

THE ECONOMICS OF LIMITED LIABILITY

Susan Woodward

UCLA

February, 1983
Third Draft

UCLA Department of Economics
Working Paper #285

Thanks are due to Armen Alchian and to Jack Hirshleifer for lively discussion about this issue.

February, 1983

The Economics of Limited Liability

Susan Woodward
UCLA

Why is limited liability such an entrenched characteristic of modern enterprise? Legal scholars and historians widely regard limited liability as the single most important feature of the corporation.¹ Henry Manne, an economist, writes that the limited liability corporation is essential because it allows individuals to participate in risky ventures "without risking disastrous loss if any corporation in which they have invested becomes insolvent" and that without it "Wealthy individuals would never make small investments in a corporation."²

Manne also acknowledges what I regard as a vastly more important feature of the corporation -- the appeal of the transferability of their shares: "...in most instances, a functioning stock market will be of more interest to a potential corporate investor than will the limitation of his liability in the event the corporation is not successful."³ I will argue here that

1) the primary and ultimate characteristic of the corporation is the transferability and divisibility of its shares, 2) limited liability is a consequence of transferability, not an end in itself, and 3) limited liability is costly, but the costs are outweighed by the desirability of an anonymous secondary market.

The prime point to appreciate is that limited liability does not eliminate risk: it only transfers risk among different par-

ties. Taking account of this fact, two different justifications have been offered for limited liability. The first, which I shall call the "exploitation" view, holds that entrepreneurs would not be willing to make investments without a known limit on the downside risk of the venture. Thus, the gains of industrialization, which required the pooling of large amounts of capital, would never have been realized without giving the capitalists the privilege of foisting down-side risk onto other parties. If not for the opportunity afforded firm owners through limited liability to make other parties bear part of the cost, we would all be back on the feudal estates.

This view is wrong. The firm's creditors are not captives; they extend credit willingly.⁴ All the risks of an enterprise are borne by someone regardless of the liability rule. With limited liability, some of the risks are borne by the creditors instead of the shareholders. The creditors acknowledge and anticipate these risks, and as Meiners, Mofsky, and Tollison⁵ argue persuasively, the firm owners will have to pay the creditors in some way for the risk they bear through limited liability. There is an enormous array of possible arrangements between firms and creditors, and the price of credit will be different depending upon the liability arrangements. Note the widespread use of the terms "2/10, net 30",⁶ which is simply a way of announcing "If we are going to finance you, compensate us for the risk."

The other view, whose main proponent is Posner, holds that not only are creditors compensated for the risks borne through limited liability, but that this is the cheapest allocation of

the risks. As an explanation of why this might be so he suggests "First, the lender may be in a better position than the borrower to appraise the risk" and "Second, the borrower may be risk⁷ averse and the lender less so..." .

The contention that limited liability is the least costly allocation of risks seems dubious in the light of what we understand about moral hazard and the control of agency costs. Limited liability relieves one party (the firm) of a risk over which it has considerable control, and imposes on a myriad of others (the firm's creditors) a risk which they can assess and control only at greater cost than the agent relieved of it. The basic force shaping organizations is cost minimization, including^{8,9} minimizing costs associated with principal/agent problems. The widespread existence of limited liability, an allocation of risk in which those who bear certain risks have little opportunity to control them, seems to conflict with this basic principle.

Coping with Risk

There is of course no such thing as unlimited liability. All of us, individually and collectively, have the potential to do more harm than any of us, individually and collectively, is worth. Moreover, no arrangement of risks, even in the most insured of worlds, could make this not so. An individual may regard his potential liability towards others as unlimited, but they see his wealth as a limit (the farthest, in fact) to which he can be held accountable towards them.

