accept additional corporate borrowing under an unlimited liability regime. What shareholders fear is not additional borrowing as such, but additional borrowing for unprofitable business opportunities. If a business venture is profitable, the shareholders will be happy to let the corporation borrow to invest in it. One may argue that shareholders would prefer the corporation to invest in the new venture with equity capital, which would eliminate the need to borrow. Yet this new equity capital must come from either existing or new shareholders. If the existing shareholders did not invest new capital into the corporation, their residual claims would be diluted by new shares. To avoid claim dilution, which the shareholders would likely want to do because of the profitable business opportunity in the horizon, they must raise funds on their own. Some of them will fail to do so due to credit constraints, and would prefer the corporation to undertake the borrowing instead. Therefore, the emergence of corporate debts is not contingent on limited liability. Existing shareholders will let the corporation borrow even under unlimited liability, while exercising tighter monitoring on the corporate managers.

Despite our rejection of these two risk allocation-related defenses of limited liability, the fact remains that we were unable to determine whether shareholders or creditors are superior risk bearers in a publicly held corporation. This prevents us from concluding whether unlimited liability will be efficient for public corporations from a risk allocation perspective.

B. Risk Allocation in a Closely Held Corporation

As in the case of publicly held corporations, the inquiry is whether shareholders or creditors are superior risk bearers. The risk-bearing abilities of creditors are unlikely to be substantially different between a public corporation and a private corporation. Financial creditors such as bank lenders should continue to be able to diversify easily.¹⁴⁸ The indeterminacy in the risk-bearing abilities of trade creditors as a group remains. Employees in a closed corporation are unlikely to exhibit different risk-bearing abilities from their public corporation counterparts.

One difference between public and close corporations is that the latter may have individual lenders. Depending on the size of their loans, individual lenders will have considerably greater difficulty in achieving effective diversification. As they are not commercial lenders, individual lenders are unlikely to have access to borrowers from a wide range of industries to allow them to diversify

1590. For example, replicating corporate leverage of a certain amount by 1,000 shareholders would entail repeating the same transaction 1,000 times.

148. Diversification should be more easily achieved with respect to loans to close corporations because these loans will most probably be smaller than those to public corporations.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

their loan portfolios. Nor are they likely to have the capital to lend to a sufficient number of firms for diversification to be effective. Of course, diversification need not be achieved through lending to other firms. It may be executed with other financial instruments. To the extent that their loans to close corporations account for a large portion of their portfolios, effective diversification will be difficult to achieve.

Given the significant disparities with their counterparts in a public corporation, the risk-bearing abilities of shareholders in a close corporation will require a different analysis. The conclusion will again depend on the size of their shareholding in relation to their overall investment portfolios. For an active shareholder who manages and has invested much of his personal wealth into a business venture,¹⁴⁹ it will be difficult for him to diversify away his risk exposure to the corporation.¹⁵⁰ However, his risk exposure is mitigated by his control over the corporation. This gives him the power to decide whether to incur new contractual liabilities.¹⁵¹ A passive shareholder will not enjoy this advantage. For a passive shareholder whose investment only accounts for a small part of his personal wealth, diversification should be easy. Yet, a passive shareholder's investment need not be small. He can invest much of his personal wealth into a close corporation while entrusting his friends or family members with management. Effective diversification for such an investor would be difficult. However, the equity investment of a passive investor in a close corporation will be likely smaller than that of a controlling shareholder. The lack of control over corporate decisions will be offset by the greater diversification ability gained from the smaller size of its investment. The risk-bearing abilities of a passive shareholder are unlikely to be significantly different from that of an active shareholder.

On balance, shareholders in a close corporation should be superior risk bearers to creditors. If the focus were on shareholders and financial creditors only, it would be difficult to draw concrete conclusions. Bank lenders are clearly efficient risk-bearers. Individual lenders, however, may not be as efficient. Active shareholders are likely to have invested a substantial portion of their wealth in the corporation. Yet their risk exposure is mitigated by their control of the business. Passive shareholders' ability to diversify defies generalization. The same is true of trade creditors. What tips the balance are the employees

149. See Leebron, *supra* note 4, at 1628 ("Many individuals who start a company in fact invest everything in it, borrowing to their capacity on a personal level to finance the investment.").

150. See *id.* ("But the effect of unlimited liability of the owners of close corporations to significantly diversify is likely to be far greater than on portfolio investors. Unlike the passive investor holding shares of large publicly held firms, even pro rata unlimited liability for one-person and closely held corporations might destroy the ability to achieve an investment portfolio adequately diversified against specific risk.")

151. This is different from tort liabilities, the incurrance of which the shareholder-manager does not completely control. A tort may happen regardless of the precaution undertaken. Meanwhile, a contractual liability will not be incurred unless the corporate managers consent to it.

who will have great difficulty diversifying away their risk exposure to their employer. They are also likely to be risk averse. For states, such as New York, that provide shareholder liability for unpaid salaries, the argument for introducing unlimited liability would be weaker. For states without such provisions, unlimited liability would seem to be the economically efficient rule.¹⁵²

C. Risk Allocation in Parent-Subsidiary Relationships

The most important difference between subsidiaries and the general close and public corporations that has been examined so far is again the existence of a controlling shareholder. This may require a slightly different analysis as far as risk allocation is concerned. Risk allocation in parent-subsidiary relationships can be organized according to whether the subsidiary is wholly owned or partially owned, and if it is partially owned, whether it is publicly held or only privately owned. The discussion begins with wholly owned subsidiaries. It may seem that the corporate parent of a wholly owned subsidiary would have the least ability to diversify away risks.¹⁵³ This may then lead one to conclude that the optimal rule from a risk allocation perspective is limited liability. This argument is incomplete for two reasons. First, while this argument may be true for an individual shareholder, it is most probably untrue for the parent of a *bona fide* corporate group, which has considerable ability to diversify its portfolio. In many instances, the *raison d'être* of corporate groups or conglomerates is diversification. Therefore, the corporate parent of a subsidiary is likely to have no weaker ability to diversify than any outside creditors. Second, and more important, the corporate parent has complete control over the subsidiary, and hence can effectively manage its risk exposure to the subsidiary. Therefore, a corporate parent of a wholly owned subsidiary should be no worse in risk-bearing abilities than the subsidiary's contractual creditors.

The risk-bearing abilities of the controlling shareholder should be similar regardless of whether the subsidiary is wholly or partially owned. The main difference between these two types of subsidiaries from a risk allocation perspective is the existence of non-controlling shareholders. The risk-bearing abilities of the non-controlling shareholders in a subsidiary should be no different from the shareholders of general close and public corporations. There is no reason to assume that there is any systematic difference in the risk-bearing abilities of shareholders simply because the firm at issue is a subsidiary. We concluded earlier that shareholders of a close corporation should have greater risk-bearing abilities than its creditors, and that the comparison within a publicly held corporation is indeterminate. This supports the conclusion that unlimited liability

152. This conclusion is valid provided that those states do not follow New York's example and institute shareholder liability for unpaid salaries only.

153. See Leebron, *supra* note 4, at 1628.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

is efficient from a risk allocation perspective for wholly owned subsidiaries and private partially owned subsidiaries. Limited liability should be maintained for public partially owned subsidiaries.

