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Victor P. Goldberg
Columbia Law School, vpg@law.columbia.edu

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RECOVERY FOR ECONOMIC LOSS FOLLOWING THE EXXON VALDEZ OIL SPILL

VICTOR P. GOLDBERG*

I. INTRODUCTION

THE physical cleanup following one of the worst oil spills in history, that of the Exxon *Valdez*, is done.¹ The legal cleanup, however, has barely begun. Over 100 law firms participating in over 200 suits in federal and state courts involving more than 30,000 claims are presently engaged in litigation.² Fishermen, cannery workers, fishing lodges, tour boat operators, oil companies whose shipments were delayed, and even California

* Thomas Macioce Professor of Law and Codirector, Center for Law and Economic Studies, Columbia University School of Law. For comments on previous drafts, I would like to thank Merritt Fox, Ronald Gilson, Bruce Johnsen, Ken Jones, Bill Landes, Julie Nelson, Dick Pierce, Mark Roe, and participants at workshops at Yale University, the University of Pennsylvania, the University of Connecticut, University of California, Berkeley, and the University of Michigan.

¹ For a useful discussion of the Exxon *Valdez* Oil spill, see generally Art Davidson, *In the Wake of the Exxon Valdez* (Sierra Club Books 1990); and Jonathan Jones, Christopher Jones, & Fred Phillips-Patrick, *Estimating the Costs of the Exxon Valdez Oil Spill*, 16 Res. L. & Econ. — (1994). Oil spills are a reasonably common occurrence, although the magnitude of the *Valdez* spill and the physical damage that it caused distinguishes it from other spills. Eleven million gallons of oil were lost in the *Valdez* spill, whereas sixty-eight million barrels were lost in the 1978 spill by the Amoco *Cadiz* off the northern coast of France, for which damages were assessed at only \$160 million. See *In the Matter of Oil Spill by the Amoco Cadiz Off the Coast of France on March 16, 1978*, 954 F.2d 1279, 1329–37 (7th Cir. 1992). Both of these spills are dwarfed by the deliberate release of oil into the Persian Gulf in January of 1991.

For the period between 1970 and 1987 the firm of Temple, Barker & Sloane compiled a list of 189 “significant” oil tanker spills. They defined a significant spill as a spill which caused damages in excess of \$1 million. Of these significant spills, only six involved damages greater than \$50 million, and none of these occurred in U.S. waters. The study also identified 17,000 minor spills which occurred prior to 1982. Temple, Barker & Sloane, Inc., *The International Oil Protocols: Should the United States Ratify?* (report prepared for U.S. Coast Guard, October 2, 1988).

² Marla Williams, *Mess of Lawsuits Is Proving Stickier than Valdez Oil Spill*, *Seattle Times*, July 26, 1991, at A1.

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motorists facing higher gasoline prices³ have filed claims against Exxon and its fellow defendants.

Most claimants face a formidable roadblock, the so-called *Robins* doctrine. Under *Robins Dry Dock & Repair Co. v. Flint*,⁴ those who have suffered only "pure economic losses" are barred from recovery. The *Robins* bar has been explicitly extended to most of the indirect victims of oil and chemical spills. Following the Santa Barbara oil spill of 1969, the Ninth Circuit, in *Union Oil Company v. Oppen*,⁵ barred the claims of all the indirect victims save the commercial fishermen. A decade later, in *State of La. ex rel. Guste v. M/V Testbank*,⁶ after extensive debate, the Fifth Circuit sitting *en banc* reaffirmed the vitality of *Robins*, again recognizing an exception for commercial fishermen.⁷ The Exxon *Valdez* disaster provides a good vehicle for reassessing the rationale for the *Robins* bar on recovery.

The *Robins* rule lumps together a number of very different problems. An accountant negligently audits a client's books and the lender suffers a big loss; a contractor delays completion of a job and the tenant suffers lost profits; a turbine malfunctions and the purchaser suffers lost profits. All these claims have at one time or another run afoul of the *Robins* doctrine. There are plausible grounds for denying recovery to Flint (the aggrieved charterer in *Robins*) and these others as well.⁸ But the grounds

³ The action by California motorists was dismissed in *Benefiel v. Exxon Corp.*, 959 F.2d 805, 808 (9th Cir. 1992).

⁴ 275 U.S. 303 (1927). In England the rule dates back to the case of *Cattle v. Stockton Waterworks, Co.*, 10 Q.B. 453, 457-58 (1875). For a thorough analysis of the economic loss rule emphasizing commonwealth cases, see Bruce P. Feldthusen, *Economic Negligence: The Recovery of Pure Economic Loss* (Carswell 2d ed. 1989). Feldthusen refers to the "exclusionary rule," a term apt to confuse an American audience.

Congress enacted the Trans-Alaska Pipeline Authorization Act ("TAPAA") (Pub. L. 93-153, November 16, 1973, 87 Stat. 584, codified at 43 U.S.C. §§ 1651-55), which provides for strict liability for oil spills in § 1653(c) up to a ceiling of \$100 million. The courts have split on whether the *Robins* bar carries over to TAPAA. Compare *Benefiel v. Exxon Corp.*, No. Cv 90-2184-RG (C.D. Cal. July 27, 1990), 1990 WL 180503 (C.D. Cal.) [not reported in F. Supp.] aff'd 959 F.2d 805, 807 (9th Cir. 1992) (holding that the TAPAA incorporated the *Robins* rule), with *In re Exxon Valdez*, 767 F. Supp. 1509, 1514-16, 1991 A.M.C. 1482, 1489-91 (D. Alaska 1991) (holding the TAPAA preempted *Robins*); *In re Glacier Bay*, 746 F. Supp. 1379, 1384-86 (D. Alaska 1990) (same); *Slaven v. B. P. America, Inc.*, 786 F. Supp. 853, 858 (C.D. Cal. 1992) (same).

⁵ 501 F.2d 558 (9th Cir. 1974).

⁶ 752 F.2d 1019 (5th Cir. 1985).

⁷ *Id.* at 1026-27. It should be noted that the Amoco *Cadiz* plaintiffs did recover for pure economic losses under French law. The commercial fisherman exemption of American jurisprudence is discussed in Section II *infra*.

⁸ For my analysis of *Robins* itself, see Victor P. Goldberg, *Recovery for Pure Economic Loss in Tort: Another Look at Robins Dry Dock v. Flint*, 20 J. Legal Stud. 249 (1991) (hereinafter cited as Goldberg, *Robins*). For a justification of the denial of compensation

for shielding Robins are not the same as those for shielding the accountant, building contractor, or turbine manufacturer. Nor do the arguments for denying recovery to any of these injured parties carry over to the claims of the Exxon *Valdez* victims.⁹ Nevertheless, a strong case can be made that their claims, including those of the commercial fishermen, should be denied as well.

Most of the claims of the Exxon *Valdez* victims are for what Bruce Feldthusen labels "relational economic loss."¹⁰ The injurer caused physical damage to an asset, and those who had relied upon the continued availability of the damaged asset suffered losses. In addition, the *Valdez* accident adds a complicating factor, one not common to all relational economic loss cases. Most of the physical damage was to things unowned—fish, the environment, and shipping lanes. If there are no owners to sue for the direct damage, then the injurer might not bear the full consequences of his tortious act. This suggests that indirect victims might be allowed to recover as surrogate owners, an argument which some, notably Judge Posner,¹¹ have embraced explicitly and others implicitly. The notion that, say, commercial fishermen should recover as surrogate owners of a fishery leads to a very different theory of liability and a different measure of damages than if we were to allow them to recover for their relational economic loss. In Section III, I attempt to sort this out as a prelude to the analysis of relational economic loss claims in the following section. There I emphasize the indirect victims' role in mitigating their damages and the reasons why recognizing the reliance losses of indirect victims will overstate the true social losses caused by the injurer.

That discussion raises some interesting puzzles. For example, if a hotel were damaged and had to remain closed for two weeks, the owner would be compensated for the lost profits; yet if that same hotel were shut down for the same two weeks because the adjacent public beach had been

to third parties not in privity with the accountant, see Victor P. Goldberg, *Accountable Accountants: Is Third-Party Liability Necessary?* 17 J. Legal Stud. 295 (1988) (hereinafter cited as Goldberg, *Accountable Accountants*).

⁹ See Gary T. Schwartz, *Economic Loss in American Tort Law: The Examples of J'Aire and of Products Liability*, 23 San Diego L. Rev. 37, 38 (1986) (arguing against any attempt to formulate a single general theory of the economic loss problem). See generally Feldthusen, *supra* note 4 (presenting another skeptical view about the possibility of finding a general theory of recovery for economic loss).

¹⁰ Feldthusen, *supra* note 4, at 2.

¹¹ See Richard A. Posner, *Epstein's Tort Theory: A Critique*, 8 J. Legal Stud. 457, 465–68 (1979) (hereinafter cited as Posner, *Epstein's Tort Theory*); Richard A. Posner, *Tort Law: Cases and Economic Analysis* at 467–69 (Little, Brown 1982) (hereinafter cited as Posner, *Tort Law*); William M. Landes & Richard A. Posner, *The Economic Structure of Tort Law*, at 251–52 (Harvard Univ. Press 1987).

soaked with oil, the hotel owner would not be compensated. Why does the law recognize this difference? This question, and many others involving the direct/indirect distinction and the ownership of the indirectly affected assets, will be explored in Sections IV and V. The tort law regime places very different limits on the tracing of consequences of directly damaged victims as opposed to victims who are indirectly damaged. Both sets of limits are conceptually flawed, but, as we shall see, they arguably represent a reasonable, pragmatic compromise.

II. THE EXCEPTION: SEAMEN ARE THE FAVORITES OF ADMIRALTY

Exxon's liability to the commercial fishermen now appears to be beyond controversy. Indeed, shortly after the accident, Exxon began making payments to the fishermen, paying out \$86 million in the first six months.¹² Yet less than two decades earlier this liability would have been a close call. Following the 1969 Santa Barbara oil spill, the Ninth Circuit faced a large number of claims for relational economic loss. While rejecting most, the court recognized an exception for commercial fishermen.¹³ I digress from the central argument to briefly examine the shaky origins of the exception.

In *Oppen*, the Ninth Circuit, as per Judge Sneed, restricted recovery for indirect economic loss to the fishermen alone. "Nothing said in this opinion is intended to suggest . . . that every decline in the general commercial activity of every business in the Santa Barbara area following the occurrences of 1969 constitutes a legally cognizable injury for which the

¹² Economists Incorporated, *An Economic Analysis of the Effect of the Exxon Valdez Oil Spill on Alaskan Seafood Prices* (report submitted to the Trans-Alaska Pipeline Liability Fund, December 1991), at 16. Fishermen have apparently filed claims for over \$45 billion. See Jeff Berliner, *Exxon Oil Spill Damage Claims—\$59 Billion*, United Press International, April 5, 1991. The number does not appear to be grounded in reality since the total annual sales of Alaskan fish are approximately \$1 billion and the *Valdez* spill probably decreased the catch by about one-third. Economists Incorporated, *supra*, at 366.

¹³ *Oppen*, 501 F.2d at 568–70. Other courts have reached the same conclusion via a different route. In the case of *Burgess v. M/V Tamano*, 370 F. Supp. 247 (D. Me. 1973), decided contemporaneously with *Oppen*, and involving a relatively small (about 1 percent of the size of the *Valdez* spill) oil spill off the coast of Maine, the court held that "the right to fish or to harvest clams in Maine's coastal waters is not the private right of any individual, but is a public right held by the State in trust for the common benefit of the people." *Id.* at 249–50. The spill was a tortious invasion of public rights held in trust by the state; an individual could recover for damages only if the damages suffered were different in kind, rather than in degree, from those sustained by the public generally. The court went on to hold that commercial fishermen and clam diggers did have an interest that differed in kind from the general public. *Id.* at 249–51. See also *Stop & Shop Co. v. Fisher*, 387 Mass. 889, 896–98, 444 N.E.2d 368, 373–74 (S.J. Ct. Mass. 1983); William L. Prosser, *Private Action for Public Nuisance*, 52 Va. L. Rev. 997, 1004–11 (1966).

defendant may be responsible.”¹⁴ Although he found it to be unprincipled, the district court judge in *In re Exxon Valdez* reluctantly recognized Judge Sneed’s distinction.