The individual engaged in entrepreneurial activity must nonetheless view with some awe the possibility of losing all of

his assets, and at some price would like to insure against this risk. Indeed, the insurance solution predates the modern corporation.¹⁰ The invention of the leveraged joint business venture and premium insurance were closely connected. The original "sea loan" of the thirteenth century was a non-recourse loan to a shipowner engaged in trade. If the ship was wrecked or looted by pirates, the lender lost the loan. If the ship came in and the goods were delivered, the lender received principal plus interest. In the early fourteenth century the Italians began making a market in these loans, and the liquidity of this market called for standardizing the instrument. The solution was to make the loans full-recourse loans, the fulfillment of which required the borrower to insure against shipwreck and piracy. (Note that the opening of liquid secondary markets in options in 1974 also required standardizing the option contracts.) The first insurance was commercial insurance, and it was designed precisely to protect a leveraged equityholder from losing all his assets.

Insurance seems in an important way a more satisfactory solution to commercial risk than limited liability. With limited liability, the equityholder's insurers are the creditors of the firm. The insurers are numerous, which means the part of the risk each holds is necessarily smaller than what an individual insurance company would hold. On the one hand, the diversification aspect of this is appealing, but of course this can be achieved even more easily through wide ownership of stock in the insurance company. On the other hand, it will likely not pay each insurer/creditor to devote much energy to assessing and

devising means for controlling the risks they bear. Certainly it would pay the sum of the individual small insurers less than it would a single large insurer.

This is related to the issue of why we borrow from banks rather than from each other. It is not simply a matter of repackaging small investments into larger ones or risky investments into less risky ones with a residual risk-holder. Rather banks have a comparative advantage in devising means to control the moral hazard. The banks are unlikely to know more about a business than its managers, but they know much more about how to write a debt contract than do other lenders. The indebtedness of a corporation is determined by the counterposed forces of the tax advantages versus the moral-hazard costs of debt. Without the tax advantage, the levels of indebtedness would be much lower than what we currently observe; without moral hazard, the tax advantage would drive firms to be financed wholly with debt.

Can limited liability be cheaper than insurance? While insurance itself possesses some costs associated with moral-hazard, the moral-hazard costs of limited liability, due to its more diffuse allocation of responsibility, can only be higher. Let me not be accused of mincing words: I am claiming here that if a firm went to an insurance company to insure the risks implicitly insured through limited liability, the competitive premium quoted would be less what it implicitly pays for the same insurance through limited liability. If insurance is what entrepreneurs want, limited liability is an expensive way to get it.

If insurance is such a good idea, why do we not then observe extended-liability corporations -- where equityholders who are shy of the downside risk simply insure? Because the owners of perfectly alienable shares will not voluntarily insure. The corporation with completely transferable shares traded in an anonymous secondary market will always be effectively a limited liability corporation! If the shares are perfectly transferable and alienable, the secondary market must be anonymous. If the liability of corporations did legally extend beyond the corporate assets to those of the individual shareholders, and if the shares were completely transferable (as they are in our secondary markets), wealthy persons would be willing to hold shares so long as times were good; but when the firm came upon threatening days, the rich would bail out by selling to those with no wealth for the creditors to attach. ¹¹ If Nelson Rockefeller sold his interest in Standard Oil to me, the creditors of Standard Oil would not bother to reassess the credit of the firm; they would know that in the event of insolvency, the holders of the equity shares would all be impecunious individuals. The anonymous secondary market renders the wealth of the individual shareholders irrelevant. The publicly traded corporation is thus de facto a limited liability entity. A liquid secondary market in which all can participate is simply not compatible with anything else.

Yet another question relating to insurance remains: if limited liability is more expensive than insurance, why don't the firms themselves (apart from the shareholders) insure? Part of

the answer is, they do. Even in this limited liability world
12
most firms buy insurance of some sort. Rather than have
creditors bear risks which could bankrupt a going concern, they
choose a less costly alternative, insurance. Clearly they are
not fully insured, or we would never see a bankruptcy. A puzzle
remains as to why they do not insure more fully.