VI. INSURANCE AND SHAREHOLDER LIABILITY RULES

A number of insurance-related defenses have been offered for limited liability.¹⁵⁴ These arguments generally proceed on the basis that however the liability rules shift the residual default risks, the risk-bearing party can always purchase insurance to cover those risks if it does not wish to bear them. Limited liability is effectively a shareholder liability insurance sold by creditors to shareholders. With a functioning insurance market, the shareholders should be indifferent about purchasing this insurance from either the insurer or the creditors. The fact that most shareholders purchase their insurance from the creditors must mean that creditors are superior providers of liability insurance. From the creditors' perspective, they should be equally indifferent between unlimited liability and limited liability plus shareholder liability insurance purchased by the corporation. In both cases the creditors will be fully compensated. And, if the corporation is unwilling or unable to purchase insurance coverage, the creditors can do it themselves. They can transfer part (or all) of the premium to the corporation by charging a higher rate of return for their credit.¹⁵⁵ If these arguments were valid, then the considerations raised in the previous Section about risk allocation would carry less weight. A corporate claimant's ability to diversify would be less important in determining its suitability for risk bearing. It can always purchase insurance to cover the risks that it cannot diversify.

A. Inferiority of Creditor-Provided Shareholder Liability Insurance

The first insurance-based defense for limited liability raised in the previous paragraph is that creditors are superior providers of liability insurance to insurers. This somewhat counter-intuitive argument proceeds as follows. Limited liability is effectively a liability insurance sold by creditors to shareholders.¹⁵⁶ In an efficient market where transaction costs are negligible,¹⁵⁷ shareholders

154. These arguments again do not differ significantly between close and public corporations. The subsequent analysis will focus on publicly held corporations, even though the results are equally applicable to close corporations.

155. If the corporation purchased the insurance itself, it would do the same and negotiate for a lower interest rate so as to transfer part of the insurance costs back to the creditors.

156. Easterbrook & Fischel, *supra* note 4, at 102.

157. There is, of course, no reason to assume that transaction costs are negligible. It will take time and resources for the corporation to find an insurer willing to provide coverage. The two parties must negotiate the scope of coverage and the premium. The insurer will need to incur substantial costs to ascertain the extent of risks of the corporation. This will be particularly costly for close corporations, on which little information is publicly available. The important question is whether transaction costs will be higher or lower when the insurance is purchased from the insurer as opposed to the creditors. This will be discussed *infra*.

will always purchase insurance from the lowest-cost provider.¹⁵⁸ The choice of liability rule does not matter because if it is cheaper to purchase liability insurance from an insurer than from the creditors, the shareholders will accede to unlimited liability and obtain coverage from the insurer instead.¹⁵⁹ From the shareholders' perspective, it matters little from whom they purchase the insurance. Therefore, the fact that insurer-issued shareholder liability insurance is not frequently observed in real life suggests that limited liability is a superior rule.¹⁶⁰

This line of argument erroneously assumes that limited liability and unlimited liability with insurer-issued liability insurance are completely fungible from a creditor bargaining perspective, even though it may be so from a shareholder's perspective. The shareholders have few incentives to accede to unlimited liability and purchase liability insurance because making such a purchase would entail substantial transaction costs, which will be saved if limited liability is adhered to. Shareholders will therefore insist on limited liability unless being pressured by a creditor to forego it. As argued earlier, given that limited liability is the default rule, it will be much costlier for a creditor, especially a trade creditor and an employee, to negotiate for unlimited liability from a corporation. Therefore, the fact that unlimited liability with insurer-issued liability insurance is rarely observed does not demonstrate the efficiency of limited liability. It merely reflects the difficulty for most creditors to obtain unlimited liability from the shareholders.

It is not even obvious that the various types of creditors are better providers of liability insurance than insurers.¹⁶¹ This is in some ways an extension of the previous discussions about the comparative information costs of the various creditor groups.¹⁶² The one difference is that instead of being compared to shareholders, now the comparison is with insurers. An insurer's information costs are likely to be similar to those of a sophisticated financial creditor. Both wield significant bargaining power vis-à-vis the corporation and should be able

158. Easterbrook & Fischel, *supra* note 4, at 102.

159. *See id.*

160. *See id.*

161. The ensuing discussion will focus on public corporations, even though the analysis will not be significantly different for closely held corporations.

162. There is one crucial difference between the ensuing discussion involving insurers and the previous comparison between shareholders and creditors. Under the previous discussion, the goal was to determine whether limited liability or unlimited liability is superior from a transaction cost perspective. Under unlimited liability, creditors would need to investigate the shareholders' personal wealth. In the ensuing comparison between insurers and creditors, the goal is to determine which group is the more cost-effective provider of liability insurance. The creditors will not be investigating the shareholders' personal wealth because creditors will only have recourse to corporate assets under limited liability. Nor will insurers be investigating shareholders' personal wealth because insurers are only concerned about the probability and magnitude of the payout, which does not depend on shareholder wealth. Shareholder wealth is relevant to creditors because creditors recover from shareholders under unlimited liability should corporate assets prove insufficient. Insurers are not interested in shareholder wealth because obviously they do not recover from the shareholders.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

to obtain information from the corporation at relatively low costs. The corporation will have incentives to withhold unfavorable information from insurers and financial creditors. However, there is no reason to assume *a priori* that the incentives are higher with respect to either group. Their monitoring level is unlikely to differ significantly either. There is hence no reason to prefer financial creditors to insurers as providers of liability insurance, which means that limited liability is no more efficient than unlimited liability with insurance coverage as far as financial creditors are concerned.

Once trade creditors and employees are taken into account, it is clear that insurers are better providers of liability insurance than creditors as a group. For trade creditors and employees, their constrained ability to demand for a higher return for increased risks as compared to insurers means that they are not optimal providers of liability insurance. Reliance on trade creditors and employees as providers of liability insurance will result in the under-pricing of risks, which will encourage the corporation to take on riskier projects. In terms of information costs, an insurer should be able to use its superior bargaining power to obtain information from the corporation at lower costs than a trade creditor or an employee. However, a trade creditor and an employee also enjoy certain advantages over an insurer. Both are likely to be in contact with the corporation more frequently than the insurer.¹⁶³ This is particularly true for employees in a close corporation. Yet, on the whole, insurers should be more cost-effective monitors than trade creditors and employees. In terms of risk-bearing abilities, insurers are clearly superior to trade creditors and employees, and no worse than financial creditors. After all, insurers are in the business of providing protection against risks, and are very experienced in diversifying them. Insurers will have access to the reinsurance industry, which will further aid in the diversification of risks. In light of all these considerations, it should be clear that insurers are superior providers of liability insurance to creditors as a group. While the shareholders may be indifferent about purchasing insurance from either the insurers or the creditors, creditor-provided liability insurance in the form of limited liability is a clearly inferior arrangement.

B. Inadequacy of Corporate Default Insurance for Creditors Under Limited Liability

Another insurance-related defense of limited liability is that from the creditors' perspective, there should be no material difference between unlimited liability and limited liability with liability insurance purchased by the corporation or even the creditors themselves. Under any of the three scenarios, the creditors will be fully protected from the default risks of the corporation. There are reasons to believe that the level of protection offered to creditors will indeed be

163. Halpern et al., *supra* note 4, at 139.

quite different under these three scenarios. First, no matter who purchases the insurance, the coverage is unlikely to be complete. Insurance almost always carries a cap on the maximum payoff,¹⁶⁴ which means that creditors are still exposed to residual default risks.¹⁶⁵ Moreover, unless insurance coverage is mandatory for corporations, debtors will have great incentives to obtain insufficient coverage or even no coverage. Competitive pressure in the marketplace means that if one competitor decided to forego liability insurance coverage to gain a competitive advantage, other firms would be under pressure to follow suit.¹⁶⁶ Compulsory liability insurance may seem the obvious solution.¹⁶⁷ However, firms will always find a way to circumvent compulsory coverage requirements and under-insure.¹⁶⁸ There also will be a need for detailed regulations on the minimum coverage. If experience is any guidance, mandatory minimum coverage and other similar insurance regulations seldom provide adequate protection to creditors. To avoid overburdening businesses, the legislature has tended to err on the side of caution when setting the minimum coverage. Experience with the minimum liability coverage for taxicabs is clear evidence of that phenomenon. In the taxicab veil-piercing cases, with *Walkovsky v. Carlton* being the most famous of them, plaintiffs have had to resort to veil piercing when mandatory minimum coverage proved deficient.¹⁶⁹ These limitations of liability insurance mean that there will always be uninsured default risks that will be borne by the creditors.