Despite the express disclaimer in *Oppen* of any intention to disavow *Robins Dry Dock* except for commercial fishermen, this court does not understand how, as a matter of principle, the rule in *Robins Dry Dock* can have application for all claimants who suffer economic loss as a result of a marine tort except commercial fishermen. If the court of appeals were to have second thoughts about its decision in *Oppen* . . . the implications of such a change of direction in this case would be of monumental proportions. . . . This court . . . urgently need[s] to know whether and to what extent the rule of *Robins Dry Dock* will apply to the economic claims of those who are not commercial fishermen.¹⁵

Judge Sneed’s rationale for the exceptional treatment of fishermen was, however, extremely dubious. He recognized that the general rule precluded an action against a negligent defendant for preventing the plaintiff from obtaining a prospective pecuniary advantage. However, he noted a number of exceptions that made it “apparent that we are not foreclosed by precedent from examining on its merits the issue presented.”¹⁶ Among these exceptions were two cases addressing the claims of fishermen for recovery of their contractual share of the catch for losses suffered when their boat was damaged by a negligent third party.¹⁷ Judge Sneed quoted one, *Carbone v. Ursich, the Del Rio*, regarding the law’s solicitude for seamen.

This long recognized rule [the right of fishermen to recover their share of the prospective catch] is no doubt a manifestation of the familiar principle that seamen are the favorites of admiralty and their economic interests entitled to the fullest possible legal protection.¹⁸

A few years later, the district court in *State of La. ex rel. Guste v. M/V Testbank*¹⁹ relied on this argument to distinguish the commercial fishermen from other plaintiffs:

[C]laims for economic loss asserted by the commercial oystermen, shrimpers, crabbers and fishermen raise unique considerations. . . . Traditionally, seamen

¹⁴ *Oppen*, 501 F.2d at 570.

¹⁵ 767 F. Supp. 1509, 1518 (D. Alaska 1991).

¹⁶ *Oppen*, 501 F.2d at 568.

¹⁷ *Main v. Leask* [1910] S.C. 772 (Ct. of Sessions); *Carbone v. Ursich, the Del Rio*, 209 F.2d 178 (9th Cir. 1953).

¹⁸ *Carbone*, 209 F.2d at 182.

¹⁹ 524 F. Supp. 1170 (E.D. La.) aff’d 728 F.2d 748 (per curiam) (1981).

have been recognized as favored in admiralty and their economic interests require the fullest possible legal protection. . . . Accordingly, in those instances where there has been a tortious invasion of commercial fishing areas by the introduction of pollutants or contaminants, courts have affirmatively protected those fishermen who incurred actual economic losses.²⁰

That admiralty law favors some group labeled seamen (or fishermen) does not say whether it should favor others so labeled; nor does it establish the boundaries of the law's solicitude.²¹ The seamen's favored position in admiralty stems from their historical position at the bottom of the labor market barrel. An early nineteenth-century case painted a grim picture: "[Seamen] are generally poor and friendless, and acquire habits of gross indulgence, carelessness and improvidence. If some provision be not made for them in sickness at the expense of the ship, they must often in foreign ports suffer the accumulated evils of disease, and poverty, and sometimes perish from the want of suitable nourishment."²² The doctrine (or aphorism) was at origin a paternalistic policy designed to protect a group of workers who, the courts believed, would not, or could not, adequately protect their own interests through private contracts with their employers.²³

²⁰ *Id.* at 1173.

²¹ Some courts have recognized that the seaman's favored position does not necessarily require the outcome reached by the *Carbone* court. In *Casado v. Schooner Pilgrim, Inc.*, 171 F. Supp. 78 (D. Mass. 1959), the court stated: "I do not believe that to say 'seamen are the favorites of admiralty' should be to create a corresponding class of villains on whom to impose a new type of liability." *Id.* at 80.

²² *Harden v. Gordon*, 11 F. Cas. 480, 483 (No. 6,047), 2 Mason 541 (C.C.D. Me. 1823).

²³ "In the admiralty, seamen are always treated as a favored class of suitors, and entitled to a large and liberal protection as being, in a qualified sense, the wards of the court. From their open and unsuspecting character, their inexperience in business, as well as their usual state of destitution and notorious improvidence, they are extremely liable to be overreached, by the superior knowledge and foresight of those with whom they deal, and drawn into unequal bargains. And especially does their poverty, with their habitual recklessness of the future, place them in a state of dependence, which subjects them very much to the power and influence of their employers. They in all respects stand on unequal ground, with unequal advantages, in treating with the merchant owners, a class of men, who, by their education, habits, and course of life, are as remarkable for their shrewdness and quick perception of their interest, and the systematic steadiness with which it is pursued, as seamen are for the reverse. A court of admiralty will, therefore, interpose to protect them from the consequences of their own heedlessness and ignorance, upon the same principles that courts of equity protect, against their improvident bargains, young heirs dealing with their expectancies, or wards and cestui que trusts dealing with their guardians and trustees. It habitually looks with jealousy upon the contracts and dealings of owners with them, when there is any departure from the ordinary terms of the contract, or the usual course of dealing; and if it appears that from their improvidence or necessities, they have been induced to waive any of their rights, without an adequate compensation, the court will set aside the most express stipulations as inequitable." *The Betsy and Rhoda*, 3 F. Cas. 305, 306-7 (No. 1,366), 3 N.Y. Leg. Obs. 215, 2 Ware 117 (D. Me. 1840).

To be sure, doctrine has evolved; current law provides substantial protection for seamen and fishermen.²⁴ The core element in the protection, however, has remained unchanged: a paternalistic concern for these groups in their contractual dealings vis-à-vis their employers.²⁵ *Carbone* could plausibly be viewed as a case involving the division of a tort award between the vessel owner and the fishermen; in the absence of explicit contractual language regarding the division, the law will favor the weaker party, the fishermen.²⁶ This is at least within the spirit of the seamen/commercial fishermen exception. *Oppen*, however, went considerably further. While the language obscures the identity of the plaintiffs, the plaintiff class included not only the fishermen but also the vessel owners.²⁷ The transformation of the exception was completed a few years after *Oppen* in *Jones v. Bender Welding & Machine Works, Inc.*,²⁸ a decision in which Judge Sneed joined the majority. The court noted that “[i]n admiralty it is well settled that *fishing vessel owners and commercial fishermen* may recover for lost fishing profits under the general maritime law of negligence.”²⁹ Thus, a rule that was apparently intended to protect weak employees from their employers has now been transformed into a policy that protects the interest of both the employers and employees vis-à-vis third parties. Whatever the actual merits of the fishermen’s claims, it should be clear that admiralty law’s historical soft spot for seamen and commercial fishermen provides a slender reed on which to base recovery.³⁰

²⁴ See John V. Lovitt, *Things Are Seldom What They Seem: The Jolly Little Wards of the Admiralty*, 46 ABA J. 171, 171–74 (1960).

²⁵ Technically, the relationship between the fishermen and the vessel owners is not necessarily an employment relationship; the fishermen have sometimes been classified as independent contractors. See *Columbia River Co. v. Hinton* [1940–1943 Trade Cases P 56,185], 315 U.S. 143 (1942) (fishermen characterized as independent entrepreneurs so the dispute was not an employer-employee dispute within the meaning of the Norris-LaGuardia Act); *Emard v. Squire*, 58 F. Supp. 281 (W.D. Washington, S.D. 1945) (fishermen were independent contractors for social security tax purposes); *Cape Shore Fish Co., Inc. v. United States*, 330 F.2d 961 (Ct. of Cl. 1964) (fishermen were employees for social security tax purposes).

²⁶ See Goldberg, *Robins*, *supra* note 8, at 271–75.

²⁷ In *Oppen*, the plaintiff class was composed of approximately 130 individuals, corporations, and associations. See Comment, 88 Harv. L. Rev. 444, 444 n.2 (1974). Although most of the plaintiffs were small, independent boat owners, a few large corporations which employ fishermen, such as the Starkist Seafood Company and Castignola Bros., were included in the plaintiff class as well, with no distinctions made by the court. Telephone interview with one of the plaintiffs’ lawyers.

²⁸ 581 F.2d 1331 (9th Cir. 1978).

²⁹ *Id.* at 1337 (citing *Oppen*) (emphasis added).

³⁰ The creative interpretation of precedent has gone both ways. A Louisiana Court of Appeals denied compensation to fishermen for lost profits suffered when a collision inter-

III. ISOLATING RELIANCE

Consider a fishery damaged by an oil spill. If the fishery were owned by someone, that owner would be entitled to recovery for the net market value of the fish destroyed by the spill. In addition, since the spill also destroyed aquatic life which was, in effect, an input into the production of future fish, the oil company would be liable for the decreased value of that aquatic life.³¹ The problem is analogous to an accident in a sardine cannery that destroys some cans of sardines and also destroys one of the canning machines. The owner would be entitled to recover for both the goods in process (the fish in both instances) as well as the capital goods (the machine or the aquatic life). That appears to be an uncontroversial outcome, although I will show below that even the apparently simple case of damage to an owned asset presents some difficulties.³²

The *Robins* rule concerns the claims of those who have relied on the continued availability of the fishery or the sardine cannery. Since their property had not been damaged, they could not recover. It is on these claims that I would like to focus attention. To do so we must first get one complicating factor out of the way: no one owned either the fishery or the fish. That lack of ownership has led to a blurring of two distinct rationales for allowing the commercial fishermen to recover—as surrogate owners of the fishery or as indirect victims (those who had relied on the continuing vitality of the fishery).

Unless someone could be given standing to sue for the destruction of the unowned fishery, the oil company would avoid responsibility for these damages (assuming that their only liability would arise under tort law). Landes and Posner would justify *Oppen* on the ground that the commercial fishermen were the best available surrogate plaintiffs. “[T]here was no one in *Oppen* better placed than the fishermen plaintiffs to sue for those losses, so they properly were allowed to do so.”³³

If we treat the commercial fishermen as surrogate plaintiffs (in effect, as private attorneys general), it is only a short step to the conclusion that

fered with their fishing. The court held that “*Oppen* is distinguishable from the instant case since there is no allegation that the defendants fell into the category of ‘oil spillers.’” *Dempster v. Louis Eymard Towing Co., Inc.*, 503 So. 2d 99, 101 (La. App. 5th Cir. 1987). Nothing in the *Oppen* opinion suggested that the *defendant’s* status was relevant for determining whether the fishermen could overcome the bar to recovery created by the economic loss rule.

³¹ I am assuming that any aesthetic value of the aquatic life can be treated separately. Thus, we can treat the aquatic life as having value only for commercial purposes—namely, the production of future fish.

³² See Section V *infra*.

³³ Landes & Posner, *supra* note 11, at 252.

there may be others at least as well suited to play that role. Why should fishermen be elevated ahead of other plausible candidates, such as the state or a class action of consumers?³⁴ If the losses suffered by the fishermen were a reasonable proxy for the social losses arising from the damage to the fishery, then allowing the fishermen to play the role of surrogate owner would not be unreasonable. However, as we shall see below, that is unlikely to be so.

