The Economics of Vicarious Liability

Alan O. Sykes†

Business principals frequently incur civil liability for the wrongs of their agents.[1] If the wrong is not ordered, authorized, or encouraged by the principal, then his liability is "vicarious."[2]

Hierarchy and delegation are so pervasive in modern business relationships that a staggering number of legal disputes directly or indirectly involve rules of vicarious liability.[3] Under certain conditions, principals are vicariously liable for torts and unauthorized contracts of their agents. Corporate stockholders are vicariously liable for antitrust violations by their agents and for certain securities violations by their agents. Other forms of vicarious liability arise in many fields of business-related law.

The objective of this Article is to develop a broad set of economic principles to explain and criticize important aspects of vicarious liability in all of its manifestations. The Article inquires whether a rule of vicarious liability, under which the principal and agent are jointly and severally liable[4] for the agent's wrongs, is economically efficient[5] relative to a rule of

---

† Associate, Arnold & Porter, Washington, D.C. and doctoral candidate, Yale Department of Economics. This Article is based in part on chapter one of my Ph.D. thesis. I wish to thank my thesis supervisors, Alvin Klevorick and Sidney Winter, for innumerable insights and suggestions, and George Priest for extensive comments on earlier versions of this Article. I also thank the participants in the Yale Civil Liability Workshop, especially Guido Calabresi and Henry Hansmann, for many helpful criticisms. Finally, I thank the students in my Fall 1982 Economics of Law class at the University of Pennsylvania Law School for comments and questions that led to many refinements. Errors are mine. I gratefully acknowledge financial support from the Program in Civil Liability of the Yale Law School.

1. The terms "principal" and "agent" are not necessarily used in their legal sense. For purposes of this Article, a principal is an individual or group of individuals who employs or contracts with another individual or group. The individuals so employed or under contract are agents. These definitions are broad enough to encompass masters and servants, employers and independent contractors, corporations and directors or managers, franchisors and franchisees, and in some instances, lessors and lessees.

2. This Article does not address rules that impose liability on principals for agent wrongs that are attributable to the principals' own malfeasance. For example, the Article does not analyze situations in which the principal knowingly hires a dishonest or inept agent or supplies the agent with defective equipment for his activities. Rather, the Article deals with situations in which the principal does not contribute to the wrong except, perhaps, by his failure to monitor the agent or to design incentives that deter agent malfeasance. *Cf.* Landes & Posner, *Joint and Multiple Tortfeasors: An Economic Analysis*, 9 J. LEGAL STUD. 517 (1980) (analysis of tort cases in which two or more parties contribute to tort); *infra* note 124 (further distinguishes analysis herein from analysis of Landes & Posner).

3. Despite their widespread application and their consequent economic importance to business relationships, rules of vicarious liability often draw little or no attention in litigation. For example, few attorneys would challenge the proposition that corporations are vicariously liable for acts of corporate executives that involve the corporation in a price-fixing conspiracy.

4. Joint and several liability accurately characterizes the rules of vicarious liability to be analyzed in Part B of this Article. Such rules allow the plaintiff to sue the principal, the agent, or both, and to

personal liability, under which the agent alone is liable for his wrongs. To illustrate the applications of the analysis, the Article examines various rules of tort law to determine whether they encourage efficient behavior.

Part A develops the economic results. It indicates that the efficiency of vicarious liability depends in large measure on the magnitude of certain transaction costs in the negotiation and enforcement of a customized allocation of risk in agency contracts. If such costs are insignificant, vicarious liability is almost always efficient relative to personal liability, or at least is not inefficient. Otherwise, the efficiency of vicarious liability turns on a number of factors, which include the ability of the agent to pay judgments under a rule of personal liability, the ability of the principal to observe the loss-avoidance behavior of the agent, the length of the agency relationship, the importance of contractual incentives to the agent's loss-avoidance behavior, and the existence of a prior contractual relationship between the enterprise and the injured party. Despite the number of relevant considerations, however, the economic analysis provides reasonably simple guidelines for legal policy.

Part B of the Article applies these guidelines to a variety of issues in tort law.[6] The discussion encompasses the control test and its exceptions,

---

collect his judgment from one or both defendants as he pleases, subject to the restriction that he cannot collect more than the total judgment. An extensive discussion of possible alternative rules can be found in Stone, *The Place of Enterprise Liability in the Control of Corporate Conduct*, 90 YALE L.J. 1 (1980).

5. Liability rule *A* is "efficient" relative to liability rule *B* if rule *A* is potentially Pareto superior to rule *B* from the perspective of society as a whole. That is, *A* is efficient relative to *B* if the members of society who prefer *A* to *B* can compensate the members of society who prefer *B* to *A* and remain better off themselves. This definition of "efficiency" corresponds to the Hicks-Kaldor potential compensation criterion, which is an important concept in modern welfare economics. *See* E. MANSFIELD, MICROECONOMICS: THEORY AND APPLICATIONS 457-58 (2d ed. 1975); H. VARIAN, MICROECONOMIC ANALYSIS 215-23 (1978).

The potential compensation criterion is roughly equivalent to the wealth-maximization criterion that some scholars (e.g., Richard Posner) believe should be the basis for legal policy decisions. *See* Posner, *The Value of Wealth: A Comment on Dworkin and Kronman*, 9 J. LEGAL STUD. 243 (1980); Posner, *Utilitarianism, Economics, and Legal Theory*, 8 J. LEGAL STUD. 103 (1979). The author disagrees with Posner's apparent conviction that wealth maximization should be the sole basis for the distribution of all legal rights and responsibilities, including property rights. This contention of Posner's has been roundly criticized. *See* Dworkin, *Is Wealth a Value?*, 9 J. LEGAL STUD. 191 (1980); Kronman, *Wealth Maximization as a Normative Principle*, 9 J. LEGAL STUD. 227 (1980); and Hammond, *The Economics of Justice and the Criterion of Wealth Maximization* (Book Review), 91 YALE L.J. 1493 (1982). Nonetheless, efficiency is a sound criterion for the choice of many legal rules, including the rules of vicarious liability, as long as other devices exist to achieve an acceptable distribution of wealth. Indeed, legal rules may be comparatively ineffective and costly devices for redistribution. *Cf.* Shavell, *A Note on Efficiency vs. Distributional Equity in Legal Rulemaking: Should Distributional Equity Matter Given Optimal Income Taxation?*, 71 AM. ECON. REV. 414 (Papers & Procs. 1981) (economic model in which citizens unanimously prefer redistribution through taxation to redistribution through less efficient legal rules).

6. Vicarious liability has received some attention through the years from legal academicians, especially tort scholars. *See infra* note 117. Only two previous works, however, undertake the type of analysis made possible by the modern economic theory of agency. The first such piece is the author's student work, Note, *An Efficiency Analysis of Vicarious Liability Under the Law of Agency*, 91 YALE L.J. 168 (1981), and the second is Kornhauser, *An Economic Analysis of the Choice Between Enter-*

including the inherently dangerous activity exception, the non-delegable duty exception, the apparent authority exception, and the proposed financial responsibility exception. Not surprisingly, the discussion identifies both consistencies and inconsistencies between the law and the economic analysis of Part A. The Article then concludes with brief remarks on other legal applications of the economic framework.

Part A—Economic Analysis

The economic analysis is divided into five sections. Section I contains an introduction to the modern economic theory of agency and incentive contracts, the lessons of which are essential to understanding the consequences of vicarious liability. Section II identifies the circumstances in which the choice between vicarious liability and personal liability has systematic effects on resource allocation. Sections III and IV discuss the efficiency of vicarious liability for the debts of agents to *involuntary* creditors, defined as creditors whose claims do not relate to prior transactions with the principal-agent enterprise.[7] Section V then discusses vicarious liability for the debts of agents to *voluntary* creditors, defined as creditors whose prior transactions with the enterprise are closely linked to the debt in controversy.[8]

I. The Economic Theory of Agency: Determinants of Principals' and Agents' Welfare

A. *Privately Pareto Optimal Contracts*

Any principal-agent relationship requires an agency agreement.[9] The economic theory of agency postulates that all agency agreements, regardless of their complexity, are Pareto optimal from the perspectives of the principal and the agent.[10] Thus, the theory assumes that agency agree-

---

prise and Personal Liability for Accidents, 70 Calif. L. Rev. 1345 (1982). This Article analyzes the tension between the author's works and Kornhauser's work *infra* notes 50, 52, & 122.

7. The victim of an agent's motor vehicle tort, for example, is usually an involuntary creditor.

8. The buyer of a defective product from the agent, for example, is a voluntary creditor.

9. The simplest type of agency agreement is an oral agreement by the principal to pay the agent a certain amount per hour (or per week or per year) for services of a specified type. Often, the contract does not specify the length of the agency, and the principal may terminate the agent's employment at will.

The apparent simplicity of such an agreement, however, is deceptive. Either explicitly or implicitly, the principal may authorize the agent to use or dispose of the principal's assets or to bind the principal in contract. The principal may also agree to provide the agent with a safe workplace, and to pay to insure the agent against work-related injuries. These features of the agreement are but a few of the many "clauses" that exist, at least implicitly, in most agency contracts.

10. Literally dozens of articles on agency theory proceed from the assumption that the agency agreement is Pareto optimal for the parties to the agreement. *E.g.*, Mirrlees, *The Optimal Structure of Incentives and Authority Within an Organization*, 7 Bell J. Econ. 105, 121-27 (1976); Ross, *The Economic Theory of Agency: The Principal's Problem*, 63 Am. Econ. Rev. 134 (Papers & Procs.

ments have the property that no alternative agreement yields any greater subjective welfare ("utility") to the principal without diminishing the utility of the agreement to the agent (and vice-versa). This postulate of Pareto optimality is broad enough to allow for all manner of negotiation costs, information costs, enforcement costs, and other transaction costs of contracting.[11]

Of course, agency agreements may have favorable or adverse consequences for other members of society, and thus may not be Pareto optimal from a societal perspective. To avoid confusion, this Article adopts the term *privately Pareto optimal* to distinguish Pareto optimality in the economic theory of agency from society-wide Pareto optimality and the related concept of society-wide economic efficiency.

B. *Privately Pareto Optimal Agreements in an Environment of Uncertainty: Expected Returns and Risk*

The value of an agency agreement to the principal and to the agent usually is uncertain. Principals are subject to innumerable uncertainties about business cycles, the costs of raw materials and investment capital, and the productivity of their agents. Agents are subject to many other uncertainties, including those about their abilities, their prospects for advancement and for wage increases, and the possibilities of layoff or discharge. Although the significance of these uncertainties varies among agencies, uncertainty is rarely absent altogether.

To analyze agency behavior under uncertainty, the economic theory of agency postulates that the utility of an agency agreement to each party has at least two important determinants: expected dollar returns and the riskiness of those returns.[12] The theory then demonstrates how, if either party

---

1973).

11. Thus, for example, if negotiations are costly and the principal and the agent perceive little chance of significant improvement in their agreement through further negotiations, Pareto optimality may require them to terminate negotiations and to settle for an agreement that would not be Pareto optimal if negotiations were costless. In the extreme, negotiations may be so costly that the principal offers a standard form contract to all potential agents, who then accept or reject the contract offer without modification. By experimenting with various terms of the form contract, however, the principal can still search for Pareto superior contracts until further experimentation appears more costly than it is worth.

12. The riskiness of returns depends roughly upon the dispersion among possible values of the return. For example, an agency agreement that yields to the agent $30,000 with probability 0.5 and $10,000 with probability 0.5 is riskier than an agreement that yields $25,000 with probability 0.5 and $15,000 with probability 0.5. Both agreements have expected returns of $20,000, but the former agreement has greater dispersion in the returns. Formally, economists say that one distribution of returns is riskier than another distribution of returns with the same expected value if the former has greater probability mass in the tails of the distribution. *See* Rothschild & Stiglitz, *Increasing Risk I: A Definition*, 2 J. ECON. THEORY 225 (1970). The Rothschild-Stiglitz definition of increasing risk is theoretically superior though more cumbersome to apply than an alternative definition of risk, often used in the theory of finance, that focuses entirely on the variance of returns as a measure of risk. *See*

is risk averse, the parties to the agreement can achieve greater utility for themselves by distributing risk in accordance with their attitudes toward risk bearing.

As the next section indicates, risk sharing often has adverse effects on the incentives of agents to perform as the principal desires. Neglecting that problem for the moment, however, optimal risk sharing alone has the following general implications. If one party is risk neutral and the other is risk averse, a privately Pareto optimal agency agreement assigns all of the financial risk in the agency to the risk-neutral party. If both parties are risk averse, private Pareto optimality requires that the financial risks of the agency be shared, with a greater portion of the risk on the less risk-averse party.[13]

Empirically, principals are usually better risk bearers than their agents. Agents are often individuals of limited means who may be quite risk averse as to the prospect of even modest financial losses. Principals, by contrast, are often wealthier individuals, and intuition suggests that aversion to risk of a given magnitude often declines as wealth increases.[14]

Concomitantly, a principal may have many agents who perform similar tasks. Such principals may face little statistical risk because a large pool of similar agents creates instant diversification.

In addition, the "principal" may actually be the stockholders of a corporation. A financial risk that seems large to an individual agent may become quite small when divided among a large group of stockholders. Then, even if the stockholders are averse to the risk of substantial financial losses, such risk aversion may be of little importance as to the small prospective loss per stockholder from civil judgments against corporate agents.[15]

Modern finance theory further suggests that individual stockholders generally hold diversified portfolios of many financial assets, and that such stockholders are only averse to risks that are non-diversifiable.[16] The risks

---

id.; H. MARKOWITZ, PORTFOLIO SELECTION (1959); Tobin, *Liquidity Preference as Behavior Towards Risk*, 25 REV. ECON. STUD. 65 (1958).

13. For a formal, mathematical treatment of risk sharing, see Shavell, *Sharing Risks of Deferred Payment*, 84 J. POL. ECON. 161 (1976); Note, *supra* note 6, at 178, 180 n.64.

14. *See* K. ARROW, *The Theory of Risk Aversion*, in ASPECTS OF THE THEORY OF RISK-BEARING 28 (1965) (hypothesis of decreasing absolute risk aversion).

15. Intuition suggests that risk aversion is unimportant for small risks. For example, most individuals are probably indifferent between 25¢ with certainty or a 50/50 chance of 50¢ or zero. Indeed, the willingness of many individuals to buy lottery tickets, play slot machines, and bet on the ponies suggests some degree of risk preference when potential losses are small.

16. *See* Mossin, *Equilibrium in a Capital Asset Market*, 34 ECONOMETRICA 768 (1966); Sharpe, *Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk*, 19 J. FIN. 425, 436-42 (1964).

of civil liability judgments against individual agents, however, are usually easy to eliminate through diversification.[17]

Finally, to the extent that the risks of civil liability are insurable,[18] a principal often can obtain insurance more cheaply than his agents. A principal with many agents presents the insurance company with a ready-made pool of risks. Moreover, the issuance of one policy to a principal rather than many individual policies to his agents surely reduces administrative costs.[19]

Thus, for a variety of reasons, principals are often better suited than their agents to bear the risks of financial losses. The theory of optimal risk sharing thus predicts that privately Pareto optimal agency agreements will often allocate the bulk of civil liability to business principals rather than to their agents.

Of course, there are some instances in which the risk of civil liability will remain with the agent. The agent may be the better risk bearer, as in the case of a railroad passenger (principal) and railroad company (agent). Alternatively, the transaction costs of an agreement to shift liability to the principal may exceed its benefits, or the allocation of liability to the principal may greatly reduce the expected returns to the agency if the agent is unable to pay judgments on his own. These possibilities are discussed at length in subsequent sections of this Article. Prior to that discussion, however, it is important to explore the problem of tradeoffs between risk sharing and incentives.