One solution to this dilemma perhaps is for the creditors to purchase the insurance themselves and transfer the premium costs back to the corporation by demanding a higher rate of return. This should help to solve the problem of insufficient coverage because the creditors will endeavor to obtain sufficient coverage for their risk exposure. Instead of asking the legislature to determine the sufficiency of coverage, the creditors themselves make the determination, which is bound to be more accurate. However, under this arrangement, the

164. Leebron, *supra* note 4, at 1576 (noting that almost all liability insurances are for a limited amount).

165. This is not to say that creditors will always be able to obtain full recovery under unlimited liability, especially under pro rata unlimited liability. The shareholders themselves may be judgment-proof because of insufficient personal assets. Some shareholders may be beyond the creditors' reach because of jurisdictional issues. Leebron, *supra* note 4, at 1611, n.140, 1639.

166. LoPucki, *supra* note 111, at 76-79.

167. In the alternative, Professor Leebron proposes the recognition of a tort for failure to insure, although he is only referring to insurance for tort liabilities. Leebron, *supra* note 4, at 1632-36.

168. For a thoughtful discussion of liability insurance, see LoPucki, *supra* note 111.

169. See *Mull*, 31 F.R.D., at 168-174; see also *Black & White*, 367 S.W.2d 427. These are tort cases, and minimum insurance coverage for tort liabilities is at least easier to determine. It would be much more difficult to do the same for contractual liabilities. One possibility would be to link the premium to outstanding liabilities of the corporation, but those obviously change on a regular basis. See LoPucki, *supra* note 111, at 46. That would mean that the insurers would need to monitor the corporation closely and adjust the premium frequently. In a way, setting minimum contractual liability insurance coverage is the same as setting minimum capitalization requirements for a corporation, which states have tried in the past, but have largely given up on since. See LoPucki, *supra* note 111, at 60.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

creditors will be paying for the insurance coverage. In order for the costs to be shifted back to the corporation, the creditors must be able to demand a higher rate of return. The extent to which creditors can successfully achieve that will depend on their bargaining power. Financial creditors will likely succeed, while trade creditors and employees will face substantial difficulty.

In a sense, creditor bargaining power has replaced government regulation as the source of compulsion on the corporation to purchase liability insurance. To the extent that the creditors can recover the full premium costs from the corporation, creditor-purchased liability insurance is tantamount to corporation-purchased insurance under government regulation. The strength of compulsion on the corporation would be the strongest if it emanated from government regulation. On this sliding scale then lie financial creditors, trade creditors, and finally employees. While government regulation is the surest way of securing insurance protection for creditors, it also suffers from under-coverage. The scope of coverage will be more accurately determined with creditor-purchased insurance, but the strength of compulsion will be weaker. In fact, the amount of coverage will now be determined by the relative bargaining power of the corporation and its creditors. Any premium costs not shifted to the corporation will be borne by the creditors themselves. This will leave creditors, especially trade creditors and employees, under-insured. Unlimited liability avoids all the problems associated with government-compelled liability insurance purchased by the corporation and creditor-purchased insurance. The need to determine the scope of coverage will be obviated and under-insurance will cease to be a problem. In short, the level of protection offered to creditors differs under unlimited liability, government-compelled insurance, and creditor-purchased insurance. Creditors are not indifferent between these three scenarios. They would prefer unlimited liability.

VII. CAPITAL MARKETS-RELATED DEFENSES FOR LIMITED LIABILITY

Thus far, the analysis suggests a strong argument for introducing unlimited liability to closely held corporations, while the case for publicly held corporations is less clear. Commentators have offered a number of capital markets-related defenses for limited liability. It is worthwhile to examine the validity of these defenses. If they turn out to be persuasive, we may be able to decide against introducing unlimited liability to public corporations altogether. Otherwise, the analysis must proceed to further considerations.

A. Limited Liability is Indispensable to an Efficient Capital Market and Diversification

Early commentators argued that unlimited liability undermines the capital markets because the value of a share will incorporate the possibility that a

shareholder's personal wealth is required to meet corporate liabilities. The wealthier is a particular shareholder, the greater is his potential loss as a result of unlimited liability.¹⁷⁰ The expected value of this loss will be incorporated into the value of the share to him. In the extreme case, when the expected loss is sufficiently large, the value of the share may become negative. The unfortunate consequences of this phenomenon are that first, shares will no longer be fungible because their value now depends on their owner's personal wealth, and second, wealthy shareholders will seek to increase their shareholding to the point where they exercise control over the company. This is done in order to minimize the probability of catastrophic losses on them. Subsequent commentators have convincingly demonstrated that this problem will only exist under a joint unlimited liability rule. It will be avoided under a pro rata rule.¹⁷¹ Therefore, the impact on the fungibility of shares and the functioning of the capital markets should not affect the choice of liability rule.

Some scholars also argue that unlimited liability will eliminate an investor's ability to diversify.¹⁷² According to this argument, diversification actually increases rather than decreases the risks of a portfolio under unlimited liability.¹⁷³ A deeper understanding of the concept of diversification would refute this argument. Assume that there are only shares in a diversified portfolio.¹⁷⁴ Diversification is achieved when the overall risk of a portfolio is lower than the weighted average of the risks of the component stocks.¹⁷⁵ This is possible because the risk of one component share may offset the risk of another component share if their prices, and hence rates of return, tend to move in opposite directions.¹⁷⁶ The extent of this offsetting effect is measured by the statistical concept of covariance.¹⁷⁷ As long as the covariance of a portfolio is negative, diversification will be achieved. And the covariance of a portfolio will remain negative as long as the prices of its component stocks do not move in the same direction. The choice of liability rule does not affect the direction in which the rates of return of a stock go. It only affects the magnitude of the movement.

170. Halpern et al., *supra* note 4, at 130-31.

171. Hansmann & Kraakman, *supra* note 4, at 1892-94; Leebron, *supra* note 4, at 1578-84; Blumberg, *supra* note 23, at 627-29; Presser, *supra* note 23, at 159-64.

172. Easterbrook & Fischel, *supra* note 4, at 96-97.

173. *Id.*

174. This is only a simplifying assumption. A diversified portfolio may include bonds, foreign exchange, real estate, cash, etc.

175. In technical terms, the risk of the portfolio and individual stock is measured in terms of variance or standard deviation. See Edward A. Moses et al., *Measuring the Effectiveness of a Trust Portfolio's Diversification*, 35 ACTEC J. 303, 307 (2009); ROSS ET AL., *supra* note 121, at 250. Variance is defined as the average of the squared value of the deviation of the actual rates of return of an investment from its expected return, or the expected value of the square of the deviation between expected return and actual return. ROSS ET AL., *supra* note 121, at 250. Standard deviation is simply the square root of variance.

176. *Id.* at 257-58.