Designating the commercial fishermen as the only surrogates leaves a large hole. If the tort system is going to assess injurers for damages to the unowned assets, then it will have to find additional surrogate plaintiffs. Fisheries are not the only unowned assets damaged by an oil spill. Beaches are despoiled; shipping lanes are temporarily disrupted. Indeed, the environmental damage arising from a significant oil spill like those in Santa Barbara and Alaska is likely to be much greater than the damage to the fisheries. If fishermen are the appropriate surrogates for the damage to the fishery because they earn their living from the sea, should the surrogate claimants for these other classes of damages be the hotels, restaurants, and others who make their living off the environment and the merchants who rely on the shipping lanes? Judge Wisdom raised precisely this point in his *Testbank* dissent, questioning the majority's distinction between the fishermen and other indirect victims:

Oppen allowed the fishermen to recover . . . but the opinion fails to draw a very convincing line between the rights of fishermen and the rights of others who draw their living from the water. Certainly the injury from the oil spill to others who make their living upon the water, such as boat charterers who are unable to put to sea, is as foreseeable and as direct as the injury to the fishermen. It is therefore unclear why these parties should not also be entitled to recovery. The court did attempt to distinguish fishermen in that they "lawfully and directly make use of a resource of the sea, viz. its fish, in the ordinary course of their business." Yet, if those who make use of a "resource of the sea" are entitled to recovery, then it seems *a fortiori* that those who make use of the sea itself in their business—a boat charterer, for example—would be entitled to recovery.³⁵

Judge Wisdom was not, however, arguing that these other users of a resource of the sea should be treated as surrogate plaintiffs; they were

³⁴ Richard Epstein raised this question in his dispute with Judge (then Professor) Posner regarding the commercial fishermen's claim in *Oppen*. See Richard A. Epstein, Nuisance Law: Corrective Justice and Its Utilitarian Constraints, 8 J. Legal Stud. 49, 50–53 (1979); Richard A. Epstein, Causation and Corrective Justice: A Reply to Two Critics, 8 J. Legal Stud. 477, 501–02 (1979) (hereinafter cited as Epstein, Reply).

³⁵ State of La. ex rel. Guste v. M/V Testbank, 752 F.2d 1019, 1044 n.23 (5th Cir. 1985) (en banc) cert. denied sub nom. White v. M/V Testbank, 477 U.S. 903 (1986) (Wisdom, J., dissenting).

to be compensated for their lost profits, which, as we shall see shortly, is not the same thing.

Judge Posner's notion that the fishermen are surrogate plaintiffs carries with it a presumption about the proper measure of damages.³⁶ "One way of preventing oil companies from ignoring the effect of oil spills on fish is to make the companies liable to the fishermen *for the value of the lost catch*."³⁷ The damage would be the net market value of the fish that would have been caught, but for the accident—the decreased value of the fishery.³⁸

This is not the damage measure Judge Sneed (or Judge Wisdom) had in mind. The oil company would be liable for the "profits the plaintiffs would have realized from their commercial fishing in the absence of the spill."³⁹ Referring to two earlier cases in which riparian owners sued for losses arising from the pollution of a river, Judge Sneed noted that "[t]he injury for which damages were sought in each case was the loss of anticipated profits—a pure economic loss as that term is normally understood."⁴⁰

³⁶ See Posner, Epstein's Tort Theory, *supra* note 11, at 465–68; Posner, Tort Law, *supra*, note 11, at 467–68; Landes & Posner, *supra* note 11, at 251–52. Elsewhere, Judge Posner correctly criticized Judge Sneed for a misapplication of Calabresi's least cost avoider notion with respect to *Oppen*. See Richard A. Posner, Some Uses and Abuses of Economics in Law, 46 U. Chi. L. Rev. 281, 300 (1979) (hereinafter cited as Posner, Uses and Abuses of Economics).

³⁷ Posner, Epstein's Tort Theory, *supra* note 11, at 468 (emphasis added).

³⁸ *Id.*

³⁹ *Oppen*, 501 F.2d at 570. This is the standard measure of tort damages. See Restatement (Second) of Torts § 906, comment a (1977).

⁴⁰ *Oppen*, 501 F.2d at 568. The decisions in the two cases gave an indication of the types of damages that would be reckoned:

[Plaintiff's] whole case was bottomed upon the proposition that fishermen . . . had, because of the killing of the fish . . . ceased to come to that neighborhood and had, therefore, ceased to avail of the facilities which she had maintained for their use and entertainment, and that her loss and injury was in the profits which she would have thereby made had the fishermen . . . continued to come. *Masonite Corporation v. Steede*, 198 Miss. 530, 553, 23 So. 2d 756, 760 (Miss. 1945).

We are sure that the convenient access which plaintiff had from his riparian property to the run of the fish is an advantage of which he cannot be lawfully deprived by the alleged nuisance. It is true that he might obtain access to the fish by going to more distant points where the nuisance had not yet affected the fish, if there were any such places, but "if a man's time and money are worth anything," he has received a substantial damage in being driven to this necessity. . . .

[W]e have been specially considering the injury to plaintiff's business. He alleges also, that the value of his riparian property has been diminished. The convenience of access to the fish from his adjacent riparian land, especially in view of the fact that it has been so long used in that connection, may reasonably be considered a contributing element in the value of his premises, and we so hold. *Hampton v. North Carolina Pulp Company*, 223 N.C. 535, 547–49, 27 S.E.2d 538, 546–47 (N.C. 1943).

For Judge Posner the damages are measured by *the value of the fish destroyed*. For Judge Sneed the damages are measured by the losses suffered *because the fish were destroyed*. Posner, in effect, strips *Oppen* of the economic loss issue, transforming it into a routine case in which we compensate the “owner” of destroyed goods for the market value of those goods (the sardine cannery alluded to above). If the fish had been owned by someone else with a compensable claim, Posner would deny the fishermen any recovery. For Sneed, however, the fishermen are not surrogates; they are claimants in their own right. Thus, it is possible that he would allow the fishermen to recover their lost profits even if the fish had been owned and the owners had been compensated.

Professor Rizzo has suggested a possible reconciliation of the two positions.⁴¹ The losses of the fishermen (Sneed) might measure the actual damages to the fishery (Posner). Owners of certain complementary assets would, in effect, have the value of the unowned fishery attributed to them by the market. The spill-induced decline in the fishery’s value would be reflected in the revaluation of the complementary assets.⁴² While it is easy to show that in general Rizzo’s equivalence result does not hold, it is useful to begin by describing the one case in which it does.

To make the discussion more transparent, assume that the fishery is completely destroyed, and assume further that only one class of assets is involved—fishing vessels that have been deployed in this particular fishery. Suppose that vessels were designed to be used only in this fishery, so that their value in any other use was zero. To simplify further, assume that they have no scrap value. The market value of the vessels prior to the accident is what rational investors would be willing to pay for the fleet. Leaving aside for the moment some crucial qualifications, that value would be the expected net benefits (the expected number of

These plaintiffs were not barred by *Robins* because they were riparian owners. In most American jurisdictions, riparian law defines the rights of adjacent land owners in terms of reasonable use. “The use, not the stream, came to be the thing protected by law, and injury to a reasonable use became the tort.” Jesse Dukeminier & James E. Krier, *Property*, at 65 (Little, Brown 1981). Thus, the legal resolution of the “commons problem” (see text at notes 46–49 *infra*) turns the destruction of upstream fish into an injury to downstream property. Judge Sneed argued that labeling the riparian owner’s loss a property loss should not provide the basis for distinguishing between the claims of riparian victims and the commercial fishermen in *Oppen*. “To permit riparianism to transmute this loss into an ordinary property loss for the purpose of allowing recovery does no harm. However, harm would be done if the fact that the plaintiffs in this case are not riparian owners was held to deprive them of the comfort these authorities provide.” *Oppen*, 501 F.2d at 568.

⁴¹ See Mario J. Rizzo, *A Theory of Economic Loss in the Law of Torts*, 11 J. Legal Stud. 281, 286–88, 298–99 (1982) (hereinafter cited as Rizzo, *Theory*).

⁴² The value of the asset, before and after, is the discounted sum of expected future earnings. Thus, the decline in the asset value is the capitalized value of the lost profits.

fish caught in each season multiplied by the expected price, minus the expected variable costs of catching the fish, all discounted by an appropriate interest rate). The market value after the accident would, of course, be zero. Under these assumptions, the vessel owners' loss in this extreme case would be the net market value of the fish, and the Sneed and Posner measures coincide. However, the coincidence stems from some strong assumptions, and when these are relaxed, the two measures diverge. It is sufficient to note two reasons for the divergence between the lost profits of the vessel owners and the value of the lost fish.

First, a vessel has a finite life that could be shorter than the productive life of the fishery. To take an extreme example, suppose that the fishery were totally destroyed but that all the vessels deployed in the fishery would have required replacement at the end of the year. The vessel owners' loss is the market value of the vessels, which would be one year's net revenue. The vessel owners have (by assumption) no specific assets which decline in value as a result of the destruction of the future net revenue stream. While obviously correct, this point is almost certainly irrelevant for most oil spills because the expected life of the vessels is considerably greater than the expected length of the disruption. Even in the Exxon *Valdez* case, most of the damage to the fishery was confined to the first season.⁴³

Second, and more significant, the vessels were assumed to have no alternative use. But if they do, the link between the value of the fishery and the value of the vessels is severed. If vessels were completely fungible, on the destruction of the fishery the vessels would be moved quickly

⁴³ If the accident had significant adverse long-term effects, we should expect to find a decrease in the value of fishing permits. One study compared the transfer price of permits in the years before and after the spill (1988 and 1990) and found that the price rose in thirty-one of the thirty-four categories. Economists Incorporated, *supra* note 12, at 221-24. The record catch in 1990 suggests that there was little damage to the fishery beyond the first year. See John Balzar, *Salmon Harvest in Alaska Grows, but There's a Catch*, Los Angeles Times, June 30, 1992, at A1; Casey Bukro, *Fishing Strike Stirs Bitterness in Town*, Chicago Tribune, August 4, 1991, at C6. Indeed, by August 1991 surplus Alaskan salmon was being sent to the postcoup Soviet Union as a goodwill gift (with the more practical intent of raising the price of salmon). See Hal Bernton, *Alaskan Salmon Harvest Is Fisherman's Nightmare; Hatchery Overrun in Prince William Sound Leads to Massive Dumping, Airlift to Soviets*, Washington Post, August 25, 1991, at A18. The salmon catch in Prince William Sound has fallen off dramatically in subsequent years. In the summer of 1993, fishermen briefly blockaded the Valdez Narrows, claiming that the disastrous harvest was a consequence of the 1989 spill. Exxon disputes the causal link between the spill and the subsequent population dynamics. See Hal Bernton, *Another Depressing Run In: Prince William Sound Has Fishermen Sinking*, Washington Post, October 28, 1993, at A3; *Alaska Fishermen Blockade Tankers*, New York Times, August 23, 1993, at 8; and Joel Connelly, *Still Feeling the Sting; Alaska Area to Ever Recover from Oil Spill?* Houston Chronicle, October 17, 1993, at 7.

and cheaply elsewhere.⁴⁴ Their owners would suffer no losses from having relied on the continued availability of the fishery. Thus, Rizzo's equivalence argument is clearly wrong. We cannot presume that by compensating the lost profits of indirect victims, such as fishermen, we are in effect accurately assessing the injurer for the lost value of a damaged, but unowned, complementary asset, the fishery.⁴⁵

So, the lost profits of the indirect victims are not simply another way of reckoning the losses of the surrogate owner. If the fishermen, or indirect victims generally, are to be compensated for their lost profits, we must seek another rationale. The general question we face is this: even if a damaged asset were owned and the owner received compensation for its losses, would there be grounds for providing additional compensation to those who suffered no physical harm to their property, but who suffered financial losses as a result of the accident? To move our hypothetical to dry land, suppose that a tractor owner, T, contracts annually to work on farmer F's land. The farmer's land is then contaminated by a toxic waste dumper, W, and thus is no longer suitable for farming. T's claim would not be as a surrogate for the farmer who is quite capable of suing in her own behalf. T's loss, if any, stems from T's reliance on the continued availability of farmer F. Should W have to compensate T?

Before tackling that question in the next section, a brief digression is in order. The claims of a number of Exxon's victims are infected by the common pool problem. This is obvious for damage to a fishery; it is less obviously a problem for damage to other assets.

Management of a fishery presents some well-known problems.⁴⁶ If no one owns a fishery, those engaged in fishing will have incentives to exploit it inefficiently. Fishermen or governments can respond to the problem by imposing rules which restrict the number of fishermen, the equipment and techniques that can be used, the length of the fishing season, and so forth. As a result, fisheries are generally harvested more effectively than if there were no such restrictions and less effectively than if they were operated under unified ownership.⁴⁷ If a fishery were damaged, say, by

⁴⁴ To simplify the problem further, I assume that the vessels deployed in this particular fishery are an insignificant part of the vessel market, and, therefore, the accident has no effect on the market price of vessels.