Another arrangement of risk-bearing sometimes chosen over
limited liability is to extend liability for the firm's debts to
shareholders, by borrowing against the credit of the firm's
individual owners. Most such loans are to privately held
13
corporations, of course, but it is not unheard-of for publicly
traded firms to have loans secured by one or more wealthy
shareholders. Such arrangements necessarily require an agreement
between the lender and borrower which restricts the alienability
of claims. To contract around limited liability, you must impair
transferability.

Those who (like Posner) contend that the risk-reshuffling
brought about by limited liability is a least-cost solution must
face the following question: Why limit the potential claims of
creditors exactly to the assets of the firm? What makes this
particular partition of the contingent claims superior to any
other? Why not 90% of the assets of the firm? Why not 110%?
These both provide the coveted limitation on downside risk. The
answer of course, is that the firm's assets are chosen as the
limit to liability because of the presence of the secondary
market, not because of simple risk-aversion. Risk-aversion can
be dealt with by less rigid institutions.

Policy Implications for Parent/subsidiary Relations

When is it appropriate to "pierce the veil" of incorporation and hold a parent responsible for the debts of its wholly owned subsidiary? Posner¹⁴ and Landers¹⁵ lay out the two opposing views. Landers believes that a parent and its subsidiary are in reality a single economic enterprise, operated to maximize the joint income, and should be treated as such by the law. As a general rule he would pierce the veil. Posner relies on the competitive market to protect the creditors of the subsidiary. The creditors are fully informed, and by choosing to do business with a wholly-owned subsidiary, they demonstrate their willingness to assume the risk of being able to recover only from its assets. In his usual fashion, Posner argues that what is, is efficient: a policy of piercing the veil between parent and subsidiary "...would probably be an uneconomical rule because it would prevent a type of risk shifting (from shareholders to creditors) that is apparently highly efficient, judging by its prevalence."¹⁶

If one believes the economic raison d'être of limited liability to be the risk-shifting, Posner's view follows. But if one is convinced that limited liability will in general be an inefficient device for avoiding risks, and that the real importance of limited liability lies in the incompatibility of a secondary market with anything else, protection of the veil between a firm and its wholly-owned subsidiary can serve no useful economic purpose. Since the subsidiary is wholly owned, the secondary market plays no role, and hence the efficient policy should be to always pierce, unless there is an explicit

agreement between subsidiary and creditor not to do so.

Such a policy could, of course, result in a few shares of every otherwise "wholly owned" subsidiary being owned by some individual, and its ultimate desirability lies in the cost to the courts of distinguishing form from substance. Should one decide in favor of not piercing the veil, it would be because the rule is too costly to enforce, not because limited liability is such an efficient allocation of risk per se.

Conclusion

Nature has endowed us with a number of productive opportunities whose large scale requires amassing the resources of many individuals. The pre-eminent institutional form for exploiting such opportunities is the transferable-share, limited liability corporation. The advantage of transferable shares is evident: differences in individual desires for consumption over time can be indulged, and changes in individual preferences, wealth endowments, and estimates of the future can be accommodated by individual portfolio revisions that need not affect the productive decisions of the corporation itself.

But the advantage of limited liability is not so obvious. Indeed, it is mostly misconceived. After all, limited liability does not eliminate risk; it can only redistribute risk among the individuals involved. We have an alternative market mechanism that specializes in redistributing risks in the economy -- the insurance industry. Why do we, via corporate limited liability, in effect make an end run around the insurance market?

The reason, I argue, is that from the creditor's point of view, limited liability will emerge in any case, de facto, whenever there are transferable shares. With unlimited liability, whenever the threat of insolvency arose, wealthy individuals would unload their shares to individuals who have little or no attachable assets beyond the corporate shares themselves. Insurance on the individual level as an alternative to limited liability would be unfeasible as a practical matter. Given the opportunity to simply sell any claims if and when they threatened his other assets, no one would insure voluntarily. Laws establishing limited liability simply make explicit what would arise anyway, and by doing so lower the cost of it.