177. The covariance between two stocks is defined as the average of the product of the deviations between the expected return and the actual return of the two stocks respectively. *Id.* at 252-53.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

Imposition of unlimited liability only affects the magnitude of the covariance, and not its sign.

A numerical example will help to illustrate this point.¹⁷⁸ Assume that there are only two stocks, A and B, in a portfolio,¹⁷⁹ and that there are four states in the economy—depression, recession, normal, and boom—which occur with equal probability. Under limited liability, the rates of returns of the two shares in the four states of the economy are as follows: A: -0.20, 0.1, 0.3, and 0.5, and B: 0.05, 0.2, -0.12, and 0.09. Assume further that limited liability has shielded both corporations from more severe losses, and that their rates of return would be much lower if unlimited liability were in place. When the economy is in depression, Corporation A will fail and result in excess liability imposed on its shareholders at ten times the value of their shares. The same applies for Corporation B when the economy is normal. Now the rates of returns of the two corporations in the four states of the economy are as follows: A: -10, 0.1, 0.3, and 0.5, and B: 0.05, 0.2, -10, and 0.09. The covariance of this portfolio under limited liability would be -0.004875.¹⁸⁰ The covariance of this portfolio under unlimited liability would be -6.352875.¹⁸¹ The covariance remains negative, and therefore diversification can still be achieved.¹⁸² In conclusion, the choice of liability rule does not affect an investor's ability to diversify. Diversified portfolios can still be constructed as long as the prices of stock do not move in the

178. *Id.* at 252 (using this example).

179. The conclusion applies to a portfolio consisting of multiple shares.

180. Table showing calculation of covariance under limited liability. *Id.* at 252:

State of Economy	Rate of Return of A	Deviation from Expected Return (=0.175)	Rate of Return of B	Deviation from Expected Return (=0.055)	Product of Deviations
Depression	-0.20	-0.375	0.05	-0.005	0.001875
Recession	0.10	-0.075	0.20	0.145	-0.010875
Normal	0.30	0.125	-0.12	-0.175	-0.021875
Boom	0.50	0.325	0.09	0.035	0.011375

The covariance is $[0.001875 + (-0.010875) + (-0.021875) + 0.011375]/4 = -0.004875$.

181. Table showing calculation of covariance under unlimited liability

State of Economy	Rate of Return of A	Deviation from Expected Return (=2.275)	Rate of Return of B	Deviation from Expected Return (=2.415)	Product of Deviations
Depression	-10.0	-7.725	0.05	2.465	-19.04213
Recession	0.10	2.375	0.20	2.615	6.21063
Normal	0.30	2.575	-10	-7.585	-19.53138
Boom	0.50	2.775	0.09	2.505	6.95138

The covariance is $[-19.04213 + 6.21063 + (-19.53138) + 6.95138]/4 = -6.352875$.

182. This covariance is unusually large because the probability of unlimited liability for shareholders of both corporations is assumed to be 25%. In reality, the figure is likely to be much closer to 0.5%. Leebron, *supra* note 4, at 1598. This will reduce the value of the covariance substantially.

same direction as the state of the general economy changes.

B. Limited Liability Facilitates the Market for Corporate Control

Another defense of limited liability is that it facilitates the market for corporate control, which helps to discipline corporate managers and to allow inefficient ones to be replaced.¹⁸³ Unlimited liability will frustrate this mechanism by making it more difficult for would-be acquirers to take a controlling stake in a public corporation.¹⁸⁴ This argument loses its force under a pro rata limited liability rule.¹⁸⁵ In fact, unlimited liability facilitates the functioning of the market for corporate control. As unlimited liability prevents a corporation from externalizing its default risks, it will cause these risks to be accurately reflected in the share prices.¹⁸⁶ If poor management increases the likelihood that the corporation's contractual liabilities will exceed its assets and hence require contribution from the shareholders, its share price will drop. When the share price drops low enough, the corporation will become an attractive takeover target and be taken over. The incompetent management will be replaced. Under limited liability, the share price only reflects the expected loss from mismanagement up to the value of the corporation's assets. Beyond that, the loss will be borne by outside creditors and will not be reflected in the share price. Takeover may not be forthcoming in light of this artificially inflated share price.

Unlimited liability is not without drawbacks, as far as facilitating the market for corporate control is concerned. One drawback is that it will render the post-takeover controlling shareholder an attractive target for liability collection.¹⁸⁷ Prior to the takeover, the more dispersed share ownership will at least put some of the shareholders beyond the creditors' reach. Now that there is a controlling shareholder with a substantial holding of shares, creditor recovery will become easier. For a corporation with considerable potential for shareholder liability, there will be a liability discount for a large block of its shares.¹⁸⁸ The greater the size of the block, the greater is the discount. To frustrate creditors' collection effort, an acquirer may acquire the controlling block through an entity that is beyond the jurisdictional reach of the court in which the creditors may sue for recovery. To the extent that courts are willing to countenance such a maneuver, the deterrent effect of unlimited liability on

183. Easterbrook & Fischel, *supra* note 4, at 96.

184. *Id.* This is also because unlimited liability allegedly causes shares to lose their fungibility.

185. Leebron, *supra* note 4, at 1623-24.

186. See Hansmann & Kraakman, *supra* note 4, at 1907-09; Leebron, *supra* note 4, at 1624. *But see* Grundfest, *supra* note 17, at 390 (arguing that enforcement problems and arbitrage would render this impossible).

187. See Leebron, *supra* note 4, at 1624.

188. See Grundfest, *supra* note 17, at 400. The size of this discount will also depend on the extent of dispersion among the remaining shareholders of the corporation.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

takeover activities will be reduced.¹⁸⁹ In any case, on balance, unlimited liability will bring more benefit than harm to the functioning of the corporate control market as it prevents the externalization of default risks arising from poor management.

VIII. ENFORCEMENT ISSUES FACING AN UNLIMITED LIABILITY RULE

The theoretical discussions thus far present a convincing case for adopting unlimited liability for closely held corporations, including wholly owned subsidiaries and private partially owned subsidiaries. The arguments, however, are not so clear-cut for publicly held corporations. We were unable to establish that a shift to unlimited liability would reduce aggregate monitoring costs for these corporations. Nor were we able to demonstrate that such a shift would result in a more efficient allocation of risks among the corporate claimants. The capital market-related arguments were equally inconclusive. These theoretical indeterminacies suggest that there are good reasons not to extend unlimited liability to public corporations. What follows is a review of possible implementation problems for unlimited liability within a public corporation, which will further reinforce that conclusion.

A. Procedural Obstacles for Implementation

1. Domestic Personal Jurisdiction

Implementing shareholder liability for contractual claims will encounter considerable procedural obstacles. A similar proposal to impose shareholder liability for tort claims was heavily criticized on procedural grounds.¹⁹⁰ The three main areas of difficulty identified were personal jurisdiction, choice of law, and exercise of jurisdiction over foreign shareholders.¹⁹¹ These are all serious obstacles that do not lend themselves to simple solutions. In fact, obstacles to exercising personal jurisdiction over foreign shareholder are so substantial that they may turn out to be insurmountable.

Before a court can impose shareholder liability for a corporation's contractual debts, it must first exercise personal jurisdiction over the shareholders. A

189. However, there is good reason to believe that courts will be tempted to pierce the veil between the entity specifically set up to avoid jurisdiction and the true acquirer, especially if the acquirer would have been subject to the court's jurisdiction. *See, e.g.*, *Castleberry v. Branscum*, 721 S.W.2d 270, 273 (Tex. 1986) (holding that veil piercing can already be effectuated by showing constructive fraud and not actual fraud). *See also*, Peter B. Oh, *Veil-Piercing*, 89 TEX. L. REV. 81, 121 (2010).