⁴⁵ Rizzo's argument is plausible in the riparian context since riparian land is immobile and permanent; changes in the value of the land (the capitalized value of anticipated profits) could provide a reasonably good measure of the value of the fish. See Rizzo, Theory, *supra* note 41, at 286–89, 298–99.

⁴⁶ See Gary D. Libecap, Contracting for Property Rights, ch. 5 (Cambridge Univ. Press 1989).

⁴⁷ For illustrations of how various groups, including fishermen, have coped with common

an oil spill, the magnitude of the harm to both society and the fishermen would depend on how well the participants had resolved the common pool problem. It is conceivable that mismanagement of the fishery could have resulted in complete dissipation of all economic rents, so that the net social loss of destroying what could have been a productive fishery would be zero.

Hotels exploiting the availability of beaches or other tourist attractions also present a common pool problem. In the absence of proper management, private incentives can lead to overbuilding. As in the case of fisheries, private incentives alone do not determine the outcome. The number of hotels, for example, might be limited by zoning regulations or by allocation of public services such as sewers and access roads.⁴⁸ Again, the magnitude of the harm to society and the hoteliers will depend on how successfully society has resolved the common pool problem.

I will assume throughout that the effectiveness of fishery management, land use planning, or other common pool management arrangements is determined exogenously.⁴⁹ The preaccident value of the fishery, the beach, or complementary assets would reflect whatever imperfect rules society had adopted. In addition to being analytically convenient, this makes policy sense. To assume otherwise would encourage the ad hoc manipulation of tort doctrine to correct misallocations (real and imagined) having nothing to do with the tortious activity.

IV. RELIANCE AND OFFSETTING BENEFITS

If an accident causes direct damage to a physical asset, such as a fishery or beach, the direct damages are suffered by the owner of that asset (if there is an owner). In addition, the financial repercussions extend along three causal chains: reliance (complements), offsetting benefits (substitutes), and repair and replacement. Those who had made decisions

pool problems, see Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge Univ. Press 1991).

⁴⁸ The management need not be by government. Compare the development outside Disneyland with that around Disney World. In the latter case, Disney purchased much of the surrounding land prior to announcing plans to build the park.

⁴⁹ In their analyses of the claim of the *Oppen* fishermen, a number of commentators have recognized the existence of the common pool problem. See William Bishop, *Economic Loss in Tort*, 2 *Oxford J. Legal Stud.* 1, 25–26 (1982) (hereinafter cited as Bishop, *Economic Loss*); William Bishop, *Economic Loss: A Reply to Professor Rizzo*, 2 *Oxford J. Legal Stud.* 207, 210 (1982) (hereinafter cited as Bishop, *Reply*); Mario J. Rizzo, *The Economic Loss Problem: A Comment on Bishop*, 2 *Oxford J. Legal Stud.* 197, 206 (1982) (hereinafter cited as Rizzo, *Comment*); Posner, *Epstein's Tort Theory*, *supra* note 11, at 468; Epstein, *Reply*, *supra* note 34, at 502.

in reliance on the continued availability of the physical asset could suffer financial harm if that asset were damaged. In the Exxon *Valdez* spill, this class would include fishermen, owners of canneries, employees of canneries, those engaged in tourist-related industries, and so forth. At the same time, producers of substitutes (and those who deal with them) could find themselves better off as a result of the accident. If, for example, the accident induced tourists to go elsewhere, hotels in alternative locations might earn more than they would have, were it not for the accident. A third chain of financial repercussions concerns those engaged in efforts to repair or replace the damaged asset. In order to clean up the mess it had caused, Exxon had to bid some resources (vessels and workers) away from alternative uses.⁵⁰ The increased demand for these resources could result in an increase in their price, thus making the resource owners better off, while making those who had intended to use the resources for other purposes worse off.

Most claimants for indirect economic losses have suffered reliance losses. The existence of such losses indicates, as we shall see, that the true social losses are not entirely captured by the direct damages. However, the reliance losses are likely to overstate the actual additional social harm. If the purpose of reckoning tort damages is to confront wrongdoers with the consequences of their actions, then either ignoring the reliance losses or compensating them is likely to give the wrong result. For a number of reasons to be developed below, it is preferable to err on the side of ignoring the reliance losses.

A. *Reliance*

Suppose that an oil spill results in the death of a large number of fish. The value of the fish depends on the market price of fish and the cost of getting the fish from the ocean to the retailer. Suppose that processed fish sells for \$1 per pound at retail, the wholesale price is 50¢ per pound, and the delivered price to the cannery is 20¢ per pound. If the costs of capturing the fish and delivering them to the cannery are 15¢ per pound, then the market value of the destroyed fish would be 5¢ per pound.⁵¹ If

⁵⁰ See Michael Arndt, *Alaskans Cleaning Up on Oil Spill*, Chicago Tribune, August 20, 1989, at 1.

⁵¹ If the common pool had been mismanaged so that the rents of the fishery had been entirely dissipated, then the market value of the fish would be zero. In fact, the rents in the Alaskan fisheries were not fully dissipated as demonstrated by the positive market price for fishing permits. Permits are classified by species, gear type, and fishery (for example, fishing salmon by purse seine in Southeastern Alaska). One study found the average price of a permit in the late 1980s to be a bit less than \$100,000 and the aggregate value of all permits to be around \$1 billion. Economists Incorporated, *supra* note 12, at 216–30. The

the fish are destroyed, what does society lose: the fish in the ocean (5¢/lb.), the fish on the grocer's shelves (\$1/lb.), or something in between?

Assume first that all the resources that would have been used to convert the free-swimming fish into canned goods on the grocer's shelf were completely fungible. Absent the fish, the resources would be redeployed elsewhere. Owners of those resources suffer no reliance losses because they in no way relied on the availability of the fish. Society loses \$1 per pound worth of fish at the retail level, but it saves the costs of capturing, processing, and distributing the fish (95¢/lb.); thus, the net loss to society is 5¢ per pound.

Now assume the opposite: all the resources were unique. The fishermen had skills that could be used in this fishery and nowhere else, their vessels could only be used here, the cannery to which they delivered their catch was inaccessible to any other fishermen, and (more far-fetched) the distributional network could be used only for marketing fish from this fishery. In such a case, the loss of the fish would result in all these resources sitting idle. The social loss would appear to be \$1 per pound since consumers do not receive their fish and all the resources freed up by the death of the fish cannot be redeployed.

The appearance is misleading, as I will show below. First, however, I want to restate the problem in terms of mitigation rather than reliance. In the former case, individuals who would have been involved economically in moving these fish from the ocean to the consumer suffered no financial losses; they did not (by assumption) rely on the continued viability of the fishery. Their flexibility enabled them to mitigate the damages that they would otherwise have suffered. In the latter case, the owners of unique assets (including human capital) suffered a financial loss because they were unable (again, by assumption) to mitigate their damages by redeploying their assets elsewhere.

Between these extremes, situations exist where those adversely affected by the accident can partially mitigate their damages. The magnitude of the financial harm suffered by the fishermen does not, therefore, depend entirely on the behavior of the oil company. It also depends on their own efforts to mitigate their damages. Thus, it is misleading to argue that the oil company should be held liable for the damage suffered by the fishermen because it is the only party that can affect the probability and magnitude of the harm.⁵² The extent of the damages suffered by the fish-

analysis that follows does not depend in any way on the value of the fish destroyed. The key feature is the fungibility of the resources that would have been used to bring these fish from the ocean to the market.

⁵² Posner argued that the oil company should be held liable in *Oppen* because it was in the position to control the occurrence of the accident while the fishermen were not; see

ermen can, to a considerable degree, be determined by the decisions made by the fishermen themselves.

Even if we ignore the relationship between the pecuniary losses of the indirect victims and the social losses, the above discussion suggests a plausible reason for denying recovery for indirect losses—to encourage efficient mitigation. There are, broadly speaking, two ways of mitigating the damages arising from reliance: mitigation *ex post* and *ex ante*. To these we now turn.

1. Mitigation, Ex Post

The victims could adjust to the damage after the accident has occurred. Awarding damages weakens the victim's incentive to mitigate damages following the accident. To be sure, tort law requires the victim to mitigate,⁵³ but in practice, it is difficult for courts to determine the efficacy of the victim's postaccident behavior. Suppose, for example, that there has been an oil spill and that it takes two weeks to get vessels to an alternative site. An owner may refuse to move the vessel because she anticipates a low vessel price at the alternative location and also anticipates a resumption of fishing within four weeks at the present site. If it turns out that fishing does not resume for the entire season, should she be compensated for the nonuse of her vessel for the entire season? One way to induce efficient mitigation is to make the victim's compensation independent of her efforts. In the present context that could be done by holding the injurer not liable to the indirect victim. Alternatively, the injurer could be held liable, but the compensation could be established by a rule unaffected by the behavior of the victims. Either would get the *ex post* incentives right. As the chain of causation lengthens, the difficulties with ascertaining the appropriate level of mitigation multiply. Limiting the tracing of losses, as the economic loss rule does, takes review of the mitigation decisions away from the courts. A rule of no liability encourages the victim to adapt efficiently without worrying about a judicial assessment of the reasonableness of the response.⁵⁴

Posner, *Uses and Abuses of Economics*, *supra* note 36, at 300. However, recall that Posner was compensating the fishermen for the value of the lost fish, not for their pecuniary losses.

⁵³ Restatement (Second) of Torts § 918 (1977).

⁵⁴ In denying recovery for economic loss arising from a temporary cutoff of electric power, Lord Denning stated:

Such a hazard is regarded by most people as a thing they must put up with—without seeking compensation from anyone. Some there are who install a stand-by system. Others seek refuge by taking out an insurance policy against breakdown in the supply. But most people are content to take the risk on themselves. When the supply is cut off, they do not go running around to their solicitor. They do not try to find out whether it was anyone's fault.

2. Mitigation, Ex Ante

Victims might be able to premitigate. True, the victim suffered financial harm, but did he make himself unnecessarily vulnerable? Should someone be allowed to design, build, and deploy a vessel, say, that could be used only in a single fishery and then expect compensation from someone who damages that fishery? If the victim's reliance were modest, it would probably not be worth pursuing the matter of compensation. If the reliance were more substantial, however, then the court might choose to justify it by invoking such notions as good-faith reliance or investment-backed expectations.⁵⁵ This was the path the North Carolina Supreme Court chose in *Hampton v. North Carolina Pulp Company*.⁵⁶ In *Hampton*, the court allowed a riparian owner to recover for the reduced value of its property after a nuisance destroyed the fish. The court held that "[t]he convenience of access to the fish from his adjacent riparian land, especially in view of the fact that it has been so long used in that connection, may reasonably be considered a contributing element in the value of his premises."⁵⁷ The emphasized passage suggests that the long history of usage validated the reasonableness of the victim's expectations.⁵⁸

Whether the vessel owner relied in good faith or had reasonable investment-backed expectations does not matter in terms of identifying the social loss arising from the accident. No matter what its origin, the vessel exists; the destruction of a fishery would produce a greater loss than if the vessel had never existed. The question of "good faith" arises ex ante. Should the owner have made the investment that got her into this mess in the first place?⁵⁹ Prior to the accident, she could have influenced the financial consequences by, for example, deploying a fishing vessel that could have been moved to other fisheries with relative ease.

They just put up with it. They try to make up the economic loss by doing more work next day. This is a healthy attitude which the law should encourage. *Spartan Steel & Alloys Ltd. v. Martin & Co.*, [1973] 1 Q.B. 27, 38.

⁵⁵ The latter concept is often invoked for determining whether a governmental taking must be compensated under the Fifth Amendment or its state counterparts. *Penn Central Transp. Co. v. New York City*, 438 U.S. 104 (1978).