C. *Incentives, Risk Sharing, and Observability*

If a business principal assumes all or part of the financial risks of an agent's performance, and if good or careful performance is more costly or troublesome to the agent than poor or careless performance, then the quality of the agent's performance may decline. An agreement by a principal to assume civil liability judgments against an agent, for example, may lead to smaller investments by the agent in efforts to avoid judgments and an attendant increase in the likelihood or extent of liability. To maintain the agent's incentives under these circumstances, the principal may choose

17. Although a liability judgment reduces the value of stock in a particular corporation, the effect of liability judgments on the diversified portfolio as a whole is about the same from period to period because roughly the same number of wrongs occur from period to period. Thus, after careful diversification, little risk remains.

18. Of course, the principal may be a better risk bearer than an insurance company, and he may then choose to self-insure. The principal may be the better insurer, for example, if his pool of agents is so large and creates so much diversification itself that insurance becomes superfluous.

19. *Cf.* G. CALABRESI, THE COSTS OF ACCIDENTS 50, 54 (1970) (discussing possible use of enterprise liability to promote loss spreading through the purchase of private insurance).

to employ an incentive contract that places at least part of the risk of loss on the agent.

To illustrate, consider an agency in which the agent may incur civil liability. Suppose that the agent's loss-avoidance behavior is *unobservable* by the principal—that is, the principal knows whether a loss occurs, but he has no other information about the agent's behavior.

Assume further that the principal is vicariously liable for the agent's wrongs, and hence that the principal wants the agent to take certain measures to avoid losses. Because the agent's behavior is unobservable, however, a simple instruction or contractual requirement that the agent undertake particular loss-avoidance measures is potentially ineffective. The agent can exercise less care than the principal demands and still avoid a loss in many cases, and in the event of a loss, the agent can claim that he exercised the required level of care nonetheless. Hence, because the agent's behavior is unobservable, he may find it advantageous to ignore the principal's instructions.

To motivate the agent effectively under these conditions, the principal must employ a combination of penalties and rewards that depend upon the occurrence or non-occurrence of the loss. Specifically, the principal must reward the agent for the avoidance of the loss, penalize the agent for the occurrence of the loss, or both.

Such incentive contracts are subject to many complications. If the agent is risk averse, the contract may so increase the riskiness of the agent's expected compensation that the principal must include a very substantial risk premium to secure the agent's services. This risk premium may eliminate the value to the principal of an otherwise effective reward-penalty structure and, at a minimum, cause the principal to settle for less than ideal loss-avoidance incentives.[20]

There are other complications as well. The agent may be judgment-proof so that penalty provisions are largely ineffectual. Alternatively, reward provisions that are large enough to be effective might provide the agent with expected compensation far in excess of what the principal is willing to pay the agent and far in excess of what the agent's services are worth in the labor market. Finally, transaction costs may make the negotiation and enforcement of an incentive scheme with the agent uneconomical. For all of these reasons, incentive contracts when loss-avoidance behavior is unobservable often fail to exhibit the *first-best* property—the

20. *See* Holmström, *Moral Hazard and Observability*, 10 BELL J. ECON. 74 (1979); Shavell, *Risk Sharing and Incentives in the Principal-Agent Relationship*, 10 BELL J. ECON. 55 (1979). *Cf.* Sappington, *Limited Liabilty Contracts Between Principal and Agent*, 29 J. ECON. THEORY 1 (1983) (analyzes cases in which principal must settle for less than ideal incentives even with risk-neutral agent).

concurrence of optimal risk sharing and optimal loss-avoidance incentives.[21]

Fortunately for some principals, however, rewards and penalties that take effect only upon the occurrence or non-occurrence of a loss are not the only available incentive devices. If the agent's loss-avoidance behavior is *cheaply observable*, other inexpensive and straightforward incentive devices will normally induce the agent to behave in accordance with the principal's interests. Specifically, the principal can order the agent to behave as desired, and promise to reward the agent if he complies or to discharge the agent or withhold his fee if he disobeys. Such promises and threats are effective because the principal can easily determine whether the agent behaves as instructed.

These simple incentives have tremendous advantages over rewards and penalties that take effect only upon the occurrence or non-occurrence of a loss. They are relatively inexpensive to design because the principal needs only to know the desired behavior and its cost to the agent—he need not bother to determine how the agent would react to loss-contingent rewards and penalties. Moreover, the incentives are not in themselves risky to a risk-averse agent; if the agent behaves in the desired way, he either receives the reward with certainty or avoids the penalty with certainty. Thus, it is unnecessary to compromise optimal risk sharing for the sake of incentive maintenance. Finally, the magnitude of the required rewards and penalties is much smaller than the necessary rewards and penalties when behavior is unobservable because, when the principal is sure to ascertain whether the agent complies with instructions, the receipt of the reward or avoidance of the penalty is a certainty for the agent—neither is discounted by the probability of loss. As a consequence, the principal can almost always devise a scheme that is neither ineffectual because of the potential insolvency of the agent nor excessively costly in terms of the agent's total compensation.

The principal can thus generally write a first-best agency agreement if the agent's behavior is cheaply observable.[22] This result contrasts with agency contracting when the agent's behavior is unobservable[23] where,

---

21. Henceforth, this Article distinguishes *first-best* privately Pareto optimal loss-avoidance behavior and risk sharing from *second-best* privately Pareto optimal loss-avoidance behavior and risk sharing. First-best behavior is attainable in a privately Pareto optimal agreement only when there is no tradeoff between risk sharing and incentives. Second-best behavior arises when a tradeoff exists and the agency agreement must compromise risk sharing for the sake of incentive maintenance.

22. *Cf.* Posner, *A Theory of Negligence*, 1 J. LEGAL STUD. 29, 43 (1972) (mentioning importance of "supervision").

23. The tension between risk sharing and performance incentives when behavior is unobservable is theoretically similar to the "moral hazard" problem that arises in insurance contracts where the insured's behavior affects the likelihood of a loss but is unobservable by the insurance company. *See* Pauley, *The Economics of Moral Hazard: Comment*, 58 AM. ECON. REV. 531 (1968); Shavell, *On*

with few exceptions,[24] the privately Pareto optimal agreement requires the parties to sacrifice both optimal risk sharing and optimal performance incentives in exchange for a second-best agency agreement that accommodates the tension between these concerns.[25]

There is one final complication to the analysis. The behavior of agents may be *imperfectly observable.* That is, the principal may be unable to obtain perfect information about behavior, but he may know more than simply whether or not the loss occurs. Imperfect observability arises, for example, when observation of the agent's behavior is feasible but continuous observation is too costly.[26]

Intuitively, imperfectly observable behavior provides the principal with a greater ability to motivate the agent than in the case of unobservable behavior because the principal can more easily detect behavior that conflicts with his interests. Yet imperfectly observable behavior leaves the agent some room to ignore contractual requirements without detection.[27] Thus, it presents an intermediate case; the ideal combination of risk sharing and incentives that is attainable when behavior is cheaply observable becomes infeasible, but the problems that arise when behavior is unobservable are mitigable.[28] Sections III-V of this Article will show that the efficiency of vicarious liability often turns on the extent to which the principal can (economically) observe the agent's loss-avoidance behavior.

II. Effects of the Rule of Liability on Resource Allocation

Several commentators suggest that the choice between a rule of vicarious liability and a rule of personal liability may have no effect on the

---

Moral Hazard and Insurance, 93 Q.J. Econ. 541 (1979); Spence & Zeckhauser, *Insurance, Information, and Individual Action*, 61 Am. Econ. Rev. 380 (Papers & Procs. 1971).

24. If the principal and agent have certain special utility functions, an agreement may exist under which optimal risk sharing and optimal incentives both emerge. *See* Ross, *On the Economic Theory of Agency and the Principle of Similarity*, in Essays on Economic Behavior under Uncertainty 215 (M. Balch, D. McFadden & S. Wu eds. 1974); Ross, *supra* note 10. An obvious example of such a situation arises if the agent is risk neutral. Then, all the risks of poor performance by the agent can be left on the agent to maintain his incentives with no sacrifice of risk-sharing benefits. Even this result is invalid, however, if the agent is potentially insolvent.

25. *See* Gjesdal, *Information and Incentives: The Agency Information Problem*, 49 Rev. Econ. Stud. 373 (1972); Stiglitz, *Incentives, Risk, and Information: Notes Towards a Theory of Hierarchy*, 6 Bell J. Econ. 552 (1975); sources cited *supra* note 20.

26. Spot inspection systems that provide occasional observations of an agent's behavior, but do not provide continuous observations, are a possible response to this problem.

27. *But see* Holmström, *supra* note 20, at 76 n.7 (special case in which imperfect observability does not impede attainment of first-best optimum); Mirrlees, *Notes on Welfare Economics, Information and Uncertainty*, in Essays on Economic Behavior under Uncertainty, *supra* note 24, at 243, 249 (same).

28. Three recent articles specifically address the incremental value to the principal and agent of sources of imperfect information about the agent's behavior. Gjesdal, *supra* note 25; Holmström, *supra* note 20; Shavell, *supra* note 20.

behavior of agencies or on economic efficiency.[29] The most recent and interesting version of this thesis suggests that the choice of liability rule has no economic effect whatever if agents or their insurers are able to pay all judgments in full under a rule of personal liability.[30]

To understand this claim, consider an agency in which the agent is personally liable for his wrongs. Assume that the agent can and will pay any conceivable judgment against him in full.[31] Then, the principal and agent can negotiate an equivalent arrangement under a rule of vicarious liability by agreeing that the agent will reimburse the principal for any damages that the principal pays. Such an equivalent arrangement could also be reached if, under personal liability, the principal had contracted to bear part or all of any judgments against the agent.[32]

In contrast, if the agent is potentially insolvent under personal liability, the parties cannot construct an equivalent financial arrangement under vicarious liability. If the judgment is large enough, joint and several liability would give the injured party greater compensation under vicarious liability than under personal liability. Because the total amount paid to the injured party increases under vicarious liability, either the principal, the agent, or both must bear a greater financial burden.

Thus, as a purely logical matter, principals and agents *can* employ financially equivalent agency agreements under either liability rule if and only if the agency agreement that would prevail under personal liability provides the agent with enough assets to pay any conceivable judgment in full. Recent commentary further suggests that principals and agents *will* employ equivalent agreements under such conditions.[33] This constitutes an empirical claim that warrants further attention.[34]

---

29. Of course, the "Coase theorem" holds that economic efficiency arises under any liability rule in a world of zero transaction costs where all potential injurers and victims can costlessly negotiate among themselves and costlessly enforce their agreements. *See* Coase, *The Problem of Social Cost*, 3 J. L. & ECON. 1 (1960). For a direct application of the Coase analysis to vicarious liability, see Note, *supra* note 6, at 197–98.

30. This proposition is found explicitly in Kornhauser, *supra* note 6, at 1358–60; Note, *supra* note 6, at 185, 185 n.80. Calabresi may have sought to advance a similar proposition some years ago. *See* Calabresi, *Some Thoughts on Risk Distribution and the Law of Torts*, 70 YALE L.J. 499, 546 (1961) (suggesting that if both parties are equally likely to consider true cost of liability, it does not matter for purposes of resource allocation who is liable).

31. The agent may be able to satisfy judgments out of his own assets, the agent may agree with the principal (or simply choose) to buy sufficient insurance, the principal may agree to use his assets to assume judgments against the agent in whole or in part, or the principal may agree to assume judgments against the agent and purchase insurance to cover those judgments.

32. Intuitively, when the amount collectively paid by the principal and the agent or their insurance company is invariant to the liability rule, the principal and the agent can always find contractual terms that distribute monetary liability the same way under either regime.

33. *See* sources cited *supra* note 30.

34. As a theoretical matter, if a particular agency agreement is privately Pareto optimal under personal liability, and if the agent can pay all judgments in full, then the agreement is also privately Pareto optimal under vicarious liability. *See* Kornhauser, *supra* note 6, at 1376–80; Note, *supra* note

If the costs of allocating liability by contract are negligible, then such a claim has considerable intuitive appeal. To be sure, the choice of liability rule affects the initial allocation of liability between the principal and the agent. But when the parties' preferred agreement under personal liability is also available to them under vicarious liability at a negligible cost, it is eminently reasonable to expect negotiations to reach the same result.[35] At the very least, the choice of the liability rule seems unlikely to have any systematic or predictable effects on agency agreements under these circumstances. In turn, that choice seems unlikely to have any systematic or predictable effects on the behavior of principals and agents and the attendant implications for economic efficiency.

If agency contracting is significantly costly, however, this argument is much less persuasive. Principals and agents may find it too expensive to allocate liability by contract under either rule, and the ultimate allocation of liability may thus depend upon where the law initially places it. And even if the parties do allocate liability similarly under the two rules, the law can reduce transaction costs by placing liability on the party who would contract for liability in the absence of transaction costs.

In sum, the choice of the liability rule is unlikely to affect resource allocation significantly if the agent is able to pay all judgments against him in full under a rule of personal liability and if the costs of allocating liability by contract are insubstantial. Concomitantly, the liability rule can significantly affect resource allocation if either of these conditions does not hold.

A. *The Problem of Agent Insolvency*

Many agents are potentially insolvent in the face of a substantial judgment against them. Indeed, if an agent's activities create the risk of a judgment that exceeds the agent's net worth and the agent can obtain a discharge in bankruptcy, then the principal and the agent can use the agent's potential insolvency to their advantage under a rule of personal liability. The agent's insolvency increases the expected profits of the principal-agent enterprise by the value of the judgment less the agent's ability to pay, multiplied by the probability of the judgment. A rule of personal liability thus allows the principal and the agent jointly to increase their

---

6, at 202-03. Privately Pareto optimal agreements are not unique, however—there are many such agreements corresponding to different combinations of expected utilities for the principal and agent. Thus, under the assumption that agency agreements are in fact privately Pareto optimal, the empirical issue is whether the principal and agent will choose the *same* privately Pareto optimal agreement under either liability rule.

35. Several modern theories of bargaining lend theoretical support to this analysis. *See* Nash, *Two-Person Cooperative Games*, 21 ECONOMETRICA 128 (1953); Nash, *The Bargaining Problem*, 18 ECONOMETRICA 155 (1950).

expected profits by eschewing any risk-sharing agreement or any insurance policy that averts agent insolvency and concurrently provides greater compensation to injured parties.

It follows from this observation that agency agreements embodying a prospect of agent insolvency are sometimes privately Pareto optimal under a rule of personal liability. Suppose, for example, that both the principal and the agent are risk neutral. Thus, by definition, they prefer maximum expected wealth regardless of its riskiness. It is then privately Pareto optimal for the agent to risk insolvency in lieu of purchasing insurance or seeking *de facto* insurance from the principal. Such an arrangement yields additional expected profits that the principal and the agent can divide between themselves to the betterment of both parties.[36]

Of course, many principals and agents are risk averse, and thus will forego some expected return to eliminate uncertainty about their wealth. Private Pareto optimality for these individuals may require an agency agreement or an insurance policy that protects the agent from insolvency, despite the attendant decrease in expected profits. Sometimes, however, the cost of such an agreement in reduced expected profits is so great that the agreement is privately Pareto inferior despite the risk aversion of one or both parties.[37] This prospect is especially likely when potential liability is large. Thus, risk aversion alone, though common, does not ensure that agents will protect themselves from insolvency. An enterprise may still exploit the agent's limited ability to pay to increase its expected profits under a rule of personal liability, and the choice between personal liability and vicarious liability will affect resource allocation because it will affect the allocation of losses between the principal-agent enterprise and the victim of the agent's wrongs.