190. For a more detailed discussion of these procedural challenges, see Alexander, *supra* note 16.

191. Since Hansmann and Kraakman's proposal is limited to tort claims, Alexander's criticisms only focus on the challenges facing an attempt to impose unlimited liability for a state tort law claim. *See* Hansmann & Kraakman, *supra* note 4, at 1880, and Alexander, *supra* note 16, at 393-431. Contractual claims are also a matter of state law. Therefore, many of the procedural challenges identified by Alexander will remain relevant for the proposal in this Article.

state court will have great difficulty with that in light of the due process limitations on a state court's exercise of personal jurisdiction. The Supreme Court has spoken in a number of instances that mere ownership of a corporation's shares will not subject a shareholder to the jurisdiction of the courts of the state of incorporation.¹⁹² This problem will be less serious for closely held corporations, whose shareholders are more likely to be concentrated in one or a handful of states. The concern will be even less significant for subsidiaries. The existence of a controlling shareholder should render the assertion of personal jurisdiction over the shareholders even simpler. Establishing personal jurisdiction over shareholders of a public corporation will be much more difficult. There are two possible ways to overcome this difficulty. The first is to rely on the federal bankruptcy courts, which have nationwide jurisdictional reach. Imposition of shareholder liability for corporate contractual liabilities often takes place when the corporation is insolvent. Many of these cases will end up in the federal bankruptcy courts. One limitation of the federal bankruptcy courts is that a bankruptcy trustee may only enforce the corporation's claims. It cannot enforce claims that belong to the creditors personally.¹⁹³ If the right to recover from the shareholders belonged to the creditors themselves, a bankruptcy trustee will not be able to enforce it and a federal bankruptcy court would have no jurisdiction over the shareholders.

This dilemma can be resolved through amendments to state corporation law statutes that give corporations the power to levy assessments on shareholders.¹⁹⁴ If a creditor wishes to recover from the shareholders, it may cause the corporation to levy assessments on them. The corporation, or its bankruptcy trustee, must not refuse a creditor's request if the creditor's claims against the corporation are unmet. An assessment mechanism avoids the problem highlighted in the previous paragraph because the cause of action now belongs to the corporation and not the individual creditors. The bankruptcy trustee will be able to enforce it. While this may sound like a novel mechanism at first glance,

192. See *World-Wide Volkswagen Corp. v. Woodson*, 444 U.S. 286 (1980); *Shaffer v. Heitner*, 433 U.S. 186 (1977); *McJunkin Corp. v. Cardinal Sys., Inc.*, 190 F.Supp.2d 874 (S.D.W.Va. 2002) (deciding that single contractual relationship with corporation, whose primary shareholder was from West Virginia, did not establish minimum contacts to establish personal jurisdiction over out-of-state defendant). For a more detailed discussion, see Alexander, *supra* note 16, at 394-401 and CHARLES A. WRIGHT & ARTHUR R. MILLER, *FEDERAL PRACTICE AND PROCEDURE* §1067 (2d ed. 1986).

It seems that if the shareholder has controlled the corporation to the extent that the corporation is deemed to be his agent, personal jurisdiction may be obtained over him. See *Thomas Publ'g Co. v. Indus. Quick Search, Inc.*, 237 F.Supp.2d 489 (S.D.N.Y. 2002).

193. See Alexander, *supra* note 16, at 416.

194. This is different from Hansmann and Kraakman's approach, which characterizes the unlimited shareholder liability issue as a state tort law issue and thus renders the federal bankruptcy court solution unavailable to them. See Henry Hansmann & Reinier Kraakman, *A Procedural Focus on Unlimited Liability*, 106 HARV. L. REV. 446, 447 (1992). The tort claims clearly belong to the tort victims, and not to the corporation, and hence cannot be enforced by the bankruptcy trustee. See Hansmann & Kraakman, *supra* note 4, at 1901-02.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

it was in fact commonly used until the nineteenth century. Until limited liability was introduced in the early- and mid-nineteenth century, corporations had the power to levy assessments on their shareholders.¹⁹⁵ Such assessments were common.¹⁹⁶ Moreover, until 1959, double liability could be levied by national banks on their shareholders under the National Banking Act.¹⁹⁷

A second solution to this jurisdictional dilemma is to require shareholders to consent to personal jurisdiction when they purchase shares. This can be provided in the corporate charter. To conform to constitutional requirements, shareholders must be given adequate notice of the consent-to-suit provision in the charter.¹⁹⁸ The corporation may be required to send a notice to each beneficial owner of the corporation's shares.¹⁹⁹ These two mechanisms should alleviate the problem of exercising personal jurisdiction over shareholders that will hamper the enforcement of unlimited liability in public corporations.

2. Choice of Law

There is a potential choice of law issue in a shareholder liability suit. The contractual claim between the corporation and its creditor will be governed by the law of the jurisdiction that the parties chose in the contract.²⁰⁰ Under the internal affairs doctrine, the internal affairs of a corporation are governed by the law of the state of incorporation. There is a possibility that the two sets of law may conflict. However, given the assessment mechanism proposed above, this conflict should be minimized. Shareholder liability must be collected by the corporation itself under the corporation law statute of the state of incorporation. This mechanism should avoid problems with the internal affairs doctrine. As a further safeguard, corporations should stipulate in their contracts with creditors that while contractual issues will be governed by the law of the state chosen by the parties, imposition of shareholder liability will be enforced in accordance with the law of the state of incorporation.

3. International Shareholders

A host of complex issues arise once international shareholders come into

195. See Blumberg, *supra* note 23, at 589.

196. See *id.*

197. See *Id.* at 600-01. See also *Abbott*, 321 U.S. at 356 (upholding the imposition of liability on shareholders of a bank holding company which owned national banks subject to the double shareholder liability provision of federal banking laws).

198. Alexander, *supra* note 16, at 409.

199. *Id.*

200. Hansmann and Kraakman impose unlimited shareholder liability through state tort law, thereby creating a conflict with the internal affairs doctrine. The doctrine stipulates that a corporation's internal affairs, which will include the imposition of shareholder liability, are governed by the law of the state of incorporation. See Alexander, *supra* note 16, at 410-15. Alexander argues that in a conflict between state tort law and the corporation statute of the state of incorporation, the latter will prevail. *Id.* at 411-13.

the picture. International shareholders are unlikely to be common for closely held corporations. In contrast, with the globalization of the securities markets, international investors hold a large number of shares of American public corporations. Imposing liability on these shareholders will be exceedingly difficult. First, a U.S. court will have great difficulty exercising personal jurisdiction over international shareholders whose only contact with the U.S. is ownership of shares of an American corporation.²⁰¹ Using the federal bankruptcy courts will circumvent the constraints on the state courts' jurisdiction, but not the limitations of the U.S. courts' jurisdiction over foreign nationals. The consent mandated in the charter probably cannot be extended to foreign nationals either, given the concern about international relations highlighted by the Supreme Court in *Asahi Metal*.²⁰² Second, even if personal jurisdiction could be successfully exercised, collection of judgment would present enormous difficulties.²⁰³ Foreign courts may refuse to enforce an American court judgment, especially when the judgment entails the imposition of shareholder liability, which is inconsistent with the prevailing legal norm in most jurisdictions.²⁰⁴ Absent treaties with foreign jurisdictions allowing for mutual recognition and enforcement of shareholder liability judgments, there seems to be no way around this obstacle.²⁰⁵

B. Judgment Collection Costs

Even if all the procedural challenges can be overcome, collecting judgments from shareholders will entail substantial transaction costs. These costs should not be excessive for a closely held corporation. They should be yet more manageable for subsidiaries. The existence of a controlling shareholder responsible for a large portion of the judgment should keep judgment collection costs low for the creditors. Collection from shareholders of a public corporation is a different matter. It has been argued that judgment collection costs would be prohibitive for a public corporation.²⁰⁶ Under most unlimited liability regimes proposed in the past, the claimants are expected to bear the judgment collection

201. See *Asahi Metal Indus. Co. v. Superior Court*, 480 U.S. 102 (1987).

202. See *id.* at 115.

203. Alexander, *supra* note 16, at 430.

204. *Id.* at 430-31; Grundfest, *supra* note 17, at 398.