⁵⁶ 223 N.C. 535, 27 S.E.2d 538 (1943).

⁵⁷ 223 N.C. 535, 548, 27 S.E.2d 538, 546-47 (1943) (emphasis added).

⁵⁸ The history of usage has numerous counterparts in property and nuisance law: for example, adverse possession, lost grant, and prescriptive easement.

⁵⁹ The problem is a variation on the "*Boomer*" problem; see Victor P. Goldberg, *Relational Exchange, Contract Law, and the Boomer Problem*, 141 J. Institutional & Theoretical Econ. 570 (1985). If a cement factory worth about \$45 million causes a nuisance evaluated at less than \$1 million, society would be better off, ex post, with a remedy that assured that the plant survived. However, if such a remedy encouraged people to build first and worry about the consequences later, it might have perverse incentives, ex ante.

The reasonable reliance issue manifests itself in two quite different ways. It can take the form of a long-term investment decision; for example, construction of a hotel that relies on the continued availability of a popular beach or a vessel that relies on the continued availability of a particular fishery. Or it could involve short-term reliance on a particular crucial factor; for example, the closing of a shipping lane for a few days could prevent the timely delivery of cargo and result in the temporary closing of a factory. This latter variation might be termed the “for want of a nail” problem. For want of the nail, the shoe was lost, for want of a shoe, . . . and eventually the entire kingdom. Essentially, the loss of a seemingly insignificant input may set in motion a chain of events resulting in a huge loss at the end of that chain. Compensating those at the end of the chain would make the wrongdoer liable for the consequences of a series of decisions made in reliance on the continued availability of the input. Limited tracing puts the burden of relying on an input’s continued availability on the potential victims.⁶⁰

B. Offsetting Benefits

I noted above that if the destruction of the fish resulted in complementary assets remaining idle, then, although their idleness would appear to be an additional social loss, that appearance would be misleading. Basically, while X’s assets are idle, or at least underutilized, Y’s assets are used more intensively to make up at least some of the difference. Putting the argument in terms of mitigation, mitigating behavior could be undertaken by someone other than the victim. In a complex world, those who suffer adverse financial consequences following an accident might not be in the best position to respond. Thus, if an accident damaged one fishery and as a result a vessel owned by Smith remained idle, the social response need not necessarily end there. A second vessel, owned by Brown, which was sitting idle in a second fishery, could now be used to offset at least

⁶⁰ Consolidated Aluminum suffered considerable losses when an accident interrupted the flow of gas to its plant. In denying recovery, the Fifth Circuit emphasized Continental’s excessive reliance (invoking unforeseeability):

Consolidated’s aluminum reduction plant is the smallest in the United States. It has the unique distinction of having only one energy source for the generation of the electricity used in its operation. The record reflects that aluminum reduction plants follow the universal practice of having a readily-available, alternate energy source. This practice avoids the risk of the very damages that Consolidated sustained as a result of the unprogrammed shut down. When the plant near Lake Charles, Louisiana was built, a calculated judgment was made—no alternate energy source, such as fuel oil, was provided, despite the fact that the generators installed could operate on either natural gas or fuel oil. Consolidated Aluminum Corp. v. C. F. Bean Corp., 833 F.2d 65, 66, 1988 A.M.C. 2352, 2354 (5th Cir. 1987).

a portion of the drop in fish production. If we had very clever accountants who could instantly revalue assets to reflect changing conditions, the value of Smith's vessel would fall, while the value of Brown's would increase. Financially, Smith's reliance losses would be offset, in part, by Brown's gains. Socially, the net harm is overstated by examining only Smith's reliance losses because other resources are available to make up some of the shortfall. The result would not be a wash. So long as there is not an infinite supply of idle capacity, society would be less productive than if the accident had not occurred at all. However, a failure to recognize the offsetting behavior of others would result in an overstatement of the social harm.⁶¹

Thus, even if a particular asset were completely idled by an accident, the overall societal loss could be virtually nil. The actual social loss depends in part on the preexisting inventory of substitutes.⁶² The preaccident value of an idled asset would reflect the existence of that inventory, but the decline in the asset's value would overstate the social harm, except in the unlikely case in which no social mitigation would be possible.

To clarify this argument I will first analyze a situation that arises regularly in economic loss litigation—losses that accrue when an artery of commerce is blocked. Then I will examine two arguments, both associated with Judge Posner. Neither is quite right; understanding where they go wrong will help clarify the role of offsetting benefits.

1. Blockaded Arteries

Whenever an artery of commerce is blockaded, it is inevitable that some people will be adversely affected. Problems of this sort arise regularly in economic loss litigation.⁶³ Those with goods trapped on the wrong

⁶¹ I did not fully recognize this point in my analysis of *Robins*; see Goldberg, *Robins*, *supra* note 8, at 260. I suggested that if a vessel were idled for two weeks, the current market value of its services would represent the social harm caused by the accident. While an extraordinarily tight shipping market (the accident took place at the height of the First World War and the market price for shipping was about twelve times the prewar price) might have meant that there was virtually no idle inventory at the time of that accident, in general, the existence of inventory will result in reliance losses overstating the true social harm.

⁶² The cost-minimizing response to the idleness could entail subtle and complex patterns of substitution. Thus, if a meat delivery truck is held up in traffic, someone who might have bought meat at one restaurant might end up eating vegetables at another.

⁶³ See *Dundee Cement Company v. Chemical Laboratories, Inc.*, 712 F.2d 1166 (7th Cir. 1983); *Petition of Kinsman Transit Co.*, 388 F.2d 821 (2d Cir. 1968) (hereinafter cited as *Kinsman II*); *Rickards v. Sun Oil Co.*, 23 N.J. Misc. 89, 41 A.2d 267 (1945); *Stop & Shop Co. v. Fisher*, 387 Mass. 889, 444 N.E.2d 368 (S.J. Ct. Mass. 1983).

side of the blockade can neither use nor sell them. Consider, for example, the claim of a hypothetical shipper, Hadley Enterprises, which had shipped a shaft necessary for the operation of its flour mill. The disruption of shipping resulted in the shaft's arrival being delayed for ten days, and since Hadley had no extra shafts on hand, it was forced to close its flour mill for the entire ten-day period. Should Hadley be allowed to recover for its lost profits? If the tardy arrival of the shaft had resulted from the negligence of the carrier, that carrier would not have been liable for those losses (under contract law) for the "unforeseeable" consequences of the breach—as an earlier Hadley found out.⁶⁴

One reason for not allowing the original Hadley to recover was his failure to convey to the carrier information about the potential losses. That, obviously, would be irrelevant in a tort suit by a stranger. The second reason for denying recovery, which is relevant in the tort context, is that there are many ways that the victim—or others—could limit the harm arising from the delay. Denying recovery in such circumstances tells the victims, in effect, that they have a duty not to rely "unreasonably" on the occurrence of a particular event. Hadley, as numerous commentators have observed,⁶⁵ could have maintained an extra shaft (an input) so that the delay would not have caused any financial harm. There are many other things that Hadley could have done to limit its exposure. It could have held a larger inventory of flour (the output). Or it could have recouped the lost output by running its plant at a higher level of output after the shaft finally arrived. (In effect, that entails carrying a larger inventory of productive capacity—another input—than it would otherwise carry.)⁶⁶ Indeed, there is no reason that Hadley should have held the inventory of inputs or outputs only at this location; Hadley could have increased its output from another factory (it could have been diversified), or others could have held inventory and either sold it to Hadley or used it directly. That is, if Hadley remained closed for ten days, other sellers could have picked up the slack by selling goods out of inventory or by increasing their pace of production.

The Hadley hypothetical concerns a victim's inability to obtain an input in a timely manner. Similar problems arise when the blockade prevents the timely removal of output. Indeed, if we view the shipping lane as an input into wholesaling, as well as an input into production, then there is

⁶⁴ *Hadley v. Baxendale*, 9 Ex. 341, 156 Eng. Rep. 145 (1854).

⁶⁵ See, for example, E. Allan Farnsworth, *Contracts*, § 12.14 at 912–20 (Little, Brown 2d ed. 1990).

⁶⁶ See Victor P. Goldberg, *Readings in the Economics of Contract Law*, at 99 (Cambridge Univ. Press 1989) (hereinafter cited as *Goldberg, Readings in Contract Law*).

really no difference between disruptions of inputs and outputs. The claims advanced by Cargill in *Kinsman II*⁶⁷ provide a good example. A complicated accident resulted in the damming of the Buffalo River and a disruption in the flow of traffic for two months. Cargill had stored some wheat on a vessel in the harbor with the intention of delivering it in the next few months to fulfill a contractual obligation. The damming of the river prevented Cargill from moving the wheat, so Cargill fulfilled its contractual obligations by securing replacement wheat in the Midwest. The commissioner awarded Cargill damages for its increased transportation and storage costs, but the award was overturned by the courts.⁶⁸ As in the Hadley hypothetical, there were a number of ways in which Cargill or others could have ameliorated the situation. The blockaded wheat was only a tiny piece of an elaborate network of inventories being held in a wide variety of locations by a large number of parties. Cargill itself, as one of the world's largest grain traders, held large amounts of wheat in various locations. If one piece of the network were temporarily closed, as happened in this case, then other wheat could have been substituted both geographically and intertemporally. That is, Cargill might have had to hold on to this particular wheat for an extra month or two, but other wheat, held by Cargill or others, would be used earlier than it might otherwise have been. On net, there would be some social loss in that the allocation of the wheat inventory would likely be somewhat more costly if one piece of the network were closed for a period of time. However, the social loss would almost certainly have been much smaller than the additional transportation and storage costs that Cargill reported.

If we take as a baseline a world in which accidents never interrupted grain movements, then, conceptually, we could determine the costs of operating a system of grain storage. As the probability of interruptions increases, the costs of grain storage would increase. At higher accident rates society will need more grain, more warehouses at more locations, more ships, and more railroad cars. Accidental interruptions do, therefore, entail a real social cost. But the financial losses incurred by particular individuals following specific accidents need not bear any relation to the actual social costs.

⁶⁷ *Kinsman II*, 388 F.2d at 821. *Kinsman*, the defendant, was a family corporation. The son of the president achieved some fame and notoriety in another career. At the time of the accident, the son, George Steinbrenner, was the twenty-eight-year-old vice-president and treasurer of *Kinsman*.

⁶⁸ The lower court denied recovery on the grounds that negligent interference with contractual relations was not tortious. The Court of Appeals held "that the connection between the defendants' negligence and the claimants' damages is too tenuous and remote to permit recovery." *Kinsman II*, 388 F.2d at 825.

2. Elasticity of Supply

In their discussion of *Oppen*, Landes and Posner confuse matters by linking the social loss arising from the damage to the Santa Barbara fishery to the elasticity of the supply curve for fish. “If *the supply of fish were so elastic* that the reduction in catch caused by the oil spill was fully offset by an increase in catch elsewhere, then damages should be denied, because neither fishermen as a group, nor consumers, would have been injured by the spill.”⁶⁹ There are three possible interpretations of this statement. In none of the three does the existence or magnitude of the social loss depend on the elasticity of supply in other than a trivial way.

One possible interpretation is an extension of the argument presented in this section. The reliance losses by fishermen in the damaged fishery are completely offset by the gains of fishermen in other fisheries. Just as most of Cargill’s loss in *Kinsman II* was offset by the gains accruing to holders of other grain, the fishermen as a group suffer no real harm. Moreover, the equilibrium price and quantity of fish is essentially unchanged, so consumers are not injured. The first piece of this argument has nothing to do with the elasticity of supply. (It also is suspect because Landes and Posner appear to be more concerned with the fishermen’s role as surrogate owners than with their status as third parties suffering no physical harm; see the next paragraph.) The second arguably does, but it is of dubious relevance. *If* the supply curve is upward sloping and *if* the damage is significant, then there might be a noticeable effect on both the market price and the quantity of fish sold. The second “if” clause, it should be noted, does most of the work. In most tort contexts it is reasonable to presume that whatever had been destroyed was an insignificant enough part of the market such that there would be no impact on the price and quantity. If, for example, X tortiously destroys Y’s car, we do not anticipate a change in the price of used cars, regardless of the elasticities of supply or demand—the effect is simply too small. The effect might not be too small, however, when an oil spill destroys a large number of fish. However, even in such a case, the Landes-Posner statement is, at best, misleading.