B. *The Problem of Transaction Costs*

Various transaction costs make the allocation of liability by agency contract more difficult or more expensive. The first such costs—negotiation costs—include the costs of negotiations themselves and the costs of the information necessary to make negotiations productive. Negotiation costs are especially significant if the likelihood or magnitude of a given wrong is small in relation to the value of the agency to the parties. In such a case, it may not pay the principal and the agent to invest the time and energy necessary to the negotiation of an explicit allocation of possible civil liabil-

36. At least one other commentator notes that business principals may deliberately use judgment-proof agents under a rule of personal liability. *See* Steffen, *Independent Contractor and the Good Life*, 2 U. CHI. L. REV. 501, 521 (1935).

37. *Cf.* Note, *supra* note 6, at 182, 182 n.69.

ity. Moreover, if the parties do allocate liability by contract, the cost of the attendant negotiations significantly reduces the value of the agency.

A second type of transaction costs—enforcement costs—may also impede the contractual allocation of liability. Such costs can be especially significant when principals have a right of indemnity against their agents.[38] Suppose, for example, that a plaintiff chooses to collect his entire judgment from a vicariously liable principal who has a "deeper pocket" than his agent. Even if the principal had a right to full or partial indemnity from the agent, the costs of an indemnity action against the agent and the costs of pursuing his assets subsequent to judgment may render the action unprofitable. Indeed, empirical evidence suggests that principals very rarely pursue their rights to indemnity against their agents.[39]

When negotiation and enforcement costs are significant, the choice between personal liability and vicarious liability affects the allocation of resources even if agents can pay judgments in full under a rule of personal liability. The proper choice of liability rule can improve the efficiency of risk sharing between the principal and the agent and reduce the costs of agency contracting.

III. Personal Liability for the Wrongs of Agents Against Involuntary Creditors—The Possible Inefficiencies

This section, along with Section IV, analyzes the choice between personal liability and vicarious liability for the wrongs of agents against involuntary creditors.[40] The distinguishing feature of these wrongs is that they do not affect the willingness of consumers to pay for the goods or services of the enterprise.[41]

We begin by analyzing the possible inefficiencies of personal liability when agents are potentially insolvent or the transaction costs of allocating liability by contract are significant. Here, the term "inefficiency" refers to the misallocation of resources that occurs relative to an ideal world of solvent agents and zero transaction costs. Section IV will consider whether

38. In tort law, for example, principals have a common law right to full indemnity against their agents unless that right is contractually abrogated. *See* M. Franklin, Tort Law and Alternatives 390 (2d ed. 1979).

39. *See* James, *Vicarious Liability*, 28 Tul. L. Rev. 161, 162 (1954); James, *Accident Liability Reconsidered: The Impact of Liability Insurance*, 57 Yale L.J. 549, 556–57 (1948).

40. *See supra* p. 1233 & nn.7-8 (distinction between involuntary and voluntary creditors).

41. Henceforth, the analysis embodies several assumptions. First, the principal-agent enterprise operates in a competitive product market. Second, the assessment of damages against the enterprise is invariant to the choice of liability rule, and damages fully compensate the victims of agents' wrongs. Third, the dissolution of an enterprise will completely eliminate any possibility of the wrong at issue. Finally, the analysis ignores any opportunity for risk sharing between enterprises and victims. On this last point, see Shavell, *On Liability and Insurance*, 13 Bell J. Econ. 120 (1982).

a rule of vicarious liability exacerbates or mitigates these "inefficiencies" of personal liability.

A. *Personal Liability and the Problem of Agent Insolvency*

The potential insolvency of agents leads to several inefficiencies under a rule of personal liability. First, potentially insolvent agents are likely to invest inefficiently little of their own resources in the avoidance of wrongs. Considerations of risk aversion aside, and assuming that damages are assessed efficiently, an efficient allocation of resources requires the agent to invest in loss avoidance to the point where the marginal cost of further investment (in dollars or their utility equivalent) exactly equals the marginal reduction of expected damages.[42] Because of the potential insolvency of the agent, however, the expected loss to the agent in the event of a wrong is smaller than the expected damages. The agent thus has less incentive (overall and at the margin) to invest in loss avoidance than he would if he could pay damages in full.[43]

A second inefficiency arises because the possibility of agent insolvency increases the expected profitability of the principal-agent enterprise. Privately Pareto-optimal agency contracts may then deliberately allow agents to risk insolvency, and may thereby sacrifice the benefits of efficient risk sharing between the principal and agent. Such behavior would not occur if agents could pay all judgments out of their own assets because, absent the opportunity to evade liability, principals and agents would have no incentive to forgo an efficient allocation of risk.

Finally, when agents are potentially insolvent, the perceived costs of production for each principal-agent enterprise understate the true economic costs of production. The attendant excess profit either induces enterprises to expand, attracts entry into their industries, or both. Eventually, expansion in a competitive market reduces the selling price of agency output until the incentive for further expansion disappears. At that point, however, the selling price is below the true economic cost of each unit of output, and the level of production is inefficiently high.

---

42. The discussion here, and throughout the rest of Part A, suppresses the distinction between strict liability and negligence as a basis for the liability of the agent. The analysis is valid whichever regime prevails as long as the regime in effect would produce efficient behavior by both agents and victims absent the problems of agent insolvency and the transaction costs of agency contracts.

43. *Cf.* Posner, *supra* note 22, at 43 (discussing consequences of potential insolvency for level of care).

A risk-averse agent will undertake investments in loss avoidance for which the marginal cost exceeds the marginal dollar reduction in his expected loss. If the agent's net worth is substantially smaller than potential damages to victims, however, the agent still will not approach the efficient level of loss-avoidance investment. Moreover, if the victims of loss are also risk averse, the economically efficient level of investment may increase as well.

B. *Personal Liability and the Problem of Transaction Costs*

In the typical agency where the principal is a better risk bearer than the agent, a rule of personal liability initially places economically excessive risk on the agent. If transaction costs prevent efficient shifting of risk to the principal, then the principal must compensate the agent more generously than he would in an ideal world. The costs of production increase as a result, and economic welfare declines as principal-agent enterprises operate at a smaller scale and charge higher prices. Alternatively, if the parties incur the significant transaction costs of a risk-bearing agreement, those costs feed directly into the costs of production. Once again, the scale of operation contracts and the price of enterprise output rises.[44]

In agencies where transaction costs are significant *and* the agent is potentially insolvent, the inefficiencies that arise are a combination of those discussed here with those discussed above. Indeed, the transaction costs of risk-sharing agreements may explain why some principals and agents forego efficient risk sharing in favor of the added profits from the evasion of liability.

IV. Vicarious Liability for the Wrongs of Agents Against Involuntary Creditors

As suggested by Section I, the effects of vicarious liability on resource allocation often depend on the ability of principals to observe the loss-avoidance behavior of their agents. The remarks to follow, therefore, contemplate the three degrees of observability identified earlier: observability at zero or low cost, unobservability due to the infeasibility of observation or its prohibitive cost, and imperfect observability.

In a given agency, the degree of observability is that which is economically worthwhile under a rule of vicarious liability. Whether and to what extent a principal actually undertakes to observe his agent is not determinative.

A. *The Optimal Liability Rule When Loss-Avoidance Behavior is Cheaply Observable*

Section I of this Article establishes that if a principal can observe the loss-avoidance behavior of his agent at little or no cost, then he can generally induce first-best loss-avoidance behavior by the agent with no sacrifice

44. Of course, some agents bear insurable risks and may choose to buy insurance in the market. The opportunity for the agent to buy insurance, however, does not necessarily obviate the efficiency loss attributable to transaction costs. The principal may be able to purchase insurance more cheaply than the agent, or the purchase of insurance by the principal may reduce the transaction costs of insurance contracts. *See supra* p. 1236.

of first-best risk sharing. This section considers the implications of that result for the *social* efficiency of vicarious liability when the agent is potentially insolvent or the transaction costs of contractual risk allocation are significant.

1. *The Problem of Agent Insolvency*

As noted earlier, several "inefficiencies" arise under a rule of personal liability when agents are potentially insolvent: Agents usually invest inefficiently little to avoid losses; the principal and the agent often deliberately sacrifice the benefits of optimal risk sharing; and either the enterprise or its industry generally expands to an inefficiently large scale.

Under vicarious liability, however, an enterprise cannot evade judgments as long as the principal and the agent together have sufficient assets to cover them. The first-best privately Pareto-optimal loss-avoidance investment will then reflect the full cost of potential damages, and will thus coincide with the socially efficient investment. Furthermore, because the principal can cheaply observe loss-avoidance investments by the agent, he can induce the agent to undertake the first-best privately Pareto-optimal investment even though the principal may bear part or all of the risk of loss via a first-best risk-sharing arrangement. Thus, when vicarious liability forces the enterprise to "internalize" the full cost of its actions, the result is a socially efficient level of loss-avoidance investment by the agent and a privately (and socially) efficient level of risk sharing between the principal and the agent.

To state this conclusion in slightly different terms, vicarious liability reduces the social marginal costs of production[45] at all levels of output, i.e., it shifts the social marginal cost curve downward. To be sure, the marginal costs of production to the enterprise increase, but the enterprise economizes on losses to the victims of wrongs through more efficient loss-avoidance measures,[46] and the principal and the agent no longer sacrifice the benefits of optimal risk sharing to secure added profits from the evasion of liability by an insolvent agent. Resource allocation improves because, when all costs are taken into account, each unit of enterprise output becomes cheaper to produce.

Vicarious liability has yet another benefit. Because the enterprise no longer earns excessive profits from the evasion of liability judgments by

45. The social marginal costs of production include marginal costs to the enterprise—labor, capital, materials, liability judgments paid, and so on—plus any uncompensated marginal costs of wrongs to injured parties.

46. When loss-avoidance investments increase to their efficient level under vicarious liability, losses per unit of output decrease by more than the increased cost of loss-avoidance efforts. Hence, enterprise principals, agents, and injured parties collectively bear lower costs per unit of output.

the insolvent agent, the incentive for inefficient expansion disappears, and the scale of the enterprise (or its industry) contracts to its socially efficient level.

2. *The Problem of Transaction Costs*

Vicarious liability also improves resource allocation when the transaction costs of agency contracts are significant. As noted earlier, personal liability typically results in an excessive allocation of risk to the agent. Vicarious liability shifts this risk to the principal and, because the agent's loss-avoidance behavior is cheaply observable, it does not damage the agent's loss-avoidance incentives.

B. *The Optimal Liability Rule When Loss-Avoidance Behavior Is Unobservable or Prohibitively Costly To Observe*

Difficult issues arise when the agent's behavior is unobservable by the principal. Rewards and penalties that depend on the occurrence or nonoccurrence of a loss are the only devices that the principal can use to motivate loss-avoidance efforts, and, as shown below, vicarious liability becomes a less attractive regime. Nevertheless, it is still the best option for many agencies.

In the analysis to follow, the duration of the agency relationship has important implications for the economic consequences of vicarious liability. Hence, this section draws a distinction between "one-period" and "multiperiod" agencies.

1. *One-period Agencies*

In a one-period agency, the principal hires the agent to perform a single task or group of tasks, and the agency then terminates. The parties do not expect to renew the agency in the future, or at least the likelihood of renewal is low. At the commencement of the agency, the principal and the agent negotiate the agent's fee or salary schedule for the entire duration of the agency relation.[47]

a. *The Problem of Agent Insolvency*

To begin the analysis, imagine for the sake of simplicity that the activities of an agent entail the following risk or loss: Either the loss does not

47. Possible examples of one-period agencies include the contract between a builder and a subcontractor for a single construction project, or the contract between a shipper and a trucker for delivery of a single shipment of goods. Obviously, however, such relationships may renew themselves periodically, in which case they are not one-period.

occur, or it occurs with damages equal to a known, fixed amount. Then, the agent's incentives for loss avoidance clearly depend upon the difference between the agent's wealth in the absence of a loss and the agent's wealth in the event of a loss (after payment of any judgment). The greater the difference, the more the agent has to gain from avoidance of the loss, and the more money or effort he will invest to that end.

Earlier analysis establishes that if the agent is potentially insolvent under a rule of personal liability, his investment in loss avoidance will usually be inefficiently low. The first question to ask in this simple framework, therefore, is whether vicarious liability will increase the incentives for investment in loss avoidance.

Obviously, when the principal confronts the prospect of liability for the agent's wrongs, the principal would like the agent to increase his loss-avoidance efforts (other things being equal). Moreover, because the agent's investment in loss avoidance is inefficiently low, such an increase would save the principal more than it costs the agent.

Unfortunately, however, the principal can only motivate greater loss-avoidance efforts by modifying the agency contract to increase the difference between the agent's wealth in the absence of a loss and the agent's wealth in the event of a loss. In general, the principal can effect such an increase by paying the agent a higher fee or bonus if he avoids the loss, or by imposing a greater penalty on the agent if he incurs a loss. But here, the agent is insolvent in the event of a loss under personal liability, and hence the penalty for a loss is already at an effective maximum—any additional financial penalties that the principal threatens to impose under a regime of vicarious liability will have no impact on the agent's incentives. Thus, the only way for the principal to increase loss-avoidance incentives under vicarious liability is to reward the agent more generously if he avoids the loss.

Such behavior by the principal is contrary to what seems likely to result from vicarious liability in many cases. Vicarious liability reduces the value to the principal of the agent's services by adding to the expected cost of hiring an agent or, equivalently, reducing the value of the agent's marginal product.

Wages and other compensation may then decline for a variety of reasons. In labor markets that are not perfectly competitive, some agents possess bargaining power or special skills that enable them to obtain a fee in excess of their reservation wage—an economic rent.[48] Because vicarious liability reduces the profitability of the enterprise relative to its profitabil-

48. Concededly, if agents have market power, the analysis in the text becomes subject to a number of caveats relating to the theory of the second best.

ity under personal liability, principals may succeed in bargaining away some of these rents.[49] Also, even in perfectly competitive labor markets, the labor supply curve may slope upward. Then, because vicarious liability reduces the demand for agents' services, the market will tend to equilibrate at a lower wage rate and thus provide smaller compensation to agents and commensurately smaller incentives to avoid losses.[50]

Thus, although potentially insolvent agents invest inefficiently little in loss avoidance under personal liability, vicarious liability conceivably aggravates the inadequacy of their loss-avoidance incentives.[51] Although

---

49. Indeed, unless the principal earns economic rents himself, the agent's rents must decline under vicarious liability.

50. This analysis is similar to an argument in the author's student Note. *See* Note, *supra* note 6, at 205–06. It is this point that Kornhauser claims is mistaken. Kornhauser, *supra* note 6, at 1391–92. Kornhauser seems to misunderstand the analysis, however, and also fails to recognize that his analysis of the same issue rests on extremely restrictive empirical assumptions.

First, Kornhauser contends that this line of argument contradicts the assumption of rational behavior by the principal. He argues that if the agent's compensation declines in response to vicarious liability, then the principal could have induced the agent to work for the lower wage under personal liability, and would have done so. *Id.* at 1392.

This argument rests on very strong assumptions. As suggested in the text, some agents have special skills that enable them to command a premium over their reservation wage and other agents benefit from labor organizations (unions or professional societies) that constrict the supply of labor and raise the equilibrium wage above the competitive level. Vicarious liability may cause a decline in such rents. Moreover, equilibrium wages will tend to decline as a result of vicarious liability if the supply curve of agent labor is upward sloping. Hence, Kornhauser's argument implicitly assumes that agents have no bargaining power and that the supply of agent labor is perfectly elastic—two highly restrictive empirical premises.

Second, Kornhauser argues that the Note's analysis incorrectly "divides the choice of wage contract from the choice of precautionary level." *Id.* His model fully determines the privately Pareto-optimal agency contract and the level of precautionary behavior with an assumption that the principal maximizes his utility subject to the constraint that the agent receives his reservation wage, and the constraint that the agent chooses loss-avoidance measures to maximize his own expected utility. This maximization problem yields the first-order conditions for an optimum that Kornhauser uses in his formal analysis.