205. One possible response by U.S. courts is perhaps to refuse to allow the shareholder liability claim of a foreign creditor whose home country refuses to recognize and enforce a U.S. judgment imposing shareholder liability. See Hansmann & Kraakman, *supra* note 4, at 1922-23. This solution, however, is far from perfect as there is a certain element of unfairness since it punishes parties that are in no way responsible for the non-recognition of U.S. judgments. See Alexander, *supra* note 16, at 430-431. Moreover, this rule can be easily circumvented. A foreign creditor only needs to establish a U.S. subsidiary for contracting with American counterparts to bypass this restriction. See Grundfest, *supra* note 17, at 410.

206. Leebron, *supra* note 4, at 1610-12. Hansmann and Kraakman hold a more optimistic view and believe that the collection costs should be kept to a manageable level and will not undermine the feasibility of their proposal. Hansmann & Kraakman, *supra* note 4, at 1899-1901.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

costs, which understandably would deter claimants from collecting from small shareholders. Under the assessment mechanism proposed in this Article, it will be the corporation itself that will be collecting from the shareholders. The corporation will bear the collection costs. Of course in the case of bankruptcy, which is a probable scenario in which shareholder liability claims arise, funding judgment collection costs from the corporate coffers will reduce the assets available for recovery. As such creditors are not completely shielded from the effects of collection costs. However, these costs will be spread among all corporate claimants in a bankruptcy proceeding, and will become less of a deterrent to individual creditors. Shifting the collection costs onto the corporation will also avoid duplication of costs that will result if creditors institute parallel collection proceedings against the shareholders.

Shifting judgment collection from the creditors to the corporation or the bankruptcy trustee will alleviate the deterrent effect of collection costs on creditors, but it will not solve the problem of selective enforcement against larger shareholders. Selective enforcement will be a particularly serious problem for subsidiaries due to the existence of a large shareholding block. Similar to a creditor, a bankruptcy trustee will rationally want to pursue large shareholders to economize on collection costs. Under a pro rata rule, the judgment to be collected from a small shareholder will be too small to justify the collection costs.²⁰⁷ This will have distortional effects on the securities market because large blocks of shares will be discounted to reflect a higher likelihood of collection. This discount will be small for corporations that are in good financial health. For corporations that are struggling financially, the discount could be substantial. Investors may attempt to avoid attracting collection effort by keeping their shareholding to small sizes.²⁰⁸ This will impede the flow of equity capital into corporations. The distortional effects obviously do not concern wholly owned subsidiaries and private partially owned subsidiaries, which are not publicly traded. But they are a serious matter for public partially owned subsidiaries. Therefore, judgment collection costs remain a serious obstacle to the implementation of unlimited liability in publicly held corporations of all kinds.

C. Arbitrage Activities

The most powerful critique of unlimited liability for public corporations focuses on the role the securities markets play to arbitrage away the effects of unlimited liability on share prices. These effects are meant to spur corporate managers to internalize business costs that were previously externalized under limited liability.²⁰⁹ The idea is that under unlimited liability, share prices will

207. Leebron, *supra* note 4, at 1610-12.

208. *Id.*

209. Grundfest, *supra* note 17, at 399-405.

now incorporate the full costs and risks of a corporation's operations. If a corporation incurs excessive contractual liabilities and thereby raises its default risks to an unacceptably high level, the share prices will reflect this development fully and drop. Corporate managers will be spurred by the falling share prices and attendant heightened risks of takeover to take action and reduce liabilities. This will result in improved corporate management and reduction in default risks for the creditors. These incentive effects will only be partially captured in the share prices under limited liability.

It is argued that arbitrage will negate the beneficial effects of falling share prices on corporate management. The arbitrage argument is premised on the fact that many shareholders, domestic and international, will be beyond the jurisdiction of the court hearing the shareholder liability claim. These attachment-proof shareholders will specialize in holding securities of corporations that are likely to be subject to shareholder liability claims.²¹⁰ Non-attachment-proof shareholders will specialize in holding securities from the "safe" corporations.²¹¹ These two groups of investors will then rebalance their portfolios through transactions involving complex financial instruments such as futures, swaps, and options.²¹² It is argued that these arbitrage activities will completely neutralize the effects of unlimited liability such that a change in liability rules will not provide corporate managers new incentives to keep default risks in check.²¹³ This line of argument has little relevance for closely held corporations. However, it presents insurmountable obstacles for an unlimited liability regime for public corporations, many of which have foreign shareholders. At least with respect to domestic shareholders, the two suggestions made previously for circumventing the personal jurisdiction limitations of the state courts should minimize the emergence of attachment-proof domestic investors. Foreign investors pose a trickier problem that does not lend itself to an obvious solution.²¹⁴ For publicly held corporations with a substantial number of international shareholders, these arbitrage activities will most probably blunt the incentive effects of share prices on the management to take full account of the corporation's business risks.

210. *Id.* at 399-400.

211. *Id.*

212. *Id.* at 401-04.

213. *Id.* at 404-05.

214. With the reciprocation requirement proposed in the previous section, it is possible that at least a number of jurisdictions will be persuaded to allow the enforcement of shareholder liability claims. There is no need to persuade a huge number of jurisdictions to allow enforcement. Success in persuading a majority of foreign jurisdictions in which foreign shareholders of U.S. corporations reside would largely alleviate the problem of attachment-proof foreign investors and hence undermine international arbitrage activities. See Grundfest, *supra* note 17, at 398-99.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

D. Summary

In sum, for closely held corporations, including wholly owned subsidiaries and private partially owned subsidiaries, the enforcement problems created by personal jurisdiction limitations of the state courts, choice of law issues, the presence of international shareholders, judgment collection costs, and arbitrage activities are unlikely to be sufficiently serious to undermine an unlimited liability regime. For most close corporations, their shareholders are likely to be located domestically within a handful of states. Even if the proposed assessment mechanism and consent requirement in the corporate charter were not implemented, enforcement and judgment collection against these shareholders should be manageable. The absence of a large number of international shareholders in these corporations means that arbitrage activities will not be a major concern. Lastly, choice of law issues can be resolved through prior contractual arrangements with the creditors. In short, unlimited liability should be amenable to implementation in closely held corporations.

The story is different for publicly held corporations and public partially owned subsidiaries. Even domestic enforcement will be fraught with difficulty with the dispersion of shareholders across the nation. An assessment mechanism and mandatory consent will be needed for enforcement to have any realistic chance of success. Even with reliance on the bankruptcy trustee for collection, selective enforcement will ensue, which will result in liability discounts for large blocks of shares. Selective enforcement and the resultant liability discount are likely to be a particularly serious problem for public partially owned subsidiaries. Factor in the presence of international shareholders and the consequent arbitrage activities that undermine the incentive effects of share prices on the management, and unlimited liability is unlikely to be feasible for publicly held corporations.