A second interpretation is more consistent with the Landes-Posner treatment of the fishermen as surrogate owners of the fish; to simplify, we can ignore the reliance issue and treat this as a case of the destruction of an asset owned by the victim. If X tortiously destroys Y’s fish (or automobile or widget or whatever), what is the social loss? In general, it

⁶⁹ Landes & Posner, *supra* note 11, at 252 (emphasis added).

is the cost of repair or replacement—the market value of the asset. That value has nothing to do with the elasticity of supply; it depends only on the equilibrium price. If the market price did not change following the tortious act (as would be the case if supply were infinitely elastic), there would still be a real social loss—the price of the destroyed asset. If the damage were sufficiently great so that market conditions were affected, then the elasticity of both supply and demand would influence the magnitude of the social loss. If the market price had risen and if the fact finder reckoned the loss by simply multiplying the postinjury market price by the quantity destroyed, then the social costs would be overstated. Elasticity of supply only matters in this secondary way—and its impact is the opposite of that implied by Landes and Posner. The less elastic the supply curve, *ceteris paribus*, the more the postaccident price overstates the social loss.

A third interpretation rests on the fact that the destruction was not of widgets but of fish. It is conceivable that there could be no economic rents associated with the fishery, either because the fishery was a truly marginal one or because the rents were entirely dissipated by a failure to deal adequately with the commons problem.⁷⁰ In that case the direct damages (the market price of destroyed fish less the cost of converting uncaptured fish to fish sold on the market) would be zero. If the fish destroyed were truly worthless, then their destruction would indeed entail no social cost. The “derived supply” curve would be perfectly elastic at a zero price. In this limited sense, the Landes-Posner statement could be correct. If the supply curve is perfectly elastic at a zero price, then there would be no damages. The supply elasticity is, of course, beside the point; the key is that the destroyed fish were (by assumption) worthless. If the rents of the fishery had not been entirely dissipated, then destruction of the fish would have resulted in a real social loss, even if the supply elasticity of fish had been infinite in the relevant range.

3. Interim Losses

In his *Tort Law* casebook, Judge Posner presents the following plausible argument:

Economists distinguish between “technical” and “pecuniary” diseconomies (or externalities), the former resulting from an action that denies someone the use of some scarce resource, the latter resulting from a change in demand that

⁷⁰ That was certainly not the situation with respect to the *Valdez* oil spill since the market value of fishing permits in the impacted area was about \$1 billion. Economists Incorporated, *supra* note 12, at 216–30. See note 51 *supra* and accompanying text.

affects the distribution of wealth in the society rather than the total amount of wealth. By destroying the fish, defendant in *Oppen* imposed a technical diseconomy. But . . . the shift in business from one group of merchants to another was a purely pecuniary transfer.

As further illustration of this point, suppose that as a result of damage to the beaches at Santa Barbara caused by the oil spill, the Biltmore Hotel in Santa Barbara had lost profitable business—but the Fontainebleau Hotel in Miami Beach had gained an equivalent amount of business as travelers switched their vacation plans from Santa Barbara to Miami Beach. Assume the Biltmore's lost profits were \$2 million, the Fontainebleau's additional profits \$2 million, the loss to the commercial fishermen \$1 million, and no one else was affected by the spill. Then the spill would have produced total losses of \$3 million (\$1 million to the fishermen, \$2 million to the Biltmore) and total gains of \$2 million (to the Fontainebleau), for a net loss of \$1 million. If only the fishermen are allowed to obtain damages, the right amount of deterrence is obtained from an economic standpoint, since the fishermen's damages equal the net social cost of the oil spill. If the Biltmore is allowed to sue as well, then there is overdeterrence unless Union Oil Company is somehow able to recover the \$2 million windfall gain that the spill conferred on the Fontainebleau.⁷¹

The argument is tempting, but it is not quite right. To see this, let us change Posner's hypothetical so that the damage is direct rather than indirect. The problem now is not that the Biltmore Hotel loses business because of damage to an adjacent beach but, rather, that the hotel itself is destroyed. In both cases, those who could no longer vacation at the Biltmore would switch to inferior (to them) substitutes (vacations in Miami Beach, trips to the ballpark, reading). There is nothing in Posner's argument that would distinguish the merits of the Biltmore's claim in the two cases. Would the direct destruction of the Biltmore merely involve a pecuniary externality with the loss to be balanced against the windfall gains reaped by, among others, the Fontainebleau? Posner's logic would seem to lead ineluctably to that end. Yet his response, rather than dismissing the destruction as a mere pecuniary externality, would almost certainly be that the losses suffered by the owner of the Biltmore coincide with a real social loss.

In general, however, the social loss is not entirely captured by the financial loss suffered by the owner of the damaged asset, in this instance, the asset being the Biltmore Hotel. Nor are the pecuniary gains of others entirely unrelated to the social loss. To understand why, consider another

⁷¹ Posner, Tort Law, *supra* note 11, at 467–68. Note that Posner's hypothetical entails two implicit, implausible assumptions: (a) the financial losses of the fishermen coincide with the true damage to the fishery; and (b) the damage to the Santa Barbara beaches, though severe enough to induce tourists to eschew Santa Barbara and the Biltmore, did not entail a true social loss.

variation on the Biltmore hypothetical in which the owner's loss and the social loss do coincide. Suppose that an accident destroys the Biltmore Hotel, *but it is replaced instantly*. There are no losses, private or social, during the transition since, by assumption, there is no transition—adjustment is instantaneous. The existence of substitutes (other hotels) and complements (beaches, theaters, restaurants) mattered in assessing the owners' losses in the previous hypothetical, but now these do not matter either. So long as demand is adequate to justify replacement, and so long as replacement is instantaneous, the demand-side factors are irrelevant.⁷² The owner's loss is the cost of replacing the destroyed hotel. The social loss is the value of the resources that could, but for the accident, have been used elsewhere but have been diverted to replacement of the hotel. Both the owner's loss and social loss, then, are reckoned by the cost of replacing the destroyed hotel.

What of the possible indirect train of asset revaluations triggered by the hotel's destruction? Surprisingly, there would be neither reliance losses for complements (beaches, restaurants) nor offsetting benefits for substitutes (hotels at other beaches).⁷³ This might appear odd, but it follows directly from the assumption that the asset is replaced instantly. If the value of one asset (Y) depends on the existence of X which is destroyed but is instantly replaced by an identical X' , then the value of Y would remain unchanged.

So, when a fungible asset is destroyed and immediately replaced, the injurer would be assessed the market value of the asset which would coincide with the social cost. No one would suffer indirect economic losses. Conversely, if the asset is not replaced immediately, there could be indirect economic losses (and gains). The losses suffered by the owner of the directly damaged asset need no longer represent the actual loss to society.

Returning to the two Biltmore Hotel hypotheticals, what difference does it make if the direct damage is to an adjacent beach or to the hotel proper? When the Biltmore is damaged directly, the cost of repair and/or replacement represents real social harm—real resources must be diverted to this purpose. The Biltmore does not incur these costs when the direct damage is to the beach. However, the hotel does suffer reliance losses in both cases. While the damaged hotel is being restored, it will

⁷² I am assuming for convenience that the hotel is put back in exactly the condition it was in before the accident. The most efficient thing to do, given the nature of the accident, might be to replace it with a hotel with very different features or even not replace the hotel at all. The exposition is greatly simplified if we ignore such possibilities.

⁷³ There could be an effect on the price of inputs used in repairing or replacing the hotel.

sit idle. The loss of business to the idle hotel is the same type of loss that would follow from damage to the adjacent beach, although the magnitude of the loss need not be the same. In both cases, the interim reduction of hotel services makes both the hotel owner and society worse off. And, again in both cases, the mitigation effort by consumers and other providers of recreation (including other hotels) will to some extent mitigate the damages suffered. The increased business at the Fontainebleau indicates that the true social harm resulting from the nonavailability of the Biltmore, in either case, is not as great as the reliance component of the loss suffered by the Biltmore's owner.

Analytically, the problem is not that the victim was injured indirectly. The problem is that the claim is for interim losses suffered before the asset is replaced rather than for the repair and replacement of a damaged asset.⁷⁴ Such claims are characteristic of those suffering indirect economic losses, but they are not confined to this class. As the variation on the Biltmore hypothetical suggests, the owner of the directly damaged asset can suffer interim losses as well. However, the legal treatment of the two cases differs substantially. If an oil spill led to the closing of a retailer's establishment for a week, the economic loss rule would shield the spiller from liability, regardless of whether the spill affected any other aspect of the retailer's operations. If, however, a retail establishment were closed for a week because it had been *directly* damaged by some wrongdoer, then the owner would be able to collect for losses suffered during the week, with the magnitude of the damages depending on the broader impact on the owner's business. In the former case neither reliance nor offsetting benefits are taken into account. In the latter, both are. In the next section, the effect of ownership on damage measurement will be examined.

V. OWNERSHIP AND PURE ECONOMIC LOSS

Suppose that an accident destroys an asset, *X*. As a result, the value of *Y*, a complement, falls and the value of *Z*, a substitute, rises. The economic loss rule says that the effect on neither *Y* nor *Z* should be taken into account when reckoning damages. But suppose that the owner of *X* also owns *Y* and *Z* as well. Should ownership affect the legal outcome? In principle, it should not, since the reliance and the offsetting benefits are the same regardless of ownership. In fact, it does. While this produces

⁷⁴ The notion of temporary or interim damages should not be taken literally. Suppose, for example, that toxic waste is dumped on a beautiful beach rendering it forever unusable. On the adjacent property was a hotel that had drawn virtually all its business from beach users. The "interim" damages to the hotel are, effectively, permanent damages.

some anomalous outcomes, it is defensible. To understand the limits the economic loss rule places on the tracing of consequences to third parties, it is useful to explore the different limits tort law imposes on the tracing of consequences to direct victims.⁷⁵

The basic rule of damage measurement, as per the Second Restatement of Torts, is:

In determining the measure of recovery . . . a balance sheet is in effect set up by the court in which are stated the items of assets and liabilities that have been affected by the tort, (a) before the tort, and (b) as they appear at the time of the trial. In this are put on one side such assets of the injured person as have been affected by the tort, . . . and on the other side, the same assets at the time of the trial and any existing or prospective liabilities imposed upon him as a result of the tort. The difference, to the extent that it results from the tort, constitutes the theoretical measure of recovery.⁷⁶

This overstates the case. The rules compensate the direct victim for its net financial loss (if any), but they draw some tight boundaries as to what should be considered when reckoning that net loss. That is, the law does not simply look at the value of the victim's portfolio before and after the tort and award the difference. Only some effects on the victim's portfolio are recognized. The economic loss rule is, therefore, only half of a two-part rule. First, ignore the losses (and gains) of those who were not directly injured. Second, recognize only some of the losses (and gains) of those who were directly injured. Both parts of the rule can result in measured damages that inaccurately track the social harm.

An argument can be made that there is an economic basis for using ownership as a basis for differential treatment. Whether *X* and *Y* are under common ownership is not necessarily determined randomly. There is a growing body of literature stemming from Ronald Coase's classic paper⁷⁷ which examines the importance of integration by ownership and contract for facilitating coordination. Common ownership, arguably, is highly correlated with substantial reliance. If *Y*'s value depends critically on the availability of *X*, use of the two assets might be better coordinated if they were brought under the control of a single entity. Nonetheless, I do not think this factor will help account for much of the differential

⁷⁵ The problems go beyond tort law. Similar problems arise in takings jurisprudence and in assessing damages for breach of contract, especially for consequential damages and lost profits for the so-called lost volume seller. See Goldberg, Readings in Contract Law, *supra* note 66, at 106–21.

⁷⁶ Restatement (Second) of Torts § 906, comment a (1977).