Although such models are standard in the agency literature, they are simply unnecessary to the derivation of interesting results about vicarious liability. Kornhauser's own model, and his discussion of that model, concede the importance to loss-avoidance incentives of the difference between the agent's wealth in the absence of a loss and the agent's wealth in the event of a loss. *Id.* at 1363–64, 1383. The analysis in this Article suffices to establish that this difference can decline under vicarious liability, with a concomitant decline in loss-avoidance incentives. Thus, contrary to Kornhauser's apparent contention, a model that suffices to determine the *levels* of the agent's wealth both with and without a loss is unnecessary. Moreover, the model that Kornhauser employs is mathematically unsatisfactory, a fact that has motivated recent economic research on the theory of agency to abandon the type of model that Kornhauser uses in favor of a mathematically superior approach. *See* Grossman & Hart, *An Analysis of the Principal-Agent Problem*, 51 ECONOMETRICA 7 (1983). The analysis herein is fully consistent with that approach.

51. The incentive for loss-avoidance investments may also decline because vicarious liability leads the agent to negotiate a risk-sharing agreement with the principal or an insurance company that protects the agent from insolvency. This possibility arises because vicarious liability eliminates the extra profitability that an enterprise earns when an insolvent agent evades liability judgments. As that "benefit" of potential insolvency is no longer attainable under vicarious liability, it may then pay a risk-averse agent to enter a risk-sharing agreement. But this possibility cannot lead to an efficiency loss: The willingness of the principal or an insurance company to contract voluntarily for risk sharing with the agent ensures that the increased likelihood or magnitude of losses attendant on such an agreement are offset by the benefits of risk sharing.

such effects may be quite small, they clearly shift the social marginal cost curve upward and thereby reduce economic welfare (other things being equal).

But the analysis is not nearly so simple. A variety of circumstances exist in which the imposition of vicarious liability *lowers* the social marginal cost curve. Such a reduction can result, for example, from the advent of more efficient risk sharing between the principal and the agent.

In addition, notwithstanding the discussion above, vicarious liability may lower social marginal costs by increasing the incentives for loss avoidance. To see how greater loss-avoidance incentives may arise,[52] let us abandon the simplistic assumption that a wrong results in damages of a known, fixed amount, and consider the more realistic assumption that a wrong can result in a variety of possible damage judgments. Suppose, for example, that the occurrence of a wrong results in one of two judgments, "small" damages or "large" damages, and that under a rule of personal liability the agent can pay small damages in full, but is insolvent in the event of large damages.

Vicarious liability may lead to increased loss-avoidance incentives because the principal can use an incentive that the courts cannot use under personal liability. Specifically, courts cannot impose damages greater than the injured party's loss. In the event of small damages, however, the principal can impose a penalty that exceeds the amount of damages. Such an incentive structure may be privately Pareto optimal; it can increase the expected profits of the enterprise and can lead the agent to take greater care. If so, the social marginal costs of production decline and economic welfare increases.

In addition, social marginal costs may decline under vicarious liability if principals switch to solvent agents. By hiring agents with greater total assets, principals can contract for increased loss-contingent penalties and thereby increase agents' incentives to avoid losses.[53]

---

52. Even in the simple world where loss-avoidance incentives depend entirely on the difference between the agent's wealth in the absence of a loss and the agent's wealth in the event of a loss, vicarious liability *conceivably* leads to greater loss-avoidance investment. A principal who confronts vicarious liability may deliberately increase the payment to the agent in the absence of a loss to induce greater loss-avoidance efforts, even though such a policy results in total compensation to the agent that exceeds what the agent could otherwise command in the labor market. That is, by "overcompensating" his agent, the principal can provide the agent with a greater financial stake in the avoidance of losses. This leads the agent to invest more in loss avoidance, and the resultant savings in civil damages to the vicariously liable principal conceivably offsets the extra compensation to the agent. Kornhauser, *supra* note 6, at 1363–64. Such behavior by the principal seems unlikely to arise very often. One might test this hypothesis empirically by inquiring whether vicariously liable principals deliberately pay their agents extra wages to provide a greater incentive for loss avoidance. Absent such data, however, the significance of this possibility must remain an open question.

53. Of course, many agents conduct activities with risks of loss that dwarf their personal assets, and hence the principal may be unable to find a solvent agent anywhere in the agency market. Furthermore, the costs to the principal of searching for a financially solvent agent may be prohibitive.

Finally, aside from its effects on the social marginal cost curve, vicarious liability tends to induce a more efficient scale of principal-agent activity. As noted earlier, vicarious liability eliminates the incentives for inefficient expansion when agents are potentially insolvent by forcing enterprises to bear the full costs of their activities. The scale of enterprise activity then contracts to the point where the price of agency output covers its social marginal costs.

It follows from this analysis that vicarious liability clearly improves economic welfare if it shifts the social marginal cost curve downward. And even if vicarious liability causes the social marginal cost curve to shift upward, economic welfare may still improve because the benefit to society from a smaller scale of agency operation can exceed the loss to society from higher social marginal costs.

These results suggest the following empirical question: When, if ever, does vicarious liability lead to an upward shift of the social marginal cost curve that outweighs the benefits from a smaller scale of operation? The answer seems to be rarely, if ever.

Recall that the social marginal cost curve may shift upward under vicarious liability if agents' compensation declines and thereby reduces the incentives of agents to avoid losses.[54] The principal may be able to mitigate or eliminate this problem through appropriate incentive devices, however, and labor market competition for agents' services may prevent a significant decline in agent compensation. Moreover, the principal's expected liability per agent under vicarious liability is often quite small—vicarious liability is then unlikely to have much of an effect upon agent compensation. Alternatively, vicarious liability may lead to the employment of more financially responsible agents with an attendant increase in loss-avoidance effort.

Finally, in many agency activities, loss-avoidance behavior may be rather invariant to contractual incentives generally and to the financial incentives attendant on the level of compensation in particular.[55] For example, consider an agency activity that runs the risk of killing or severely

54. Even then, the efficiency of risk sharing may improve by more than enough to offset the effect of reduced loss-avoidance incentives on the social marginal cost curve.

55. Three types of agency activities fit this description. The first group consists of activities in which, regardless of the liability rule, the costs of feasible loss-avoidance efforts either always exceed their benefits, or never exceed their benefits. *Cf.* Shavell, *supra* note 20, at 63–64 (possibility that "efficiency of effort" is high). A second and far more important group consists of activities in which loss-avoidance behavior is determined without conscious regard for the danger of liability—i.e., the agent's decisionmaking suffers from "bounded rationality," and the risk of liability is attributable primarily to momentary carelessness rather than to a calculated decision to disregard applicable standards of behavior. The third group consists of activities that create a de minimus risk of liability, wherein the agent does not choose behavior carefully because the expense of assessing the relevant costs and benefits exceeds the benefits of doing so. *Cf.* G. CALABRESI, *supra* note 19, at 104 (argument that insurance eliminates or reduces the effect of financial considerations on decisionmaking).

injuring the agent as well as causing injury to a third party. Under such circumstances, the agent may exercise available precautions against accident regardless of the extent to which he is able to pay a liability judgment to the third party.

Hence, although vicarious liability may reduce compensation to agents and thereby reduce their loss-avoidance incentives (other things being equal) the economic significance of that prospect is probably minimal. Where it occurs, any associated inefficiency is likely to be offset by more efficient risk sharing and by a more efficient scale of operation.

b. *The Problem of Transaction Costs*

If negotiation and enforcement costs are large in relation to the value of contractual risk allocation, then vicarious liability will often shift the ultimate burden of liability to principals. Plaintiffs will choose to collect from the "deeper pocket," and it will be too costly for principals to shift liability back to their agents through incentive contracts. As a result, the economic welfare of agents will no longer depend as significantly on the occurrence or non-occurrence of losses as it does under personal liability, and the incentives for loss-avoidance investments will decline. In turn, the likelihood or magnitude of losses will increase, with an attendant upward shift in the social marginal costs of production (other things being equal). Alternatively, if principals and agents incur the costs of shifting liability back to the agent to maintain incentives, such costs lead directly to an increase in social marginal costs. Competitive prices rise, and the scale of enterprise activity contracts. This problem does not arise when the transaction costs of contractual risk allocation, and thus the costs of incentive maintenance, are insubstantial.

It follows that when such costs are high, vicarious liability can be highly inefficient. Consider an industry in which agents can pay all judgments against them in full under a rule of personal liability. Because of transaction costs, vicarious liability may inefficiently increase social marginal costs by reducing loss-avoidance incentives and increasing the costs of agency contracts. The resultant contraction of the industry is also inefficient because, under personal liability, consumer willingness-to-pay already covers the social marginal costs of production.

Of course, an important caveat to this analysis is that principals are often better risk bearers than their agents. Just as transaction costs may impede the creation of desirable incentives under vicarious liability, they may also impede a desirable allocation of risk to the principal under personal liability. Hence, the imposition of vicarious liability may generate benefits from risk sharing that outweigh any adverse impact on the incentives for loss avoidance.

A second caveat arises if loss-avoidance behavior is substantially invariant to the contractual incentives that arise under alternative liability rules.[56] Then, although vicarious liability shifts the burden of civil damages from agents to principals, the behavior of agents remains unchanged and there is no increase in social marginal costs.

Thus, when loss-avoidance behavior is unobservable and the transaction costs of contractual risk allocation are significant, the efficiency of vicarious liability turns on difficult empirical issues. Vicarious liability may exacerbate losses or increase the costs of agency contracts because contractual loss-avoidance incentives are too expensive to employ, but it may also enhance the efficiency of risk sharing and, when agents are potentially insolvent, produce an economically desirable contraction of industry scale.

2. *Multiperiod Agencies*

"Multiperiod agencies" fall into two categories. In the first category, the agent accepts periodic payments for his services over the course of the agency, and some portion of his future payments depends upon his performance. For example, the agent's performance may determine whether he receives a raise or a promotion, or whether the principal retains or discharges him. Many conventional employment relationships fit this description.

In the second category, the agent's compensation is fixed for the duration of the contract, but the parties expect a future course of dealing if the agent's performance is satisfactory. For example, a builder may subcontract with an electrician for a single job, but the parties may understand that successful and efficient work by the electrician will lead to further contracts.[57]

When the agent's loss-avoidance behavior is cheaply observable by the principal, the distinction between one-period and multiperiod agencies is uninteresting. The principal and agent simply contract for first-best privately Pareto-optimal loss-avoidance efforts in each period, and each such contract is cheaply and easily enforceable for the reasons given earlier.

If the agent's loss-avoidance behavior is unobservable by the principal, however, multiperiod agencies add a new twist to the analysis because they alter the incentive devices available to the principal. The principal can, for example, threaten the agent with a salary reduction, a demotion, or discharge, each of which can affect the agent's economic welfare in future years. Of course, such threats are ineffective if the agent can cir-

56. *See infra* pp. 1261–62.

57. Of course, in most agency relationships, there is some possibility that the parties will deal with each other again in the future. For the agency to be multiperiod in an important sense, however, the parties must perceive a substantial likelihood of future dealings.

cumvent them by moving to alternative employment. For a multitude of reasons, however, agents often earn returns in excess of what they can earn in their next-best employment opportunity, and expect those returns to continue into the future.[58] Such agents have an important stake in retaining their current positions.

a. *The Problem of Agent Insolvency*

As prior analysis establishes, vicarious liability improves resource allocation in most one-period agencies where the agent is potentially insolvent and the transaction costs of contractual risk allocation are insignificant. The economic benefits of vicarious liability are even greater in multiperiod agencies because principals can create incentives to avoid losses with rewards or penalties that affect agents' future returns on employment. Such incentive devices help the principal to overcome the inadequacy of loss-avoidance incentives attributable to the agent's inability to pay judgments in the current period. The social marginal costs of production decline, and economic welfare increases.

Courts cannot create comparable incentives because of the bankruptcy laws.[59] Once a judgment arises against an agent, the agent can file for bankruptcy and obtain a discharge that protects his future assets.[60] Thus, unlike multiperiod principals, courts generally cannot impose penalties that affect the agent's stream of income beyond the time of the discharge in bankruptcy. The multiperiod character of many agencies, therefore, weighs in favor of vicarious liability.

---

58. As noted earlier, the agent may have the power to bargain for supracompetitive wages because of unionization, unique skills, or some other source of market power. Another possibility is that the agent may invest in physical or human capital that has little value in other employment and that represents a sunk cost to the agent. Then, even a competitive return to the agent on his original investment provides compensation in excess of the agent's opportunity costs. In addition, the agent's next-best employment may not be easy to secure without an expensive search, i.e., the costs of unemployment may effectively reduce an agent's opportunity costs.

Finally, at least one author suggests that principals deliberately design age-earnings profiles to provide returns in excess of opportunity costs in the later years of agents' careers. This policy increases performance incentives, and agents accept the policy because they realize that better performance leads to greater overall compensation. *See* Lazear, *Agency, Earnings Profiles, Productivity, and Hours Restrictions*, 71 AM. ECON. REV. 606 (1981). *Cf.* Morris, *The Torts of an Independent Contractor*, NW. U.L. REV. 339, 341 (1934) (threat of discharge subjects employee to considerable control by principal).

59. Not only can the principal impose greater penalties than the courts, but he can do so in many cases without exposing a risk-averse agent to inordinate risk. In a multiperiod agency, principals can mitigate the tradeoff between risk sharing and incentives by linking the agent's compensation to the *history* of his losses. *See* Radner, *Monitoring Cooperative Agreements in a Repeated Principal-Agent Relationship*, 49 ECONOMETRICA 1127 (1981); Rubinstein & Yaari, *Repeated Insurance Contracts and Moral Hazard*, 30 J. ECON. THEORY 74 (1983).

60. *See generally* 11 U.S.C. §§ 101-766, 1301-1330 (1982) (bankruptcy law provisions that govern debts of individuals).

If the agent is a corporation, the reorganization provisions are pertinent, 11 U.S.C. §§ 1101-1174 (1982), as are the legal standards for "piercing the corporate veil."

b. *The Problem of Transaction Costs*

Multiperiod agencies can administer rewards and penalties more cheaply than one-period agencies. For a one-period agency, the costs of elaborate loss-contingent incentive schemes (e.g., indemnity actions) can be quite high. But the multiperiod principal can incorporate loss-contingent incentive devices into his routine decisions about raises, promotions, and employee retention.[61] He must make such decisions anyway, and he incurs little additional cost if he bases them in part upon his agent's history of losses or loss avoidance. Thus, although vicarious liability is potentially inefficient when loss-avoidance behavior is unobservable and the transaction costs of contractual risk allocation are significant, it is less likely to undermine efficiency in a multiperiod agency than in a one-period agency.

3. *The Optimal Liability Rule When Loss-Avoidance Behavior is Imperfectly Observable*

In many agency relationships, the principal can observe the loss-avoidance behavior of the agent only occasionally. Perhaps the cost of continuous observation is prohibitive, or perhaps continuous observation is simply infeasible. In any case, even when the principal has the incentive to monitor his agent's behavior, his information is imperfect. As noted in Section I, imperfect observability will necessitate a second-best agency agreement that generally falls short of the first-best agreement but is superior to the best attainable agreement when loss-avoidance behavior is unobservable.

a. *The Problem of Agent Insolvency*

For the reasons given earlier, when the transaction costs of contractual risk allocation are insignificant but agents are potentially insolvent, vicarious liability is likely to enhance economic welfare even when loss-avoidance behavior is unobservable. The welfare consequences of vicarious liability when behavior is imperfectly observable are better still, because the vicariously liable principal can employ various periodic observation techniques to induce greater loss-avoidance efforts by his agent.[62] As a result, the social marginal cost curve is even more likely to shift downward, resulting in an unambiguous welfare gain.