IX. A PROPOSAL

A. Introduction of Unlimited Liability for Closely Held Corporations

For closely held corporations, including wholly owned subsidiaries and private partially owned subsidiaries, the theoretical arguments strongly support the introduction of unlimited liability.²¹⁵ In Section 10, we firmly rejected the notion that limited liability is the outcome of efficient bargains between the cor-

215. A number of authors have argued that there is a strong case for the repeal of limited liability for closely held corporations. *See, e.g.*, Halpern et al., *supra* note 4, at 135; Barber, *supra* note 4, at 396. Even Fischel and Easterbrook agree that most of the benefits of limited liability are unavailable or attenuated in close corporations and there are persuasive arguments for making veil piercing more readily available against these corporations. Fischel & Easterbrook, *supra* note 4, at 110. Posner also argues that there are grounds for establishing a presumption of veil piercing for the non-business creditors of a close corporation. Posner, *supra* note 3, at 522-23.

porations and its contractual creditors and established the asymmetry of negotiation costs. This means that the position of the default liability rule affects the negotiation costs involved in achieving the creditor's desired liability arrangement. In Section IV, we demonstrated that the aggregate monitoring costs for a closely held corporation will be lowered under unlimited liability, and that shareholders are superior monitors to creditors. The same conclusion applies for wholly owned subsidiaries and private partially owned subsidiaries. In Section O, it was shown that on balance, shareholders of a close corporation are better risk-bearers than creditors, especially when trade creditors and employees are included. Again, the same is true for wholly owned subsidiaries and private partially owned subsidiaries. In Section OI, we rejected the arguments that creditors are superior providers of liability insurance to insurers, and that the availability of liability insurance renders the choice of liability rule largely irrelevant because creditors can replicate the risk protection they desire with such insurance. The capital market-based defenses raised in Section OI have little application to close corporations. In light of these theoretical arguments and the conclusions from the previous section that establish the feasibility of implementation, this Article suggests the adoption of unlimited liability for closely held corporations, including wholly owned subsidiaries and private partially owned subsidiaries. This rule will reduce the externalization of uncompensated default risks to contractual creditors and cause corporate managers to refrain from taking on excessive liabilities.

The conclusions from the previous sections may suggest that a different liability rule should apply to sophisticated financial creditors, which are cost-effective monitors and superior risk-bearers. This would create a rule whereby unlimited liability is available to all contractual creditors except for financial institutions. While there may be theoretical justifications for this rule, it will introduce unnecessary complications. Financial institutions most likely will be able to obtain shareholder liability through negotiation regardless of the default liability rule, as they already do. Introducing a uniform rule of unlimited liability will avoid definitional problems with classifying sophisticated and unsophisticated financial creditors.

The discussion of possible negotiations between the corporation and its creditors raises a related issue, which is whether the unlimited liability rule should be susceptible to adjustments through negotiations, or whether it should be made mandatory for all contractual creditors. This issue does not arise in the context of an unlimited liability regime for tort claims because there is generally no *ex ante* negotiation between the tortfeasor and the victim. Contractual parties, of course, can (and do) negotiate in advance to alter the background legal rules. Based on the discussions above concerning bargaining power, monitoring costs and risk allocation, this Article suggests a mandatory unlimited lia-

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

bility rule for employees and a negotiable one for other types of creditors.²¹⁶ Given the weak bargaining power, high information costs and poor risk-bearing abilities of most employees, a mandatory rule for employee claims is justified. Similarly, the application of a negotiable rule for financial creditors should be uncontroversial. Trade creditors present the most difficult case. In terms of bargaining power, information costs and risk-bearing abilities, trade creditors are situated between financial creditors and employees. One may question what extra protection trade creditors would gain from a negotiable unlimited liability rule. While they obviously would obtain even greater protection from a mandatory rule, this author's view is that a shift to unlimited liability will augment trade creditors' bargaining power sufficiently that it should help them obtain information more easily from the corporation. This should lower their information costs considerably. Therefore, even if trade creditors agree to waive shareholder liability, they will have received additional protection by way of improved access to information.

B. Retention of Limited Liability for Publicly Held Corporations

In light of the foregoing discussions about the theoretical justifications for and implementation issues with unlimited liability, it should be unsurprising that this author proposes to retain limited liability for publicly held corporations of all kinds. The inconclusive results from Sections IV and V about changes in the aggregate monitoring costs and improvements in risk allocation under unlimited liability mean that the theoretical justifications for overturning the current rule are not overwhelming. Taking into account myriad enforcement problems, the choice is quite clear: limited liability should be retained for publicly held corporations.²¹⁷ If it were not for the serious enforcement problems, an argument can be made that shareholder liability should be imposed for unpaid salaries of employees. However, difficulties with enforcement and collection mean that such a rule is unlikely to work well in practice. While this may be lamentable if one were concerned about the continual externalization of default risks by shareholders to contractual creditors, this seems to be a price we have to pay for the many benefits that limited liability brings to the modern economy.

One objection to the differential treatment of close and public corporations is that it may cause business activities to be migrated to publicly held corporations. The differential application of liability rules obviously gives a significant cost advantage to public corporations as a form of business organization. While

216. This is similar in principle to the shareholder liability provisions for unpaid salaries under New York law. See N.Y. BSC. LAW § 630 (McKinney 1963 & Supp. 1982).

217. Leebron, *supra* note 4, at 1610-12 (noting that the strongest arguments against the adoption of unlimited liability for tort claims in a public corporation are enforcement problems).

there may in fact be some migration of corporations on the margin, it is unlikely that there will be a mass exodus of close corporations. First, many controlling shareholders of close corporations are currently already required to give personal guarantees by their financial creditors, and that has not caused many close corporations to become public ones. The proposed rule is more extensive than that, as it applies to trade creditors and employees as well. However, for most corporations, the most substantial liabilities are likely to be owed to financial creditors. Extending shareholder liabilities to trade credit and unpaid salaries is unlikely to alter the calculus for the choice of corporate form substantially. Second, there are costs to becoming a public corporation. Entrepreneurs will only do so if the benefits outweigh the costs. For a close corporation that is financially healthy enough that shareholder liability remains a remote possibility, it is unlikely to be worth the owner's while to turn it public.

C. Timing for Recognition of Liability

One issue remains to be sorted out before an unlimited liability rule can be implemented. That is the issue of the proper timing for the recognition of liability, or to put it differently, at what point in time must a shareholder own shares in a corporation for liability to attach. The obvious rule is for liability to attach to all those who own shares of the corporation when the contractual liability is incurred.²¹⁸ The question is what constitutes the incurring of a contractual liability. There are two possibilities: the date on which a contractual obligation is created (obligation creation date) and the date on which the breach takes place (breach date). The former is usually the date on which the contract is executed, and the latter the date on which the corporation falls behind in payment and defaults.