⁷⁷ Ronald H. Coase, The Nature of the Firm, 4 *Economica* 386 (n.s. 1937).

treatment, especially when we consider the treatment of offsetting benefits.⁷⁸

A. *Reliance*

If an accident damaged A's property and as a result B's hotel on adjacent property lost business, the economic loss rule would preclude B's recovering its reliance losses against the injurer. If, however, B owned both properties, then it could recover in some instances. As noted, the general rule is that when an asset suffers physical damages, damages are reckoned by comparing the before and after versions of the victim's balance sheet. If, for example, a fire destroyed half the hotel, the injurer would be responsible for the decrease in business in the other half while the hotel was being repaired. However, only some balance sheet changes will be recognized. The courts will not award the victim all its reliance damages; the reliance would have to be substantial.

The rule is nicely illustrated by *Domar Ocean Transportation, Ltd. v. M/V Andrew Martin*⁷⁹ in which the victim claimed damages for a tugboat (undamaged) that was used in conjunction with a barge (damaged). The opinion is of particular interest since it was written by Judge Patrick Higginbotham shortly after he wrote the majority opinion denying recovery for economic loss in *Testbank*.⁸⁰ In *Domar*, the victim's tugboat had been modified so that it could be used to tow the damaged barge. The firm's accounting records showed that 35 percent of the profits of the combination were attributed to the barge and 65 percent to the tugboat. Rejecting the claim that the tugboat had suffered no physical damage and could therefore not recover, the court allowed recovery for the tugboat's losses. "Even if the two vessels were not so uniquely designed to work with each other as to exclude other use, they were indisputably so operated that they functioned as an integrated unit."⁸¹ Without common ownership, there would be no recovery; with common ownership, there could be recovery if the relationship were close enough. So, in the previous hotel example, the financial losses suffered by the undamaged part of the hotel would undoubtedly qualify, while the losses suffered by an adjacent restaurant or golf club owned by the damaged hotel would be a closer call.

⁷⁸ See Section VB *infra*.

⁷⁹ 754 F.2d 616, 1987 A.M.C. 1370 (5th Cir. 1985).

⁸⁰ State of La. ex rel. Guste v. M/V Testbank, 752 F.2d 1019, 1044 n.23 (5th Cir. 1985) (en banc) cert. denied sub nom. White v. M/V Testbank, 477 U.S. 903 (1986).

⁸¹ 754 F.2d 616, 619.

An analogous problem arises in the context of takings law when the government takes less than an entire piece of property. If the government takes parcel *A* and leaves parcel *B*, and if the value of the two parcels is interrelated, then how should the change in *B*'s value be treated? The court must determine whether or not to recognize the owner's investments on parcel *B* made in reliance on his continued use of *A*. Should compensation be based on the value of that which has been taken or that which remains? Basing compensation on that which remains recognizes the owner's reliance; courts lean toward compensating only for that which was taken. Orgel summarizes the case law:

[N]o constitution, statute or judicial decision goes to the . . . extreme of accepting value to the owner, a standard which would require the consideration of the owner's entire property as an organic whole and the measurement of compensation by an estimate of the difference in the value of this organic whole before and after the act of condemnation.⁸²

He continues:

[T]he mere fact that the taking of one piece of real estate may result in a material fall in the value to the owner (possibly even in the market value) of the owner's real-estate holdings is apparently insufficient to bring the case into the category of a partial-taking case. There must be a very obvious physical relationship between the property that is taken and the property that is left in order to induce a court to allow a recovery for damages to the remaining property.⁸³

If *X* and *Y* are not sufficiently close, then, despite common ownership there would be no compensation for the decrease in *Y*'s value if *X* is damaged (or taken). Only some reliance losses would be recognized, even in the case of common ownership. And without common ownership there would be no recovery even if there had been great reliance on the continued availability of *X*.⁸⁴

The different treatment can be understood, in part, as reflecting measurement concerns.⁸⁵ If the values of the two assets are interrelated and

⁸² Louis Orgel, 1 *Valuation under the Law of Eminent Domain*, at 226, ch. 4 (2d ed. 1953).

⁸³ *Id.* at 229.

⁸⁴ Some takings cases have compensated for intimate reliance even where the victim had something less than a full property interest in the taken property. See *Southern California Edison Co. v. Bourgerie*, 9 Cal. 3d 169, 174-75, 507 P.2d 964, 968, 107 Cal. Rptr. 76, 80 (1973) (discussing granting compensation to a neighbor for condemnation of property used in violation of a restrictive covenant).

⁸⁵ A similar set of measurement problems arises in the treatment of substitutes, see Section VB, *infra*.

ownership is joint, there is a practical problem of disentangling the values. If the barge and tug in *Domar* were owned separately, the effect on the barge's value would have been quoted separately. In the instant case, the accountant's assignment of profits to the tug and barge respectively made it possible to assign the combined loss to its component parts. But, in general, with common ownership, separate valuations would not be available. Where it is easier to identify the changes in value in the different components of the victim's portfolio, the courts are more likely to draw boundaries precluding compensation for reliance losses. The value of the piece that was taken (or damaged) can be measured without worrying about valuing that which remains, or without looking at the broader effects on the victim's holdings.

B. Substitutes

Consider two variations on the same accident. Suppose first that a negligent tortfeasor damages Ms. Black's store and, as a consequence, part of her store is closed for two days. During that time period, she operates the other half of the store more intensively so that the sales for the two days are roughly what they would have been had the entire store been usable. Suppose next that a second tortfeasor damages Mr. Brown's store and that the entire store is closed for two days. However, Ms. Green's shop next door remains open and her sales during the two-day interval increase by approximately the amount that Brown lost. Except for the identity of the party making up the lost sales, the two situations are essentially the same.

In each case the accident caused a real social loss. An asset (so many square feet of a retailing establishment) was rendered unavailable for two days. The social loss, conceptually, would be the shortfall in total output from what would have been produced but for the accident. Still, it is hard to believe that the losses associated with the temporary shutdown of the retail outlets would be other than trivial.⁸⁶

Implicit in the statement of the hypotheticals is the notion that either Black in the first instance or Green in the second had unutilized or underutilized assets to provide retailing services and that these could be made available in the short run. Had there been no accident, this additional inventory of retail space would have remained idle. Hence, society does not lose output (retailing services); it simply produces roughly the same output with resources that would have otherwise sat idle in inventory. In

⁸⁶ For a discussion of the claims of local retailers for pure economic loss see Bishop, *Economic Loss*, *supra* note 49, at 5-7.

effect, the value of the damaged asset falls and the value of the asset held in inventory increases to nearly offset the initial decline. Mitigation of the damages is done primarily by the victim (Black) in the first case and a stranger (Green) in the second.⁸⁷

What is the likely fate of the damage claims of Black and Brown? Both suffered the same loss—the unavailability of so many feet of retail space for two days. Yet Ms. Black would find the courts inhospitable to her claim. What her left pocket lost, her right pocket gained back. Mr. Brown, on the other hand, did suffer a net loss since the gain went, by hypothesis, not into his pocket but into Ms. Green's. The negligent tortfeasor who damaged Ms. Black's store owes nothing, while an equally negligent tortfeasor causing an equal amount of social harm by damaging Mr. Brown's outlet must compensate Brown and will not have a claim against that fortunate beneficiary, Ms. Green.

These problems arise regularly in admiralty law when a collision puts a vessel temporarily out of service. In *Brooklyn Eastern District Terminal v. United States*,⁸⁸ a tugboat was out of service for seventy-eight days and the owner requested compensation for the market value—\$150 per day for the period. Justice Cardozo, speaking for a unanimous Supreme Court, upheld Learned Hand's denial of recovery. If the victim had actually hired a substitute tug, the expense would have been compensable. If the victim had maintained a "spare boat" for use in such contingencies, the costs of maintaining a spare boat could have been charged to the wrongdoer. If, as in the actual case, the owner simply used its other two boats more intensively during the seventy-eight-day period, then there would be no recovery.⁸⁹ The holding was summarized nicely in a later case:

Thus, when a vessel owner uses his other vessels (other than a boat kept as a spare for such an emergency) to carry the cargo of his damaged vessel, and this is done without proof of loss of other freight and without proof of additional expenses, there can be no recovery for loss of earnings. This is because the fulfillment of the duty to minimize the damage resulted in there being no proven damage.⁹⁰

⁸⁷ As the discussion in Section IVA2 suggested, there will almost surely be some net loss arising from the temporary nonavailability of the retail space. It is plausible that in most instances, the temporary closing of one tiny piece of the retailing network for a short period of time will have *almost* no effect on the costs of distribution or the total purchases.

⁸⁸ 287 U.S. 170, 1932 A.M.C. 1487 (1932).

⁸⁹ *Id.* at 176–77.

⁹⁰ *Sabine Transportation Company, Inc., v. Steamship Esso Utica and Esso Shipping Company*, 1955 A.M.C. 2102, 2105 (E.D. Tex. 1955).

The spare boat doctrine is the exception to a rule which would compensate the victim only for costs clearly incurred as a result of the tort.⁹¹ If the victim covered his losses out of general inventory (using other boats more intensively), there would be no recovery.⁹² But if the victim covered out of specific inventory (a spare boat purchased for that purpose), then the court would treat that the same as if it covered out of someone else's inventory, an overt cost which would be compensable. For direct injury, the courts recognize the victim's interim losses but offset them if the victim was able to mitigate. For indirect victims, both chains of consequences are ignored.

A possible rationalization of the divergent treatment could take the following form. The temporary nonavailability of an asset almost certainly will make society somewhat worse off. However, the magnitude of the harm is likely to be much less than the initial impact since adaptation by the victim and others will offset some of the social costs. This is true for both direct and indirect injury. For the direct injury, the net impact on the victim (taking into account the victim's more effective use of the remaining substitutes under its control) is relatively easy to ascertain. While the net effect on the victim is unlikely to track the true social harm, on average it might not be too far off. The requirement of "direct" injury places a limit on the extent of the liability, and it allows the tortfeasor to take advantage of some of the social adaptation (mitigation) triggered by the accident. We get some deterrence, there are built-in limits on excessive penalties, and measurement problems are simplified. It is hardly perfect, but it is workable.

The picture is quite different for the indirect victims. Damage measure-

⁹¹ There are other sophisticated doctrinal twists. For example, in an earlier decision, *The Glendola*, 47 F.2d 206, 1931 A.M.C. 302 (2d Cir. 1931), Learned Hand denied recovery for losses suffered while the ship was out of service and the victim covered simply by using its existing fleet of thirty-seven vessels more intensively. However, Hand recognized the possibility of intertemporal substitution allowing some recovery for the chartering of an additional vessel after the damaged ship was back in service.

This ship [was] . . . chartered after the Tilford was again in commission, and for this reason the claimant argues that she could not be a substitute. There is, however, no inherent reason why this must be so. A company such as the libellant, with vast stores of oil and its products, may not find it necessary to make its shipments on the day, but their accumulation will in the end tell upon its crippled service, and leave a surplus for which other ships must be secured. The fact that another vessel may not be chartered until the injured ship is again on duty, does not necessarily make her any the less a substitute. 47 F.2d at 208, 1931 A.M.C. at 307.

⁹² This is a bit of an overstatement. As the quote from *Sabine* (text accompanying note 90 *supra*) suggests, the victim can attempt to recover for certain additional expenses (for example, overtime) directly attributable to the more intensive use.

ment is likely to be much more complicated. If, for example, a hotel is damaged directly, it should be a fairly manageable task to determine how much business the owner lost before the hotel had been fully restored. It is much more difficult, however, to ascertain how much business hotel owners lose while a nearby beach is being restored. Such a calculation would require an estimate of the relationship between beach quality and local demand for hotel services (and this hotel's services in particular).⁹³ Even if we could resolve this problem, there is a strong likelihood that as we increase the number of indirect claimants, we capture only the reliance losses without reckoning the mitigation (the offsetting benefits). Thus, it is likely that as the size of the class of indirect claimants increases, so too will the gap between the measured damages and the actual social harm.