---

61. Concededly, a principal cannot recover his losses by discharging or demoting his agent, but he can maintain the agent's incentives to avoid losses.

62. Spot inspections and audits are two examples of devices that the principal can use when behavior is imperfectly observable.

b. *The Problem of Transaction Costs*

The costs of loss-avoidance incentives based on imperfect observations of agent behavior can be considerable. The principal must estimate the probability that the system will detect misbehavior, determine how agents will react to the rewards and penalties, and accommodate the reward-penalty structure with the mutual desire of the principal and agent for efficient risk sharing. Such a scheme is almost certain to be more costly than the devices that are available when behavior is cheaply observable.

On the other hand, simple and cheaply administered reward and penalty devices, such as promotions, bonuses, threats of discharge, or the withholding of fees, are more likely to induce optimal or near-optimal loss-avoidance efforts when behavior is imperfectly observable than when behavior is unobservable. Such devices can be made contingent not only on the occurrence or non-occurrence of a loss, but on actual observations of agent behavior. They motivate the agent more effectively and reduce the danger that vicarious liability will undermine loss-avoidance incentives and cause an upward shift in social marginal costs. Thus, once again, imperfect observability presents an intermediate case.

V. Vicarious Liability For the Debts of Agents to Voluntary Creditors

The analysis in Section IV assumes that the loss-avoidance behavior of the agent and his ability to pay judgments does not affect societal willingness to pay for the goods and services of the principal-agent enterprise. This assumption is conceivably false if injured parties are "voluntary creditors"—if their losses arise as a consequence of their business transactions with the enterprise. Such creditors may observe or anticipate the risk of loss ex ante, and their willingness to deal with the enterprise or to pay for its output may thus depend in part upon the loss-avoidance efforts of agents and the agents' ability to pay judgments. Fortunately, however, introducing voluntary creditors requires only modest adjustments to the analysis above. And in the end, the distinction between voluntary and involuntary creditors has minimal import for the choice of an efficient liability rule.

To begin the analysis, note that the distinction between voluntary and involuntary creditors turns on the information available to potential creditors about the behavior and financial soundness of agents, and the sensitivity of potential creditors to such information. For simplicity, we consider only two possibilities.

A. *Creditors Ignore or Lack Information about Agents*

Often, the risk of malfeasance or carelessness by an agent is very small, and potential voluntary creditors may choose to ignore any information that they have about the loss-avoidance behavior of agents or the ability of agents to pay liability judgments.[63] Alternatively, potential voluntary creditors may desire to act on information that they receive about agents, but may have no source of relevant information. In either case, they cannot consider such information as part of their decisions to purchase.

Under these circumstances, voluntary creditors are equivalent to involuntary creditors in economic analysis. The ability of the principal and the agent to succeed in the marketplace, and the financial incentives that they face, are invariant to their loss-avoidance efforts and solvency except insofar as those factors depend upon the liability rule. The results in Section IV apply fully.

B. *Creditors Are Well Informed About Every Agent in the Market and React Fully to That Information*

If potential voluntary creditors have accurate information about every agent and take that information fully into account in their purchase decisions, then their willingness to pay for the products and services of each enterprise will fully incorporate the risk of loss from transactions with the enterprise and the risk that the enterprise cannot pay liability judgments against it. As a result, the choice of liability rule has relatively little economic significance.

1. *The Problem of Agent Insolvency*

When the transaction costs of contractual risk allocation between the principal and agent (as distinguished from the transaction costs of dealing with customers) are insignificant, the choice between personal liability and vicarious liability has few if any economic consequences, irrespective of whether agents are potentially insolvent. Indeed, if all parties are risk neutral, the choice of liability rule has no consequences whatever. Although vicarious liability increases the marginal costs of production to the enterprise, potential voluntary creditors' willingness to pay for the goods and services of the enterprise increases commensurately. Net revenue per unit of output is the same under either rule, and thus the scale of operation is also the same.

Even if some parties are risk averse, the choice of liability rule has no

63. It is optimal to ignore such information if the costs of information processing exceed the expected benefits—a circumstance that is especially likely if the risk of loss is very small.

consequences if the costs of transactions with potential voluntary creditors are negligible. Principals, agents, and potential voluntary creditors will then contract for an optimal allocation of risk according to each individual's attitude toward risk bearing and according to the tradeoffs between risk sharing and the incentives for loss avoidance. The choice of liability rule will not affect this contractual allocation of risk[64]—an example of the well known "Coase theorem."[65]

Of course, if the costs of transactions with potential voluntary creditors are high enough, the choice of liability rule can affect the allocation of resources, and indeed can improve that allocation if either potential voluntary creditors or enterprise principals are systematically better suited to bear the risk of agent insolvency. Under these conditions, however, it seems unlikely that customers will have accurate information about the loss-avoidance behavior of agents and their ability to pay judgments; such information is likely to arise because of negligible transaction costs between the enterprise and its customers, not in spite of high transaction costs.

Hence, for well informed voluntary creditors, the choice of liability rule is arguably immaterial if agents are insolvent, and little if anything is lost if society applies the same liability rules that govern debts to involuntary creditors. Again, the economic distinction between voluntary and involuntary creditors arguably warrants no distinction in legal policy.

2. *The Problem of Transaction Costs*

As argued above, when potential voluntary creditors are well informed, the enterprise bears the full expected costs of its wrongs irrespective of whether agents are potentially insolvent. Nonetheless, the choice of liability rule can affect resource allocation if the transaction costs of contractual risk allocation between the principal and agent are high. Then, vicarious liability will often create benefits from risk sharing because principals are typically less risk averse than their agents. But vicarious liability may also dilute agents' incentives for loss avoidance or significantly increase the costs of agency contracts. The balance of these effects will determine whether vicarious liability increases or decreases economic welfare.

These remarks, however, raise entirely familiar concerns. The only difference from prior analysis is that agent insolvency is of no significant

64. Professor Priest argues that despite transaction costs, consumer product warranties provide an optimal allocation of the risk of loss because marginal customers shop among competing products based on their warranties. Priest, *The Best Evidence of the Effect of Products Liability Law on the Accident Rate: Reply*, 91 YALE L.J. 1386 (1982); Priest, *A Theory of the Consumer Product Warranty*, 90 YALE L.J. 1297 (1981).

65. *See supra* note 34.

consequence to resource allocation because potential voluntary creditors' willingness to pay adjusts to compensate; thus, the problem of agent insolvency can be ignored, and the choice of liability rule can be based solely on the tradeoff between risk sharing and incentives within the principal-agent enterprise.

C. *Summary and Extensions*

Overall, the analysis of voluntary creditors suggests that substantially the same criteria determine the choice of an efficient liability rule as in the case of involuntary creditors, or at least that little is lost if the same legal rules are applied. The one significant difference emerges when potential voluntary creditors adjust their willingness to pay according to information about the risk of loss. In such cases, the scale of principal-agent activity under personal liability is not inefficiently large when agents are potentially insolvent, and indeed it may be inefficiently small. The potential insolvency of agents no longer weighs in favor of vicarious liability to the degree that it does in the case of involuntary creditors.

The analysis of voluntary creditors suggests one other point. If enterprises deceive their customers about agent solvency or loss-avoidance behavior, inefficiency may arise because such deception can enable enterprises to avoid paying their true social cost when well informed potential voluntary creditors would otherwise force them to do so. The imposition of vicarious liability as a penalty for deception can eliminate its benefits to the enterprise, and thus remove the incentive for the corruption of customer information.

Part B—Tort Law

Part A of this Article uses the terms "principal" and "agent" as an economist would use them—with reference to arrangements wherein one party (the agent) is employed by a second party (the principal) to act on the latter's behalf. Employers and employees, franchisors and franchisees, and contractors and subcontractors are all examples of "principals" and "agents" in the economist's sense of the terms.

The law, of course, employs a somewhat finer terminology. In legal parlance, *agency* is a fiduciary relationship in which the agent consents to the control of the principal.[66] One variety of agency is the *master-servant*

66. The *Restatement* provides:

(1) Agency is the fiduciary relation which results from the manifestation of consent by one person to another that the other shall act on his behalf and subject to his control, and consent by the other so to act.

(2) The one for whom action is to be taken is the principal.

(3) The one who is to act is the agent.

relation, in which the master (principal) controls or has the right to control the *physical conduct* of the servant (agent).[67] In contrast, the employer-independent contractor relationship is not always an agency,[68] and the independent contractor is not subject to a right of control over his physical conduct.[69]

Under the doctrine of *respondeat superior*, masters are vicariously liable for torts that their servants commit within the course of employment.[70] If the tortfeasor is a non-servant agent or an independent contractor, however, then the principal or employer generally is not liable for the tort.[71] The principal or employer is liable, however, if the tort is attributable in part to the principal's own negligence,[72] if the tortfeasor acted under the principal's apparent authority,[73] if the tort arose from an inherently dangerous activity,[74] or if the tort violated a nondelegable duty.[75]

Sections VI and VII consider these rules at length. Section VI discusses the legal concept of control that distinguishes servants from nonservant agents and independent contractors and evaluates this concept in light of the economic analysis in Part A. Section VII then considers various extant and proposed exceptions to the rule that principals and employers are not liable for the torts of their nonservant agents and independent contractors, and suggests possible improvements in this area of the law.[76]

RESTATEMENT (SECOND) OF AGENCY § 1 (1958).

67. "Master" and "servant" are defined in the *Restatement* as follows:

> (1) A master is a principal who employs an agent to perform service in his affairs and who controls or has the right to control the physical conduct of the other in the performance of the service.
>
> (2) A servant is an agent employed by a master to perform service in his affairs whose physical conduct in the performance of the service is controlled or is subject to the right to control by the master.

Id. §§ 2(1)-2(2) (1958).

68. Under the *Restatement* an independent contractor is "a person who contracts with another to do something for him but who is not controlled by the other nor subject to the other's right to control with respect to his physical conduct in the performance of the undertaking. He may or may not be an agent." *Id.* § 2(3) (1958).

69. *Id.*

70. *See* W. PROSSER, HANDBOOK OF THE LAW OF TORTS 460 (4th ed. 1971); RESTATEMENT (SECOND) OF AGENCY § 219 (1958); W. SELL, AGENCY 84 (1975).

This Article does not analyze torts committed outside the scope of employment.

71. *See* W. PROSSER, *supra* note 70, at 468; H. REUSCHLEIN & W. GREGORY, HANDBOOK ON THE LAW OF AGENCY AND PARTNERSHIP 100 (1979); W. SELL, *supra* note 70, at 85; RESTATEMENT (SECOND) OF TORTS § 409 (1965).

72. *See* W. PROSSER, *supra* note 70, at 469; RESTATEMENT (SECOND) OF TORTS §§ 410-415 (1965).

73. *See* W. PROSSER, *supra* note 70, at 467; RESTATEMENT (SECOND) OF TORTS § 429 (1965)

74. *See* W. PROSSER, *supra* note 70, at 472; RESTATEMENT (SECOND) OF TORTS §§ 416-418, 422A, 423, 427, 427A (1965).

75. *See* W. PROSSER, *supra* note 70, at 470; RESTATEMENT (SECOND) OF TORTS §§ 417-422, 424-425, 428 (1965).

76. Early writers had little sympathy for rules of vicarious liability. Oliver Wendell Holmes, for example, favored the abolition of *respondeat superior*. *See generally* Holmes, *Agency*, 4 HARV. L. REV. 345 (1891), 5 HARV. L. REV. 1 (1891) (holding master liable for acts of servant violates com-

VI. The Control Test

The control test for vicarious liability in tort has evolved through long usage at common law. Several aspects of the test seem to embody the efficiency considerations that Part A of this Article develops. The efficiency of the test could improve, however, if it focused more directly on the key issues—the implications of agent insolvency and the magnitude and significance of the transaction costs of contractual risk allocation.

A. *Analysis of the Restatement*

The *Restatement of Agency* identifies several criteria that the courts use to ascertain the existence of "control," and thus to determine the scope of vicarious liability:

> (a) the extent of control which, by the agreement, the master may exercise over the details of the work;
> (b) whether or not the one employed is engaged in a distinct occupation or business;
> (c) the kind of occupation, with reference to whether, in the locality, the work is usually done under the direction of the employer or by a specialist without supervision;
> (d) the skill required in the particular occupation;
> (e) whether the employer or the workman supplies the instrumentalities, tools, and the place of work for the person doing the work;
> (f) the length of time for which the person is employed;
> (g) the method of payment, whether by the time or by the job;

---

mon sense). Other scholars argued that vicarious liability was but a subterfuge for the search for a deep pocket. *See* T. Baty, Vicarious Liability 146-54 (1916).

More recently, scholars have come to view vicarious liability as a desirable way to spread losses to entrepreneurs and their customers. *See* P. Atiyah, Vicarious Liability in the Law of Torts 22-28 (1967); G. Calabresi *supra* note 19, at 50-54; Smith, *Frolic and Detour*, 23 Colum. L. Rev. 444, 456-57 (1923). In the language of this Article, such analysis may amount to a belief that vicarious liability promotes optimal risk sharing. Indeed, Kornhauser explicitly suggests risk sharing as the basis for the independent contractor rule. *See* Kornhauser, *supra* note 6, at 1375-76.

A few scholars touch briefly on related economic issues. William O. Douglas analyzed the independent contractor rule as applied to principal-agent relationships in which an employee of an independent contractor commits a tort. Douglas argued that the independent contractor could better monitor his employee than the employer of the independent contractor. Douglas, *Vicarious Liability and Administration of Risk I*, 38 Yale L.J. 584, 601-02 (1929). Clarence Morris emphasized that independent contractors are not generally subject to discharge, and thereby raised considerations related to the analysis of multiperiod agencies in Part A of this Article. Morris, *supra* note 58, at 342. An early article by Guido Calabresi suggested that an independent contractor is more likely to "consider the risk in his market decisions than would his employer," and hence argued that the independent contractor rule helps to promote an efficient set of prices in the economy. Calabresi, *supra* note 30, at 545. Finally, Richard Posner characterizes *respondeat superior* as a form of strict liability and conjectures rather cryptically that victims of employee torts cannot protect themselves very effectively. R. Posner, Economic Analysis of Law 140-41 (2d ed. 1972).

(h) whether or not the work is a part of the regular business of the employer;
(i) whether or not the parties believe they are creating the relation of master and servant; and
(j) whether the principal is or is not in business.[77]

Criterion (a), the extent of control over the agent's work that the master exercises under the agency agreement, may often evidence the master's ability to observe the agent's loss-avoidance measures. To that extent, this criterion seems consistent with the observation that the economic benefits of vicarious liability increase as the observability of loss-avoidance behavior increases. Yet, a master may "control" many features of the work but lack the ability to observe loss-avoidance measures cheaply and lack the ability to induce desired loss-avoidance efforts through inexpensive incentives. Thus, the master's "control" over aspects of the work that do not relate to loss-avoidance efforts has no obvious bearing on the economic benefits of vicarious liability.[78]

Criteria (b) through (e) and (h) relate more directly to efficiency considerations. If the agent has an occupation or business that is distinct from that of the principal, if similar agents usually work without supervision by their employers, if the agent's work requires a good deal of skill, if he supplies his own tools or workplace, or if his job is not part of the regular business of the employer, then the employer may have little knowledge of the risks of the work or the availability and effectiveness of particular loss-avoidance measures. Such lack of knowledge can greatly (perhaps prohibitively) increase the cost to the employer of maintaining loss-avoidance incentives by contract under vicarious liability.[79] Concomitantly, criteria (b) through (e) and criterion (h) may capture the spatial proximity of the employer and agent, which in turn may often capture the costs to the principal of observing loss-avoidance efforts.