There are advantages and disadvantages for both options. The obligation creation date is superior, in that it is the rule that best matches the benefits and costs of a contract. The idea is that those who enjoy the financial benefits of a contractual obligation should be liable for it. If a person owns the corporation's shares over the duration of a loan, he can be said to have enjoyed the benefits of the loan. It seems logical to ask that shareholder to be personally liable if the corporation is unable to repay the loan. In contrast, attaching liability to all those who own shares when the breach takes place seems haphazard. The obligation creation date is also superior in that it minimizes evasion. Unless the

218. Hansmann and Kraakman call this the occurrence rule. Hansmann & Kraakman, *supra* note 4, at 1896. Applying this incurring rule to contractual liabilities is simpler than to tort liabilities because there is a clearly defined date on which a contractual liability is incurred. The incurring date of a tort liability is often complicated by the fact that a tort may occur over a long time due to prolonged exposure to a harmful substance, for example. It is difficult to pinpoint exactly when the tort happens. This same problem does not exist for contractual obligations, which are created deliberately. However, there is a unique complication for contractual liabilities, which is to decide whether the liability is incurred on the date the contractual obligation is created, or the date on which the contractual breach takes place.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

corporation is already in financial trouble, the default will take place months or years after the contract was initially entered into. The shareholders will most probably be unable to predict the likelihood of default when a contractual obligation is created and exit the corporation before the contract is signed.

In contrast, attachment of liability based on the breach date will be more susceptible to evasion. Some shareholders may become aware of the impending financial trouble of the corporation and sell their shares just before the corporation falls behind on its payments. On the one hand, this problem could be particularly serious for a closely held corporation because the active shareholders are likely to have a significant information advantage over the passive shareholders. The lack of publicly available information about the corporation means that insider access will be particularly important. An active shareholder may become aware of the corporation's default in advance and exit the corporation by selling to an unwitting shareholder. On the other hand, such a strategy may not be easy to execute because shares of a close corporation are illiquid and may not be easily disposed of. Therefore, evasion may not be as serious a concern as it would be for a publicly held corporation. On balance, the illiquidity of a close corporation's shares is likely to predominate and render the concern about evasion relatively less important.

While the obligation creation date enjoys a number of important advantages, the breach date has a decisive advantage over the obligation creation date, which is that it avoids the need to match obligations with share ownership. Shareholder liability claims are likely to arise when the corporation is deep into insolvency.²¹⁹ This means that when shareholder liability is invoked, multiple contractual obligations will be implicated.²²⁰ There will be a need to impose shareholder liability for multiple obligations. These obligations are unlikely to be created at the same time. For a corporation that has been in existence for years, longstanding obligations may have been created years prior to more recent ones. The composition of the shareholders may have changed substantially over time. Therefore, choosing the obligation creation date for liability attachment may require an extensive effort to match obligations with shareholder composition at various times. If contractual obligations are numerous, as

219. A corporation will fall behind on its payments either because it has a temporary cash flow problem or because it has become irreparably insolvent. If the problem is temporary, it is unlikely that the creditor will bring a shareholder liability suit. The substantial enforcement costs involved will give the creditor significant incentives to negotiate a compromise with the corporation. Therefore, attempts to impose shareholder liability will only be made when the corporation is irreparably insolvent and such compromises are unlikely to save the corporation. See Alexander, *supra* note 16, at 423.

220. This is where a significant difference between contractual and tort liabilities lies. There is usually only one major tort event afflicting the corporation at a time, or at least only one that may result in shareholder liability. See Leebron, *supra* note 4, at 1565 (noting that tort liability arises from engaging in risky activities without exercising a proper amount of care). A corporation will have a multitude of contractual obligations outstanding at any given point in time. If a corporation has insufficient assets to meet one of them, it is likely to have trouble meeting the rest.

is likely for most corporations, this could be an enormous if not impossible undertaking.

If the breach date is to be chosen for liability attachment, its susceptibility to evasion must be resolved. It seems that the only feasible modification is to extend the liability attachment date to a period of time to reduce the ease of evasion. This author suggests a six-month period prior to the actual breach for liability attachment. Six months may still allow some shareholders to sell their shares ahead of time. However, setting a longer period may reintroduce the problem of matching obligations with shareholders. Six months seems to be a suitable compromise.

X. CONCLUSION

This Article proposes the adoption of unlimited liability for closely held corporations. Given the venerable status of limited liability and the powerful constituencies in support of it, the political resistance to change is likely to be overwhelming. In light of the expected resistance to reform, it is important to choose the most promising avenue for it. There are two possible avenues, one through contract law and the other through corporation law. States will have few incentives to amend their corporation law statutes.²²¹ Unless there is a concerted effort on the part of a majority of states to enact this reform, unilateral introduction will simply result in the relocation of closely held corporations to limited liability states. This is perhaps the reason that Hansmann and Kraakman suggest that their reform proposal be introduced under state tort law. States have much greater interest in ensuring that their tort judgments are fully enforced, and are therefore more willing to consider introducing unlimited liability. However, contract law does not offer the same promising avenue for reform. The governing law for a tort is the law of the state in which it takes place. In contrast, contractual parties are free to choose whichever state's contract law govern their contract. What this means is that the party with the greater bargaining power is likely to dictate the choice of law. This would render the proposal in this Article meaningless, as it would merely transpose the choice of liability rule from a corporation law issue to a choice of law issue. Therefore, for the proposal in this Article to be effective, it needs to be implemented through corporation law. Moreover, implementing unlimited liability through corporation law allows judgment collection to be done through an assessment mechanism, which avoids many of the procedural obstacles for unlimited liability identified by commentators.

The proposal presented in this Article is no doubt controversial. Past commentators have argued for unlimited liability for corporate torts and enterprise

221. See Alexander, *supra* note 16, at 412-13.

An Economic Analysis of Limited Shareholder Liability in Contractual Claims

liability within a corporate group, but have not suggested a general rule of unlimited liability for contractual claims in closely held corporations. Given the primacy of limited liability as a corporation law rule, and the powerful constituencies in support of it, the likelihood of this proposal's enactment is admittedly low.²²² It is hoped that this Article will at least spur efforts to re-examine the current theoretical consensus on limited liability for corporate contractual liabilities. It is also hoped that this Article has offered some useful criticisms of the theoretical basis for limited liability and the argumentation commonly found in the existing literature to demonstrate the efficiency of legal rules. In particular, it is unsound to assume that the outcomes we observe must represent the most efficient state of affairs or else the parties can negotiate for a different outcome. There are many reasons that such an outcome may not be reached. The imbalance of bargaining power, combined with an unfavorable default legal rule, often conspires to prevent the weaker party from negotiating for its desired outcome. Negotiation costs are asymmetrically aligned, and the position of the default legal rule affects negotiation costs. Moreover, it is important to remember that limited liability was not adopted because it was economically efficient. It was adopted to facilitate the nation's economic development, even though it results in externalization of business costs. If contractual parties cannot freely negotiate around it, there is no reason to infer its efficiency from its continual prevalence.

This mode of argumentation of presumptive efficiency is not only found in corporation law. It is commonplace in other areas of market regulation such as antitrust law and securities law. In securities regulation, there is the efficient market hypothesis, which has attracted a considerable number of detractors after the recent financial crisis. In antitrust law, some commentators have argued against government intervention on the grounds that firms know best what is the most economically efficient for them and the market. If consumers or upstream and downstream firms are unhappy with what is being offered, they can always choose another competitor. As is the case with the efficient bargain justification for limited liability, the situation is often more complicated than is assumed. The tendency to presume the efficiency of the prevailing practice must be viewed with a critical eye and evaluated against a more nuanced understanding of commercial realities. Only then will legal rules create truly efficient outcomes for society.

222. See Leebron, *supra* note 4, at 1566 (“[F]ew topics are liable to strike the reader as less likely to produce changes in the law than an analysis of limited liability.”); See also Grundfest, *supra* note 17, at 390 (“Any shareholder liability rule that deviates from the currently dominant limited liability regime is subject to capital market arbitrage of the sort described in this Article.”). *But see* Blumberg, *supra* note 23, at 573, 577-95 (arguing that limited liability as a corporation law principle was not fully entrenched until recent times).