Insurance at the firm level is a second alternative to limited liability. Since limited liability implicitly makes the creditors the firm's insurers, it seems that an insurance company, which specializes in such, would generally be able to insure the risk more cheaply than could the creditors. Firms do buy insurance, but it remains a puzzle why they are not more insured than they are. Nonetheless, if this process of insuring were carried to the limit, the insurers would become the equity owners of the corporation. Then individuals would hold the stock in large insurers which would effectively become mutual funds holding diversified portfolios of 100% owned unlimited-liability operating enterprises. But, if the insurance company shares are themselves publicly traded, the insurance company will be effectively a limited liability corporation. The buck stops at the secondary market.

In limited liability we have an important discontinuity -- in order to allow individuals to hold liquid claims on illiquid real investments, a limit must be placed on the value of the claim. Not because the investor is risk-averse (aren't we all?), but because the "natural" limit on the personal liability of the poorest among us is zero, and this puts an equally natural limit to the value of a share (also zero) and the liability of the firm.

Footnotes

- 1
For example see W. Fletcher 1 Cyclopedia of the Law of Corporations 21 (1917) for a statement by N.M. Butler; I. Wormser Disregard of the Corporate Fiction and Allied Corporate Problems 14 (1929)
- 2
Manne, Henry G. "Our Two Corporation Systems: Law and Economics" Virginia Law Review, Vol. 53, March 1967, p.262
- 3
Manne, Henry, op.cit. p. 264
- 4
I will not address here the problem of involuntary creditors. Meiners, Mofsky, and Tollison "Piercing the Veil of Limited Liability" Journal of Corporation Law, 1977, point out that the problem of "undercapitalization" is really a problem of "underinsurance" and is not unique to a limited liability firm.
- 5
Meiners, Roger E., James S. Mofsky, and Robert D. Tollison, op. cit, contend that the risk-reshuffling aspects of limited liability are not very important, but conclude that whether corporations have limited liability or not is of little consequence. They offer no explanation for its widespread presence.
- 6
2/10, net 30: if you pay the bill within 10 days, take a 2% discount; the bill is overdue after 30 days.
- 7
Posner, Richard A. "The Rights of Creditors of Affiliated Corporations" University of Chicago Law Review 43, 1976, p.500
- 8
Marshall, John M. "Moral Hazard" American Economic Review December, 1975
- 9
Michael C. Jensen and William Meckling "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure" Journal of Financial Economics Vol.3, No.4 (October 1976),pp.305-360 and
Alchian, Armen and Harold Demsetz, "Theory of the Firm" American Economic Review 1973
- 10
de Roover, E. "Early Examples of Marine Insurance" Journal of Economic History 5, 1945 pp.172-500

11

This argument is true whether individual liability is several or proportionate. With several liability, each shareholder is liable for the full debts of the corporation if the other shareholders are bankrupt, and the appropriate price of insurance for any single shareholder would be a function of the his wealth. With proportionate liability, each shareholder is responsible for his proportionate share of the firm's debts, but it would still be more expensive for Nelson Rockefeller to insure his assets than for me to insure mine. Moreover, the insurance premium would not depend upon just the value but also upon the risk characteristics of our assets. Thus, portfolio flexibility would impose an enormous moral hazard upon insurers, avoidable only by incurring great transaction costs.

12

Mayers, David, "On the Corporate Demand for Insurance" Journal of Business April, 1982

13

There seem to be no reported data on the fraction of loans to non-public corporations that are guaranteed by shareholders. Personal conversation with loan officers at Continental of Illinois indicates that between 40% and 50% of loans to non-public corporations are guaranteed. I would be most grateful to anyone who could provide some firmer data on this issue.

14

Posner, Richard A., op. cit., pp.499-526

15

Landers, Johnathan M. "A Unified Approach to Parent, Subsidiary, and Affiliate Questions in Bankruptcy" University of Chicago Law Review 42, 1975, pp.589-652

16

Posner, op. cit., p.509