Criteria (f) and (g) encompass yet another economically important issue—the distinction between one-period and multiperiod agencies. Criterion (f) directly mentions the length of the agency relationship. Criterion (g), which concerns the method of payment (salary or hourly wages versus payment by the job), can also relate closely to whether the agency is a

77. RESTATEMENT (SECOND) OF AGENCY § 220(2) (1958).

78. Moreover, it may be economically unsound to look to the extent of control that exists "by the agreement." The efficiency of vicarious liability may hinge on the *ability* of the principal to "control" the agent's loss-avoidance behavior, but certainly not on whether the master *agrees* to "control" that behavior. To focus on agreement to control rather than on ability to control is to allow the principal to avoid vicarious liability by agreeing *not* to "control" the agent.

79. Of course, the employer can always rely on his right of indemnity but, as noted earlier, an indemnity action may be quite costly in relation to the potential recovery, and employers may find it unprofitable to bother with such actions.

renewable, ongoing relationship with an expectation of future dealings, or a one-time contract for work on a single, discrete task.

Criterion (i), whether the parties believe that they have a master-servant relationship, also has an economic justification. If the parties are unaware that a rule of vicarious liability applies to their agency, then the benefits of vicarious liability attributable to the avoidance of agent insolvency will not materialize.

Finally, criterion (j)—whether the principal is in business—has two obvious links to the economic analysis above. A principal who is in business often uses agents routinely, and thereby learns about the risk of losses and the ways to avoid such risks. That knowledge reduces the costs to the principal of maintaining loss-avoidance incentives by contract. Moreover, for the reasons given earlier, a principal who is in business is often less averse to risk than his agents, and the imposition of vicarious liability on such a principal is likely to enhance the efficiency of risk sharing.[80]

In sum, the criteria in section 220 of the *Restatement* encompass a number of factors that relate closely to the efficiency of vicarious liability in particular agencies.[81] The *Restatement* provides no guidance as to how to weigh these criteria, however, and one cannot ascertain from the *Restatement* alone whether the cases that apply the criteria are consistent with their efficiency interpretation. Moreover, the *Restatement* conspicuously omits any mention of agent insolvency which, as much as any other factor, bears crucially on the efficiency of the choice between personal and vicarious liability. At this stage of the discussion, therefore, the efficiency of the control test remains an open question.

---

80. Criterion (b) captures the other side of this analysis—if an agent runs his own business (or the agent is a corporation) he is often less averse to risk than other agents.

81. Kornhauser's recent article neglects these important features of the control test. The article remarks:

> The legal distinction between independent contractor and servant suggests a different reason for the difference in liability status of the principal. The principal neither controls nor has the right to control the physical conduct of her independent contractors while she does control or has the right to control the physical conduct of her servants. The legal difference might then rest on a belief that differences in the cost of observing the level of care taken affect the desirability of the two legal regimes. The analysis of Part III [of his article] demonstrates that such a belief is unwarranted. If principals are better monitors of servants than courts are, but not better monitors of independent contractors, one would expect servants to take more care at the same task than independent contractors, regardless of the legal regime. Both servants and contractors benefit from more accurate observation of care but they benefit equally under the two assignments of liability.

Kornhauser, *supra* note 6, at 1376 n.37.

The analysis to which Kornhauser refers, however, omits consideration of agent insolvency and omits consideration of the negotiation and enforcement costs of contractual risk allocation—considerations that this Article suggests are crucial to understanding the economic significance of vicarious liability.

B. *Analysis of Case Law Illustrations*

To illustrate the efficiencies and inefficiencies of the control test in practice, this section considers the application of the test to two types of tort cases—service station torts and motor vehicle torts. The discussion of cases in each category is merely illustrative, and by no means constitutes an exhaustive survey.

1. *Service Station Torts*

When a service station operator or one of his employees commits a tort, the tort victim frequently seeks recovery from the station operator's principal—the parent oil company. The oil company often contests its liability, and the outcome usually turns upon the application of the control test.[82]

In some of the service station cases, it seems that the oil company knowingly engaged an incompetent operator, or failed to provide the operator with appropriate training and information about safety procedures. The imposition of liability on the oil company in these cases is not a strict application of vicarious liability at all because the company itself is negligent. Such cases raise interesting and difficult issues that are, unfortunately, beyond the scope of this Article.[83]

In other service station cases, however, no significant issue of operator competence and training arises. Perhaps the tort victim slips on a patch of grease[84] or an apparently competent attendant causes an injury through negligent repairs.[85] Such cases squarely raise the appropriateness of vicarious liability of an oil company that itself has committed no act of negligence.

The courts resolve most service station cases by searching for evidence of "control" in the pertinent agreements between the oil company and the

---

82. *Cf.* Davis, *Service Station Torts: Time for the Oil Companies to Assume Their Share of the Responsibility*, 10 CAL. W.L. REV. 382 (1975) (survey of service station cases including discussion of control test); Toner, *Liability of Oil Companies for the Torts of Service Station Operators*, 7 LAND & WATER L. REV. 263, 264 (1972) (same).

83. *See* Landes & Posner, *supra* note 2. Landes and Posner consider torts in which two or more tortfeasors contribute to the tort. In contrast, this Article considers situations in which loss-avoidance is the sole responsibility of the agent, although the principal may wish to motivate the agent to exercise loss-avoidance measures. The Landes and Posner analysis also differs from the analysis of this Article in that it ignores the possibility of the insolvency of a tortfeasor, it generally ignores the transaction costs of loss shifting among tortfeasors, and it ignores opportunities for risk sharing among tortfeasors. Indeed, in the Landes and Posner model, there is no risk to share because no one is ever negligent (in equilibrium), and hence no one ever incurs liability.

84. *See* Dorsic v. Kurtin, 19 Cal. App. 3d 226, 231, 96 Cal. Rptr. 528, 531 (Ct. App. 1971); Drum v. Pure Oil Co., 184 So. 2d 196 (Fla. Dist. Ct. App. 1966).

85. *See* Levine v. Standard Oil Co., 249 Miss. 651, 653, 163 So. 2d 750, 750 (1964) (injury occurred when attendant tried to remove flat tire from wheel); Chevron Oil Co. v. Sutton, 85 N.M. 679, 681, 515 P.2d 1283, 1285 (1973) (wheel repaired by appellant's agent fell off while plaintiff's decedent was driving); Westre v. DeBuhr, 82 S.D. 276, 277, 144 N.W.2d 734, 734 (1966) (injury sustained while attendant mounted tire on rim).

operator (franchise agreements, sales agreements, station and equipment leases, and so forth).[86] Among the factors that many courts cite as indicative of a lack of control are the operator's control over hours of operation,[87] the hiring and firing of employees,[88] and the prices charged for products.[89] Courts that find control on the part of the oil company cite such factors as exclusive sales agreements,[90] opportunities for the oil company to suggest retail prices,[91] and even clean restroom clauses in the franchise agreements.[92] On the basis of such analysis, a hefty percentage of oil companies (perhaps a majority) escape liability.[93]

In view of the results in Part A of this Article, however, many of these indicia of control appear to have little or no economic significance. They do not bear (or bear only tangentially) on the observability of loss-avoidance behavior, the duration of the agency relation, or other economically relevant factors.

Indeed, the analysis of Part A suggests that vicarious liability may be efficient for a substantially larger proportion of service station torts than it now encompasses. Elaborate contractual agreements normally govern the relationship between oil companies and their station operators.[94] Because of the frequency of service station torts and the fact that detailed contracts already exist, it is reasonable to conjecture that the negotiation costs of loss-avoidance incentive clauses would be modest in relation to their value to the agency under vicarious liability.

Moreover, service station agencies are normally of indefinite duration, and it is reasonable to conjecture that an operator who invests his time, money, and energy in learning the business has an important stake in the continuation of the relationship. As a result, oil companies are in a good position to use incentives that are fairly inexpensive to enforce, such as threats of termination, to induce desired loss-avoidance efforts by their operators. And if an oil company wishes to use indemnity as an incentive device, it is in a good position to require its operators to demonstrate fi-

86. *See generally* sources cited *supra* note 82 (surveys of service station cases).

87. *E.g.*, Smith v. Cities Serv. Oil Co., 346 F.2d 349, 351 (7th Cir. 1965); Hoover v. Sun Oil Co., 212 A.2d 214, 215 (Del. Super. Ct. 1965).

88. *E.g.*, Drum v. Pure Oil Co., 184 So. 2d at 196, 197 (Fla. Dist. Ct. App. 1966); Texas Co. v. Wheat, 140 Tex. 468, 473, 168 S.W.2d 632, 635 (1943).

89. *See, e.g.*, Drum v. Pure Oil Co., 184 So. 2d at 197; Levine v. Standard Oil Co., 249 Miss. at 654, 163 So. 2d at 751.

90. *See* Cooper v. Graham, 231 S.C. 404, 410, 98 S.E.2d 843, 846 (1957).

91. *See id.* at 411, 98 S.E.2d at 846.

92. *See* Dorsic v. Kurtin, 19 Cal. App. 3d at 238–39, 96 Cal. Rptr. at 537.

93. In one annotation of service station cases, about two-thirds of approximately 60 cases held that the service station operator was an independent contractor. Most of the remaining cases held that a jury question existed as to the status of the operator as servant or independent contractor. *See* Annot., 83 A.L.R.2D 1282 (1962).

94. *See* sources cited *supra* note 123.

nancial soundness as a condition for the formation and continuation of their agencies.

Finally, although oil companies cannot cheaply observe the loss-avoidance efforts of operators at all times, they can conduct spot inspections to see whether operators keep their stations free of hazards, follow proper fueling and repair procedures, and so forth. Indeed, such inspections might be conducted quite cheaply by company representatives who routinely sell and deliver gasoline, oil, and other company products to company stations.

These conjectures suggest that the costs of contractual risk allocation in service station agencies are small or at least unimportant in light of the available incentive devices. Under such conditions, vicarious liability is unlikely to dilute the loss-avoidance incentives of operators, and indeed it may substantially increase them. Vicarious liability is also unlikely to increase significantly the costs of agency contracts. Moreover, for the reasons given in Section I, major oil companies are probably less averse to risk than most of their operators, and vicarious liability will likely enhance the efficiency of risk sharing.

If this analysis is accurate, a question arises as to why, under a rule of personal liability, oil companies do not voluntarily agree with their operators to assume liability for service station torts as part of their privately Pareto-optimal agency agreements. The answer may be that such a policy would eliminate the mutual benefits of agent insolvency as a device for the evasion of liability.[95]

An instructive case on this point is *Smith v. Cities Service Oil Co.*,[96] a negligent repairs case, in which the district court granted the motion of Cities Service for judgment notwithstanding the verdict, and the Seventh Circuit affirmed.[97] The circuit court held that the operator was an independent contractor because he had control over the day-to-day operation of the business and the specific incident of repairs. Other pertinent considerations included the operator's control over hours of service and the hiring of attendants.

An analysis of the case casts serious doubt on the efficiency of the outcome. The accident occurred slightly over one year after the operator

95. To the extent that tort victims are involuntary creditors or voluntary creditors who do not take tort risks into account in their choice of service stations, the evasion of liability by insolvent agents directly increases the expected profitability of the business.

96. 346 F.2d 349 (7th Cir. 1965).

97. *Id.* at 350. The case arose from an accident that occurred when the operator poured gasoline into a hot carburetor and the contents of the gasoline can ignited. The operator then threw the can onto the plaintiff, who sustained severe burns as a result. Oddly, the case did not raise the issue of whether Cities Service was negligent in hiring the operator; the operator had no apparent training or experience as a mechanic.

leased the station from Cities Service. He was the eleventh operator of the station in a period of less than seven years. About eight months after the accident, the operator filed for bankruptcy. The operator had little if any insurance, and no personal assets with which to pay damages. Nor could the station itself be sold to pay the judgment; Cities Service owned the land, the station itself, and the major pieces of equipment. The operator merely leased the station and agreed to sell Cities Service gasoline and lubricants and to honor Cities Service credit cards.

The details of the contracts between Cities Service and the operator are also instructive. The initial lease called for rental payments of $150 per month plus one cent for each gallon of gasoline sold at the station. The operator later found these terms too onerous, and negotiated an agreement that reduced the rent to one dollar a month for several months. A subsequent agreement provided the operator with guaranteed net earnings of $335 a month over a three-month period. The Seventh Circuit attributed the various modifications of the lease to the "impecunious nature of the operation, coupled with the defendant's desire that the station be operated as an outlet for its products."[98]

The private Pareto optimality of the agency relationship is readily apparent. The operator, who had no significant assets to invest (or to put at risk), wished to open his own business. Cities Service owned a marginally profitable service station that it was willing to lease for next to nothing as long as the station sold Cities Service products. The station had built-in repair facilities that enabled the operator to earn additional income from auto repairs. This opportunity not only increased the operator's willingness to undertake the operation of the business, but it enabled him to attract additional customers for Cities Service products. In the event of a tort or other malfeasance by the operator, the station itself was not at risk because Cities Service owned it. The insolvent operator simply obtained his discharge in bankruptcy and moved on to other employment, while Cities Service found a new operator for the station. Indeed, Cities Service made no attempt to cancel the lease even after the accident—the lease ultimately terminated by mutual consent.

In sum, the agreement between the operator and Cities Service enabled a marginally profitable business to operate to the mutual benefit of the parties. Cities Service did not pay the operator a straight salary, since that might have made him a servant. Instead, it "leased" to him a gasoline retail business for next to nothing, agreed to a period of "guaranteed net

98. *Id.* at 351.

earnings" when business was slow, and provided the operator with the facilities to earn additional income from auto repairs.[99]

A rule of personal liability under these conditions is almost certainly inefficient. It results in the continued operation of a business that probably cannot cover its social marginal costs, and it encourages the business principal to use agents who have little if anything at risk and who consequently have diminished incentives to avoid losses. Vicarious liability, in contrast, with its attendant impetus for the principal to create adequate loss-avoidance incentives and to close down unprofitable operations, appears virtually certain to improve resource allocation in such cases.

It does not follow, however, that vicarious liability is appropriate in every service station tort case. For example, suppose that a station in a rural area combines the sale of gasoline with a grocery and convenience business. Gasoline and other oil company products constitute only a modest portion of total sales—the operator buys gasoline and oil from a distributor much as he buys loaves of bread from a bakery. One day a tort occurs as a customer slips and falls while shopping for groceries.

It is inefficient to hold the oil company liable under these circumstances, just as it is inefficient to hold any particular grocery supplier liable. The prospect of liability on the various suppliers could lead to a multitude of costly risk allocation and incentive contracts, to a multitude of costly investigations into the operator's personal finances, and perhaps ultimately to a multitude of costly legal defense efforts. Moreover, transaction costs might prevent the negotiation and enforcement of incentive contracts with suppliers, possibly resulting in a significant decline in the proprietor's loss-avoidance incentives under vicarious liability.

2. *Motor Vehicle Torts*

If an agent commits a motor vehicle tort within the course of employment, the control test usually determines whether the principal is vicariously liable.[100] Although such cases raise a variety of issues, an issue com-

99. The court's suggestion that Cities Service derived no profit from the auto repair side of the business, *id.* at 352, is absurd.

100. Under the control test, a traveling salesman was held to be an independent contractor because the employer could not control the time, method, or manner of the operation of the salesman's automobile. Throop v. F.E. Young & Co., 94 Ariz. 146, 152, 382 P.2d 560, 564 (1963). A relationship of wholesaler and retailer rather than one of master and servant was found where a deliveryman bought goods from the employer and then resold them to customers on the employer's customer list. Hilyar v. Union Ice Co., 45 Cal. 2d 30, 42, 286 P.2d 21, 28 (1955). A truck driver was held to be an independent contractor because he owned his truck and had the responsibility for maintaining it, although no evidence was presented to show that the tort was the result of faulty maintenance. Skelton v. Fekete, 120 Cal. App. 2d 401, 410, 261 P.2d 339, 344 (Dist. Ct. App. 1953). In contrast, a truck driver was held to be a servant because he was listed on the employer's weekly payroll and his employment was terminable at will. Amyx v. Henry & Hall, 227 La. 364, 375, 79 So. 2d 483, 487 (1955).

mon to all of the cases is the existence or nonexistence of a significant relationship between the behavior of the driver and the contractual allocation of risk. Intuitively, one would expect that motor vehicle accidents attributable to driver error often result from unthinking carelessness or momentary lapses of attention rather than from calculated risk taking. If so, then the propensity of agents to commit motor vehicle torts may not depend very much on prospective financial liability to third parties or, concomitantly, on any loss-avoidance incentive clauses in the agency agreement. The fact that the physical safety of the agent is also at risk in motor vehicle accidents perhaps reinforces the intuition that agents will not consciously drive negligently simply because they can evade monetary liability to tort victims or because their employers will absorb the bulk of any liability judgment.

Where this intuition is correct, vicarious liability is an efficient rule even if the transaction costs of contractual risk allocation are high. To be sure, principals rarely have the opportunity for inexpensive, continuous observation of their agents' driving. But even though loss-avoidance behavior is unobservable, vicarious liability cannot significantly increase the accident rate if driving behavior is largely invariant to the allocation of financial risk in the agency agreement. Then, enterprises with potentially insolvent agents will adjust toward their efficient scale without any significant increase in the social marginal costs of production. The efficiency of risk sharing will often improve as well.

Of course, these conclusions depend upon the conjecture that the incidence of motor vehicle torts by agents does not depend very much on agents' share of prospective liability to third parties. Obviously, if this conjecture is wrong,[101] then the efficiency of vicarious liability as a blanket rule for such cases is in doubt.

In addition, it is important to distinguish torts attributable to negligent driving from torts attributable to inadequate vehicle maintenance. The maintenance of motor vehicles is costly both in money and in time, and thus the incentives for maintenance may well depend on the contractual allocation of civil liability. When agents use their own vehicles in their work and the principal has no inexpensive way to ensure proper maintenance of those vehicles, therefore, a rule of vicarious liability may significantly reduce the incentive for maintenance expenditures or significantly increase the costs of agency contracts.

To conclude this section, consider the rule of liability that applies to the principal-agent relationship of passenger and taxi driver. Courts do not

101. *Cf.* Landes, *Insurance, Liability, and Accidents: A Theoretical and Empirical Investigation of the Effect of No-Fault Accidents*, 25 J.L. & ECON. 49 (1982) (empirical study that finds significant increase in fatal accidents arising from limitations of right to sue under no-fault insurance).

hold passengers vicariously liable for the torts of their taxi drivers, and commentators seem to view the non-liability of passengers as appropriate—indeed, as a paradigm case in which vicarious liability should not apply.[102]

Upon reflection, however, the inefficiency of vicarious liability is not immediately obvious. Passengers may be as well suited or better suited than accident victims to bear the risk of driver insolvency. Moreover, although New Yorkers may disagree, passengers who observe negligent behavior may be able to encourage their drivers to drive more slowly or carefully, and can threaten to terminate the fare or withhold the gratuity unless the driver complies. Thus, vicarious liability might reduce the accident rate as well as enhance the efficiency of risk sharing.

An objection to such analysis, offered by one commentator, is that passengers would seek to deal only with solvent (or well-insured) taxi drivers under a rule of vicarious liability. As a consequence, the argument runs, vicarious liability would lead to a costly exchange of information between the driver and the passenger as to the driver's ability to pay civil judgments.[103] This objection to vicarious liability, however, ignores the fact that taxi drivers could employ inexpensive signaling devices to demonstrate their solvency.[104] For example, either the government or a private association of drivers could distribute medallions and window stickers to all drivers who present evidence of a certain level of insurance coverage.

Another commentator suggests that taxi drivers are better suited to bear the risk of accidents than passengers because passengers are unlikely to purchase insurance, and if they do, such insurance will eliminate the incentive for passengers to make careful choices among taxicabs and other forms of transportation.[105] But this argument is at best incomplete. The passenger with no insurance is especially likely to be wary of hiring a cab that does not "signal" its solvency, and is especially likely to avail himself of opportunities to exercise control over the manner of driving. Alternatively, if a passenger carries liability insurance that absolves him of worry about the possible insolvency or the careless behavior of taxi drivers, then at least the risk of loss is borne by an efficient risk bearer (an insurance company) rather than by the hapless victim of a potentially insolvent driver's negligence.

A third possible objection to vicarious liability arises because taxi drivers do not pull off the road and stop when they complete a fare, but in-

102. *See* Calabresi, *supra* note 30, at 545; Morris, *supra* note 58, at 346.

103. Morris, *supra* note 58, at 346.

104. *Cf.* A. SPENCE, MARKET SIGNALING: INFORMATIONAL TRANSFER IN HIRING AND RELATED SCREENING PROCESSES (1974) (discussing economic theory of signaling).

105. Calabresi, *supra* note 30, at 545.

stead search the streets for another passenger. Thus, the probability of a tort by a particular driver seems not to depend significantly on whether a prospective passenger does or does not choose to hire that driver. Vicarious liability might then seem inefficient because the existence of the passenger-driver agency does not "cause" the tort. The problem with this reasoning, of course, is that the decision to hire a cab ultimately affects the scale of the taxi industry, and to that extent a causal relation still exists between such decisions and the likelihood of torts by taxi drivers.

Perhaps a more telling objection to vicarious liability concerns the transaction costs that arise *after* a tort occurs. Vicarious liability might necessitate a costly legal defense by passengers. Moreover, passengers or their insurance companies would desire to exercise their right of indemnity against drivers or their insurance companies, and the process of obtaining and collecting an indemnity judgment may be quite expensive—a common problem with one-period agencies. These costs represent an economic loss that may indeed suffice to render vicarious liability inefficient.

VII. Exceptions to the Control Test

When a court applies the control test and determines that an agent is an independent contractor or nonservant agent, the principal usually is not liable for the agent's torts. A number of exceptions to this rule exist, however, and others have been proposed. This section considers such exceptions in depth.

A. *The Exception for Inherently Dangerous Activities*

The first exception encompasses torts that occur during the course of an "inherently dangerous activity."[106] Generally, inherently dangerous activities are activities that create an unusual risk, recognizable in advance, for which special precautions are required to prevent an undue risk of harm.[107] Often, such precautions are necessary prior to the time that the risky activity is undertaken,[108] although a considerable risk of loss may remain despite the use of precautions.

Vicarious liability is clearly efficient for many inherently dangerous ac-

106. *See* W. Prosser, *supra* note 70, at 472; Restatement (Second) of Torts §§ 416-418, 422A, 423, 427, 427A (1965). The inherently dangerous activity exception arose from the English case of Bower v. Peate, 1 Q.B. 321 (1876), *cited in* W. Prosser, *supra* note 70, at 472, in which a principal was held liable when his independent contractor negligently undermined the foundation of an adjacent building during the course of an excavation.

107. W. Prosser, *supra* note 70, at 472.

108. For example, construction or repair work on buildings adjacent to a public highway is inherently dangerous. *See* Whalen v. Shivek, 326 Mass. 142, 150-52, 93 N.E.2d 393, 399-400 (1950); Rohlfs v. Weil, 271 N.Y. 444, 449, 3 N.E.2d 588, 590 (1936). Before such work begins, precautions are required to redirect endangered traffic and to protect passing pedestrians.

tivities. In cases where the agent's activity requires particular, ex ante precautions the principal can require those precautions in the agency agreement, and provide that failure to undertake the precautions will result in loss of the agent's fee in a one-period agency, discharge or demotion in a multiperiod agency, or some other adequately severe penalty. The enforcement costs of this simple agreement are low if the desired precautions are cheaply observable—opportunities for inexpensive observation of precautions arise in many inherently dangerous activities.[109] Vicarious liability is unambiguously efficient under these conditions.

The imposition of vicarious liability is also generally efficient if the inherently dangerous activity is "dangerous in spite of all reasonable care."[110] The so-called "ultrahazardous" or "abnormally dangerous" activities,[111] for which the tortfeasor is subject to strict liability, suggest a variety of examples.[112] When the risk of loss from an activity is exceptionally great, the principal has an especially large incentive under a rule of personal liability to employ potentially insolvent agents. The result is a grossly excessive scale of risky activity—a problem that vicarious liability eliminates. Vicarious liability is efficient as long as this economic benefit outweighs any reduction in the loss-avoidance incentives of agents or any increase in the costs of agency contracts.

An interesting limitation to the inherently dangerous activity exception is the "collateral negligence" rule, which limits the vicarious liability of the principal to risks that inhere in the nature of the work and excludes

---

109. For example, accidents arising from the demolition of a highway or a wall by an independent contractor are governed by the inherently dangerous activity exception. *See* Bonczkiewicz v. Merberg Wrecking Corp., 148 Conn. 573, 579–80, 172 A.2d 917, 921 (1961); Hevel v. Stangier, 238 Or. 44, 50, 393 P.2d 201, 204 (1964). Appropriate precautions include the use of warning signs, barricades and flagmen, all of which are verifiable by the principal with a relatively inexpensive one-time inspection before the demolition begins.

Similar opportunities for inexpensive verification of precautions exist in many other cases, including cases in which the contractor keeps vicious animals, exhibits fireworks, works as an exterminator, makes repairs to a public road, conducts an excavation, transports dangerous cargo, or conducts blasting activities. Each of these activities has been held inherently dangerous by the courts. *See* W. PROSSER, *supra* note 70, at 472–74, and cases cited therein.

Concededly, some inherently dangerous activities do not offer opportunities for inexpensive observation of precautions. In Banaghan v. Dewey, 340 Mass. 73, 162 N.E.2d 807 (1959), the plaintiff was injured when a negligently maintained elevator fell 30 feet down a shaft. Concluding that a negligently maintained elevator is inherently dangerous, the court ruled that the owner of the building was vicariously liable for the negligence of the independent contractor who was charged with the maintenance of the elevator. This ruling arose despite an argument by the defense that the condition of the elevator could not be ascertained by anyone without substantial technical skill. 340 Mass. at 79, 162 N.E.2d at 812.

110. W. PROSSER, *supra* note 70, at 472. Prosser includes in this category "the construction of reservoirs, the use or keeping of vicious animals, [the construction of] high tension electric wires, crop dusting, and the exhibition of fireworks." *Id.* (footnotes omitted).

111. *See, id.* at 505–16; M. FRANKLIN, *supra* note 38, at 392–420.

112. This group of cases overlaps significantly with the foregoing group of cases in which loss-avoidance behavior is cheaply observable. *Compare supra* note 110 (activities that are dangerous "in spite of all reasonable care") *with supra* note 109 (inherently dangerous activities).

risks of unrelated or tangentially related torts.[113] For example, although a contractor who conducts an excavation next to a public highway subjects his employer to vicarious liability if he fails to build a proper fence around the site, the employer is not vicariously liable for the negligence of a workman who, while constructing the fence, drops a hammer on a pedestrian.[114]

This rule is logically consistent with the efficiency analysis of the inherently dangerous activity exception.[115] An employer can cheaply observe the construction of a fence around an excavation, but can hardly engage in effective monitoring of the use of hammers by workmen who build the fence. And although an enterprise may have an incentive under a rule of personal liability to use an insolvent agent to evade the substantial risk of liability associated with a major excavation, the prospect of escaping liability only for the losses from falling hammers during the construction of a fence is unlikely to have much effect on enterprise behavior and the attendant allocation of resources.[116] Thus, acts of collateral negligence indeed fall outside the scope of the clear efficiency justification for the inherently dangerous activity exception.

B. *The Nondelegable Duty Exception*

A second exception to the control test arises for violations of "nondelegable duties."[117] Nondelegable duties derive from statutes, contracts, franchises, and charters, as well as from common law decisions.[118]

To a significant extent, the economic analysis of the nondelegable duty exception parallels that of the inherently dangerous activity exception. For example, the duty to take special precautions during highway mainte-

---

113. *See* W. PROSSER, *supra* note 70, at 474–75; RESTATEMENT (SECOND) OF TORTS § 427 (1965). Collateral negligence has been defined as "[n]egligence in performance of the operative details of the work, as distinguished from negligence based on danger created by the nature of the work itself." May v. 11½ East 49th Street Co., 269 A.D. 180, 185, 54 N.Y.S.2d 860, 865 (App. Div. 1945), *aff'd*, 296 N.Y. 599, 68 N.E.2d 881 (1946). Judge Cardozo gave the following example: "One who opens an excavation in the highway is liable in damages if the contractor fails to guard it. (Citations omitted). He is not liable if the contractor leaves a pickaxe in the road (citation omitted), or negligently fires a blast (citations omitted)." Hyman v. Barrett, 224 N.Y. 436, 439, 121 N.E. 271, 272 (1918) (case in which building's tenant was injured when object fell from platform used by plumber; vicarious liability denied).

114. RESTATEMENT (SECOND) OF TORTS § 426 comment b, illustrations 1–2 (1965).

115. *Cf.* Calabresi, *supra* note 30, at 548 (collateral negligence involves issue whether accidents are more risk of contractor's general business than of specific task that he is hired to perform).

116. The chance of an employee dropping a hammer is probably not very dependent on the contractual allocation of risk, however, and thus vicarious liability is in theory the efficient rule even if in practice its economic benefits are small.

117. *See* W. PROSSER, *supra* note 70, at 470–72; RESTATEMENT (SECOND) OF TORTS §§ 417–422, 424–425, 428 (1965).

118. *See* W. PROSSER, *supra* note 70, at 470.

nance operations is nondelegable.[119] Like many inherently dangerous activities, highway maintenance requires precautions (such as barricades, signs, and flagmen) that are cheaply observable by the principal, and vicarious liability is clearly the efficient rule as to accidents that occur because of the absence of such precautions.

Another obvious parallel to the inherently dangerous activity cases exists in the rule that principals cannot escape liability for negligence in the performance of explicit[120] or implicit[121] contractual obligations by delegating the performance of such obligations to an independent contractor. A contrary rule would often create an enormous incentive for a contracting party to avoid the risk of a breach of contract by delegating his obligations to an insolvent contractor. Hence, the rule in such cases is analogous to the rule that a principal cannot escape liability for ultrahazardous or abnormally dangerous activities, for which there would also be an enormous incentive under personal liability to employ an insolvent contractor.[122]

Other nondelegable duties, however, are more difficult to reconcile with prior analysis. For example, some courts hold that automobile owners have a nondelegable duty to maintain the safety of their vehicles.[123] In the event of an accident attributable to negligent repairs by a repair business, therefore, the automobile owner (the principal) is vicariously liable for the tort of the repairman (the agent). Such cases raise difficult economic issues.

Although customers deal with repair enterprises voluntarily, it seems unlikely that the reputation of such enterprises conveys complete information about their propensity to commit torts. Hence, customers are not likely to be well informed voluntary creditors. Because the transaction costs of contractual risk allocation between customers and repair businesses are probably substantial,[124] therefore, vicarious liability may reduce

119. *E.g.*, Van Arsdale v. Hollinger, 68 Cal. 2d 245, 254, 437 P.2d 508, 513-14, 66 Cal. Rptr 20, 25-26 (1968).

120. *See* RESTATEMENT (SECOND) OF TORTS § 429 (1965).

121. *See id.* §§ 419, 421 (1965) (concerning liability for negligence in performance of implied duties owed by lessor to lessee).

122. Of course, because contractual creditors are, by definition, voluntary creditors, the inefficiencies of personal liability might not be the same if contractual duties were delegable as in the typical inherently dangerous activities case. If contracting parties could legally escape liability for negligence in the performance of a contract by delegating responsibility for performance, well informed parties to some contracts would write clauses explicitly to exclude such behavior, and the need to do so would increase the transaction costs of contracting.

123. *E.g.*, Maloney v. Rath, 69 Cal. 2d 442, 448, 71 Cal. Rptr. 897, 900, 445 P.2d 513, 516 (1968) (maintenance of safe automobile brakes is nondelegable duty).

124. It is unlikely that customers can cheaply observe the quality of repairs, or cheaply determine the quality of repairs ex post, if defective repairs are not immediately obvious. Moreover, the agency that exists between a customer and a repairman is often one-period, and in any event, the prospect that a consumer will not return in the future is not terribly onerous. Nor can the customer's right of indemnity maintain the incentive for careful repairs if the cost of pursuing indemnity is substantial.

the incentives of repairmen to do careful work. Furthermore, it seems unlikely that customers are in general less averse to risk than repair businesses, and hence vicarious liability seems unlikely to generate risk-sharing benefits. The nondelegability of the duty to maintain auto safety, therefore, appears potentially inefficient.

Yet, perhaps the warranty on repair work suffices to motivate repair businesses to perform up to the level of their competence, and any residual carelessness may be due entirely to unthinking mistake and ineptitude. If so, then vicarious liability will not affect the level of care even if it reduces the prospective liability of the enterprise. Vicarious liability is then unambiguously efficient because it ensures that automobile owners confront the full social cost of driving (usually through their insurance premiums) without any adverse effect on the incentives for care. Alternatively, if customers are better informed than the analysis above contemplates, carelessness by a repair enterprise may result in a significant loss of business that suffices to maintain the incentives for care even under vicarious liability. Thus, in contrast to the analysis of various other nondelegable duties, the efficiency or inefficiency of the nondelegable duty to maintain auto safety turns on exceptionally difficult empirical questions.

C. *The Exception for Apparent Authority*

Section 265 of the *Restatement of Agency* provides:

> (1) A master or other principal is subject to liability for torts which result from reliance upon, or belief in, statements or other conduct within an agent's apparent authority.
>
> (2) Unless there has been reliance, the principal is not liable in tort for conduct of a servant or other agent merely because it is within his apparent authority or apparent scope of employment.[125]

Specific adaptations of this rule include vicarious liability for the physical harm caused by negligent representations within the apparent authority of an agent,[126] and vicarious liability for the negligence of an agent when the principal has induced reliance on the care or skill of the agent.[127] By their

125. RESTATEMENT (SECOND) OF AGENCY § 265 (1958).

126. The *Restatement* provides: "A purported master or other principal is subject to liability for physical harm caused to others or to their belongings by their reasonable reliance upon the tortious representations of one acting within his apparent authority or apparent scope of employment." *Id.* § 266.

127. The *Restatement* provides:

> One who represents that another is his servant or other agent and thereby causes a third person justifiably to rely upon the care or skill of such apparent agent is subject to liability to the third person for harm caused by the lack of care or skill of the one appearing to be a servant or other agent as if he were such.

Id. § 267.

nature, all of these rules apply exclusively to voluntary creditors—involuntary creditors have no contacts with an enterprise that could generate reliance on an agent's authority.

Depending on their application, apparent authority rules can be economically sound. For example, suppose that a health maintenance organization attracts its members by representing that its physicians and other health personnel, who appear to be employees of the organization but in fact are independent contractors, are exceptionally competent or exceptionally well insured against malpractice judgments.[128] In fact, however, the physicians lack standard certification credentials and carry minimal insurance coverage. If patients rely on the misrepresentations about physicians' competence and financial soundness, it may well be efficient to hold the organization vicariously liable for malpractice even if the transaction costs of contractual risk allocation with physicians are relatively high. Otherwise, the health care market might become insufficient because patients underestimate the dangers of health care.

The application of the apparent authority rule in practice, however, is sometimes suspect. To illustrate, consider its application to service station tort cases: Plaintiffs who seek recovery from parent oil companies frequently argue that the tort arose because of their reliance on the apparent authority of the station operator. In some cases, this argument amounts to a claim that the operator's affiliation with the oil company caused the plaintiff to rely on his skill as an auto repairman.[129] In other cases, the argument is that the operator's affiliation with the oil company was the basis for the plaintiff's decision to select the station for gasoline or other purchases.[130]

The economic soundness of vicarious liability based on such arguments is doubtful, although vicarious liability may well be efficient for other reasons.[131] First, as to cases that do not involve faulty repairs, it is highly implausible that customers suffer the tort because of reliance on apparent agency. It is unlikely, for example, that customers who slip on a patch of grease have done so because of reliance on any representation about the safety of the station or its ability to pay damages in the event of such an occurrence.[132] Absent reliance, the economic rationale of deterring misrep-

128. *Cf. id.* § 266 comment a, illustration 2 (principal liable for harm to car owner and guest resulting from apparent agent's negligent representation that car has been safely repaired); *id.* § 267 comment b, illustration 4 (principal liable for apparent agent medical technician's negligent poisoning of third-party patron).

129. *E.g.*, Gizzi v. Texaco, 437 F.2d 308, 309–10 (3d Cir.), *cert. denied*, 404 U.S. 829 (1971); B.P. Oil Corp. v. Mabe, 279 Md. 632, 644–49, 370 A.2d 554, 561–64 (1977).

130. *E.g.*, Apple v. Standard Oil Co., 307 F. Supp. 107, 109 (N.D. Cal. 1969); Standard Oil Co. v. Gentry, 241 Ala. 62, 1 So. 2d (1941).

131. *See supra* pp. 1245–55.

132. *See* Standard Oil Co. v. Gentry, 241 Ala. 62, 1 So. 2d 29 (1941) (plaintiff slipped on patch

resentations about the skill or authority of an agent cannot support vicarious liability.

The negligent repair cases pose somewhat more difficult issues. Certainly, the mere display of brand-name petroleum products hardly constitutes a representation about the skill of an auto mechanic. It may, however, lead a few customers to believe that the financial resources of the oil company are available to satisfy the judgment in the event of faulty repairs, or even that the mechanic has received some training from the oil company.

Whether such beliefs are reasonable, however, is another question. Just as it is inefficient to allow sellers to deceive buyers, it is in general inefficient to impose liability on sellers for illogical or unreasonable beliefs of buyers. To do so would impose costs on sellers that are attributable to buyers' unpredictable idiosyncrasies, and would thereby lead to higher prices and to a smaller scale of operation with no attendant loss-avoidance benefits. Thus, the requirement of reasonable or justifiable reliance in the apparent authority rule[133] is efficient, and it is certainly questionable whether the mere display of brand name logos and products at a service station constitutes a reasonable basis for any specific customer beliefs about the skill or financial status of the enterprise and its employees.

Oil companies may, however, make somewhat more explicit representations about their operators. The famous slogan "You can trust your car to the man who wears the star" is an example.[134] Some customers may rely on such representations in choosing a service station for repair work. But the reasonableness of their reliance is still in doubt—advertising slogans and the like often constitute the sort of "puffing" that cannot reasonably be taken as a representation about the skill of an agent.

Thus, although the theory of the apparent authority rule is potentially sound, its application is sometimes dubious. Absent reasonable reliance by a customer on material representations about the skill, financial soundness, or authority of an agent, considerations of apparent agency have no economic significance, and efficient rules of vicarious liability can rest solely on the analysis of transaction costs and agent solvency developed elsewhere in this Article.

D. *The Exception for Financial Responsibility and Related Proposals*

Because independent contractors and nonservant agents are often unable to pay judgments against them, several commentators and at least one

---

of grease; jury question existed under apparent authority rule).

133. *See* RESTATEMENT (SECOND) OF AGENCY §§ 266-267 (1958).

134. *See* Gizzi v. Texaco, 437 F.2d 308, 310 (3d Cir.), *cert. denied*, 404 U.S. 829 (1971) (question of reliance on slogan was one for jury).

court support further modifications to the control test. Indeed, one commentator proposes the abolition of the control test and the imposition of joint and several liability on all principals and agents.[135] Another commentator proposes vicarious liability for all principals unless "it is unreasonable to expect [the principal] to exercise his power of selection so as to avoid the employment of judgment-proof contractors."[136]

Although none of the courts go quite so far, a few cases discuss the merits of a "financial responsibility exception" to the control test, under which the principal may become liable for the tort of its agent when the agent cannot pay the judgment against him.[137] The only case actually to adopt the financial responsibility exception is *Becker v. Interstate Properties*,[138] a diversity case in which the Third Circuit "anticipated" the creation of the financial responsibility exception in New Jersey based on dictum in a case decided eighteen years earlier.[139] *Becker* held that a tort victim can recover from the employer of the insolvent contractor who committed the tort if the failure of the employer to require greater insurance coverage from his contractor was inconsistent with trade practice. The court reasoned that such a failure is a violation of the employer's duty to engage "competent" contractors.[140]

Collectively, *Becker* and the commentators offer three distinct versions of a financial responsibility exception to the existing control test. In light of the analysis in Part A of this Article, however, each has significant drawbacks.

The proposal to impose joint and several liability on all agencies is clearly an inefficiently broad extension of vicarious liability. It ignores the consequences of costs to the contractual allocation of risk that can often

---

135. Comment, *Risk Administration in the Marketplace: A Reappraisal of the Independent Contractor Rule*, 40 U. CHI. L. REV. 661, 675–79 (1973). This proposal does allow principals and agents to reallocate liability among themselves by contract.

136. Morris, *supra* note 58, at 345, 346–47; *see also* Steffen, *supra* note 36, at 507 ("legal duties must have some relation to ability to pay") (footnote omitted).

137. *See* Hampton v. McCord, 141 Ga. App. 97, 100–01, 232 S.E.2d 582, 586 (Ct. App. 1977) (rejects proposed financial responsibility exception); Majestic Realty Assocs. v. Toti Contracting Co., 30 N.J. 425, 432–35, 153 A.2d 321, 324–26 (1959) (expresses sympathy for financial responsibility exception in dictum); *see also* Reid v. United States, 421 F. Supp. 1244, 1247–48 (E.D. Cal. 1976) (rejects duty of employers to ensure compliance by contractors with statutory requirement for workmen's compensation insurance); Matanuska Elec. Ass'n v. Johnson, 386 P.2d 698, 702–04 (Alaska 1963) (same); Coleman v. Silverberg Plumbing Co., 263 Cal. App. 2d 74, 80–81, 69 Cal. Rptr. 158, 162 (Ct. App. 1968) (same). Because of the sparsity of case law, the *Restatement of Torts* expressly reserves judgment on the issue. *See* RESTATEMENT (SECOND) OF TORTS § 411 comment g (1965).

138. 569 F.2d 1203 (3d Cir. 1977), *cert. denied*, 436 U.S. 906 (1978).

139. Majestic Realty Assocs. v. Toti Contracting Co., 30 N.J. 425, 432–35, 153 A.2d 321, 324–26 (1959).

140. 569 F.2d at 1209. Under this theory of liability, the measure of damages is the difference between the contractor's actual insurance coverage and the amount of insurance coverage that is "reasonable" in light of trade practice. *Id.* at 1215.

render vicarious liability inefficient, especially where the agent can pay judgments in full.

The proposal to impose vicarious liability on agencies in which it is not unreasonable to expect the employer to investigate the financial soundness of his agent is superior, but still somewhat lacking. To be sure, if the costs of investigating an agent's finances are too high to be economical, then the costs to the principal of measures to maintain loss-avoidance incentives may also be high. But the correlation between the costs of investigation and the costs of maintaining incentives is unlikely to be perfect. For example, while a principal can investigate the financial resources of his agent at relatively low cost, it may still be quite expensive to maintain loss-avoidance behavior because of the short-term duration of the agency, the costs of indemnity actions, and so forth. Similarly, when the costs of an investigation of the agent's financial status are high, the principal may nonetheless be able to induce desired loss-avoidance behavior at modest cost because of his ability to observe the agent's behavior cheaply. Thus, it is probably inefficient to base rules of vicarious liability solely on the apparent costs to the principal of an investigation into the agent's financial soundness.

The approach of the *Becker* case is more promising. Unlike other proposals, *Becker* merely creates an additional exception to the control test that applies only if the agent is unable to pay the judgment against him. Thus, its application is linked closely to circumstances in which personal liability leads to an inefficient scale of operation and to inadequate incentives for loss avoidance.

The focus in *Becker* on trade practice to determine whether the agent's insolvency is "reasonable," however, is more suspect. The greatest danger is that under a rule of personal liability, principals may uniformly take advantage of the opportunity to evade liability through the use of potentially insolvent agents. Such a "trade practice" by no means establishes that vicarious liability is inefficient. Thus, although a rule that imposes vicarious liability contingent on agent insolvency may have significant advantages over other proposals for modification of the control test, it is probably unwise to rely on trade practice to limit the scope of the rule. A more economically sound approach would deny vicarious liability only when the transaction costs of contractual risk allocation are high and the principal has no inexpensive way to maintain loss-avoidance incentives.

Conclusion and Extension

The law of vicarious liability in tort exhibits both consistencies and inconsistencies with the efficiency analysis in Part A of this Article. Among the greatest inefficiencies in the law are that the indicia of "control" in

some cases have little or no economic significance, and that courts often ignore such economically critical factors as the solvency or insolvency of the agent and the relative risk-bearing capacity of the parties. By illuminating these and other shortcomings in existing legal rules, this Article has suggested how the law of vicarious liability in tort might be modified to enhance the efficiency of resource allocation.

The analysis in this Article also has implications for other fields of law.[141] Straightforward extensions of the analysis directly illuminate the economic consequences of vicarious liability for such agent wrongs as acts of participation in antitrust conspiracies, misrepresentations under the federal securities laws, and infringement of copyright.[142] And because an entrepreneur who incorporates and thereafter manages his business acts as his own agent for many purposes, the analysis in this Article relates closely to the rules for "piercing the corporate veil" in close corporations.[143] The reader can no doubt imagine other applications.

Indeed, whatever the field of law, the economic consequences of vicarious liability turn largely on the same considerations—the ability of agents to pay judgments against them and the magnitude and significance of the transaction costs of contractual risk allocation. Careful attention to these issues can guide the choice of intra-enterprise liability rules for a vast array of legal disputes.

---

141. Perhaps the most obvious extension is to the analysis of vicarious liability provisions under various tort-related statutes. *E.g.*, Scindia Steam Navigation Co. v. de Los Santos, 451 U.S. 156 (1981) (liability of vessel for negligence of stevedore under Longshoremen's and Harbor Workers' Compensation Act).

142. Leading cases on the doctrine of vicarious infringement include Gershwin Publishing Corp. v. Columbia Artists Mgmt., Inc., 443 F.2d 1159 (2d Cir. 1971); Shapiro, Bernstein & Co., v. H.L. Green & Co., 316 F.2d 304 (2d Cir. 1963); Chess Music, Inc. v. Sipe, 442 F. Supp. 1184 (D. Minn. 1977).

143. Intriguing cases on "piercing the veil" include National Marine Servs. v. C.J. Thibodeaux & Co., 501 F.2d 940 (5th Cir. 1974); Zubik v. Zubik, 384 F.2d 267 (3d Cir. 1967), *cert. denied*, 390 U.S. 988 (1968); Walkovszky v. Carlton, 18 N.Y.2d 414, 223 N.E.2d 6, 276 N.Y.S.2d 585 (1966).

The Yale Law Journal

Volume 93, Number 7, June 1984

Student Contributors to This Issue