C. *Assets Used in Repair*

Exxon created more than a huge oil spill; it also created a new line of business—cleaning up the oil spill. There is considerable anecdotal material on the high prices being offered for cleanup-related activity to participants in the so-called mosquito fleet. During the cleanup, reports of vessels fetching \$3,000 per day were common,⁹⁴ fishermen were paid more for cleanup work than they would have made by fishing,⁹⁵ and hotels which lost the business of tourists gained that of people who came to Alaska to clean up.⁹⁶ Should the alternative uses spawned by the spill be taken into account when determining damages? Could Exxon argue that, because it was taking from a particular claimant with one hand and giving back more with another, the claimant lost nothing and should therefore be denied any compensation?

The increased earnings of those engaged in the cleanup effort look like the gains accruing to substitutes discussed above.⁹⁷ But they are not.

⁹³ If business falls off to zero, of course, the measurement problem disappears, although causality problems might remain.

⁹⁴ See Jay Mathews & Cass Peterson, *Spill's Economic Waves: Some Riding High as Others Struggle*, Wash. Post, at A1 (April 9, 1989); John Lancaster, *As Oil Spill Clean-up Winds Down, Damage and Fears Remain*, Wash. Post, September 10, 1989, at A1. See generally John Greely, *Alaska Over the Barrels: The Spills and Spoils of Big Oil*, 248 *Nation* 721 (May 29, 1989) (stating that because Exxon has spent so much money on the cleanup, the cleanup itself will soon rank with fishing, tourism, logging, and mining as one of the major employers of Alaskans).

⁹⁵ See Arndt, *supra* note 50, at 1.

⁹⁶ The pun is intended. The anecdotal evidence suggests that some people engaged in the cleanup effort made a substantial amount of money. See *id.* at 1.

⁹⁷ See Sections IVB and VB.

When the Biltmore Hotel was damaged, society mitigated the damages by using the existing inventory of hotel rooms more intensively—the gains of the holders of that inventory partially offset the losses the Biltmore suffered by having its hotel closed. Contractors engaged to repair the hotel also benefited from the accident. Their gains, however, do not offset the hotel's losses, they merely restate them. So, if the Biltmore paid \$50,000 to Smith, a contractor, for repairs, that is a real social cost. The fact that Smith received the \$50,000 does not in any way nullify the social loss.⁹⁸

Still, if the Biltmore performed the bulk of the repairs with its own employees and housed some additional workers in its own vacant hotel rooms, it would probably not be able to recover for those implicit expenditures. The law's focus on the net balance sheet changes of the direct victims carries over to this case as well. The mischief arising from this simplification is limited by the dual limits on tracing—only the direct victim's damages are recognized, and repair costs will be offset against them only if the victim provides the repair services.

There remain some awkward problems. For example, what if the employees were "at will" employees who were terminated after the accident and then hired for the repair work? Or what if the accident damaged two assets under common ownership, and resources associated with asset *A* were used to repair asset *B*? These are the "spare boats" of the repair cost problem. Since ideally we would prefer that none of the gains of repairers should be used to offset the victim's damage, ambiguities should be resolved in favor of the plaintiffs.

The treatment of dual status plaintiffs (both victim and beneficiary) is rather straightforward if they are *direct* victims. If the fishermen were viewed as surrogate owners (à la Posner), then their offsetting benefits should be ignored; if they were viewed as being compensated for their reliance losses (à la Sneed), then the offset is more defensible.

The treatment of the claims of commercial fishermen in *Amoco Cadiz*⁹⁹ is instructive. Fishermen filed claim forms containing a subrogation agreement with the French government. Shortly after the accident the

⁹⁸ While this point is obvious to economists, it is usually misunderstood by others. Politicians (and the electorate) often view "jobs, jobs, jobs" as the end. Economists, on the other hand, view jobs as an element of cost—a means to the end, namely, output. Note that there is a parallel double-counting problem in reckoning losses. If the price of inputs for repair and replacement is bid up (or if input owners use nonprice rationing), those who would have used those inputs but for the accident will either pay more or do without. Their losses are reflected in the opportunity cost of the inputs.

⁹⁹ *In re Oil Spill by the Amoco Cadiz Off the Coast of France on March 16, 1978*, 1988 U.S. Dist. Lexis 16832 (N.D. Ill. 1988) [not reported in F. Supp.].

fishermen received compensation from the government which then litigated the actual claims against Amoco and eventually, after more than a decade, collected. The court awarded the French government less than half the amount of money it had paid out, noting that there had been considerable fraud and abuse. As its first example of the fraud and abuse, the court noted: "The evidence reveals fishermen receiving emergency aid because unemployed and also being paid for their work in the cleanup for the same period. Some fishermen and oystermen receiving emergency aid because their boats were idle had, in fact, rented their boats to the French Government for the same period."¹⁰⁰

If the fishermen had owned the fish and had sued for the direct damages to their property (the fish), then, far from being fraudulent, ignoring the subsequent employment of fishermen and their vessels in the cleanup activity would have been the only sensible rule. However, the fishermen in *Amoco Cadiz* (and in *Oppen* and *Testbank*) were being compensated not as surrogate owners of the damaged assets but for their reliance losses. These do not, as we have seen, track the net social loss. If the primary purpose of compensating these indirect victims is corrective justice (making particular victims as well off as they would have been had the accident not occurred) rather than deterrence (confronting potential injurers with the consequences of their actions), then offsetting the fishermen's losses with their related gains is a defensible position. If deterrence is the primary goal, then the offset could be weakly defended on the ground that two wrongs might make a right. That is, reliance losses almost certainly overstate social losses, so recognizing the new use of the fishermen's assets will reduce the overstatement and, perhaps, bring the measured losses more in line with the true social loss. A slim reed, at best.

VI. CONCLUDING REMARKS

I have argued that the *Robins* rule barring recovery for relational economic loss is an imperfect, but sensible, limit on the liability of injurers. It simply cuts off all inquiry into the reliance losses and offsetting benefits of those not suffering physical damages. I have also provided some rationalizations for a companion rule that does recognize some reliance losses and offsetting benefits for those victims who had suffered physical damage. The two rules together establish fairly tight limits on the tracing of the consequences of a tortious act. That might miss some of the social losses arising from third parties having relied on the continued availability

¹⁰⁰ *Id.* at 102.

of the damaged asset, but it avoids the possibility of grossly overassessing injurers for the reliance losses of numerous third parties. Courts and commentators often justify the economic loss bar by invoking the fear that an act of inadvertence might subject a wrongdoer to claims unlimited in number and crippling in amount, what Professor Rabin labels the specter of widespread tort liability.¹⁰¹ The problem is not with the magnitude of the potential liability—it would be difficult to distinguish physical damage from pure economic loss on that basis. The problem is that relational economic loss (reliance costs) overstates the damage to society. Others have made this point before;¹⁰² I have tried here to clarify the argument.¹⁰³

The oil spill problem is complicated by the fact that the physical damage was to unowned resources. The problem arises in many other relational economic loss cases, notably, those involving the blockading of a highway or waterway. It is not a matter of one set of victims suing for recovery of their losses arising from physical damages and a second set asking for *additional* damages from the injurer to recover their economic losses. There is no first set of victims. The injurer seems to get off scot free on the basis of a technicality. One response has been to allow a subset of the indirect victims to sue for their economic losses, as Judge Sneed did in *Oppen*. Judge Posner presented a variation on this theme by proposing that a subset of the victims be allowed to recover as surrogate plaintiffs and subtly shifting the definition of the compensable injury.

If we want to use the tort system to influence the behavior of potential oil spillers, then surrogate plaintiffs should be allowed to sue for recovery for the physical damages arising from the spill. Judge Posner would let at least one class of indirect victims, fishermen, play the surrogate role. I see little to be gained from singling out certain victims to play the role of surrogate, especially since the damages they would seek bear no relation to the damages that would be assessed under traditional tort princi-

¹⁰¹ Robert L. Rabin, Tort Recovery for Negligently Inflicted Economic Loss: A Reassessment, 37 Stan. L. Rev. 1513 (1985).

¹⁰² See, for example, Posner, Tort Law, *supra* note 11; and William Bishop & John Sutton, Efficiency and Justice in Tort Damages: The Shortcomings of the Pecuniary Loss Rule, 15 J. Legal Stud. 347 (1986).

¹⁰³ I have presumed throughout that the injurer would be held liable and have focused on whether indirect victims should be allowed to recover. The determination of which damages count could affect the liability issue as well. If we take the Learned Hand rule (see *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947)) seriously, then, *ceteris paribus*, as we liberalize the treatment of indirect victims' losses, the more likely it is that we would find the injurer negligent. My impression from reading numerous economic loss cases, however, is that courts have had little trouble ascertaining that the injurer was negligent without first determining which losses would count.

ples.¹⁰⁴ It would seem far more sensible to have the government play the role. This, in effect, is what happened in *Amoco Cadiz*, with the French government subrogating fishermen, paying them compensation, and then suing on behalf of the fishermen. The court-awarded damages were for a little more than half of what the French government had paid out.¹⁰⁵

Allowing the government to play the role of surrogate plaintiff has two virtues. First, it highlights the fact that the decision to compensate the indirect victims is a political decision, logically separable from the decision to assess the injurer for harm caused. If some polity deems hoteliers, fishermen, or tour boat operators worthy of relief, it can act accordingly. The oil company's liability can be assessed without reference to the financial losses of third parties. Indirect victims would be in the same position as others petitioning the government for assistance. A mechanism could be in place, similar to federal disaster relief, or the decision to compensate could be made after the fact. Compensation could be made available only for certain victims of oil spills, or, alternatively, oil spill victims could be pooled together with other victims of disasters, both natural and man-made.

Second, assigning the government the role of surrogate owner avoids the inevitable confusion that arises in combining the direct losses of the surrogate with the indirect effects; for example, should Exxon's liability be reduced because some fishermen cleaned up by cleaning up? A good example of the confusion is provided by the *Amoco Cadiz* court's treatment of the claims by hotels and other businesses for lost profits and by "communes" (municipalities) for "loss of image," losses incurred because the spill discouraged potential tourists. Holding that allowing recovery for both would be duplicative, the court declined to recognize the claims of the communes:

The loss of image harm to the commune is based upon the supposition that persons who would normally have visited the commune for vacation and other recreational purposes were deterred by the loss of image of the commune to the commune's detriment. Yet, within the commune, individual claims by hotels, restaurants, and others address the same issue in a more specific context. Plaintiffs claim that loss of image is compensable in measurable damage, to the extent that it can be demonstrated that this loss of image resulted in specific consequential harm to the commune by virtue of tourists and visitors who might otherwise

¹⁰⁴ Restatement (Second) of Torts § 906, comment a (1977).

¹⁰⁵ See *Amoco Cadiz*, supra note 99. Actually the court was trying to measure the fishermen's lost profits; it just came up with a different amount. My point is that with the government acting as an intermediary, the two tasks of assessing the injurer and compensating the victims are easily separable.

have come staying away. Yet this is precisely the subject matter of the individual claims for damages by hotels, restaurants, campgrounds, and other businesses within the communes. To award the communes additional damages for this reason would be duplicative. The loss of image claims of the communes will not be recognized.¹⁰⁶

The court got it backward. The hotels, restaurants, and other local businesses should be denied tort recovery since they suffered no direct injury. The communes' claim to compensation would rest on their being viewed as the surrogate owners of the areas damaged by the spill. Their claim would be for the decline in value of a set of productive assets damaged by the spill. These would reflect the revaluation of the communes by (potential) tourists, roughly what the court meant by the commune's "loss of image."

Still, there remains a nagging doubt that perhaps the tort system is the wrong way to go. Rather than stretching tort rules to encompass surrogate plaintiffs, perhaps we would be better off relying on mechanisms that do not require measurement of damages to publicly owned assets.¹⁰⁷ Richard Stewart, for example, argues that "the effort to apply tort liability principles to publicly owned natural resources represents a form of category mistake."¹⁰⁸ I suspect that he is right and that a schedule of fines which takes into account the magnitude of the spill and the sensitivity of the area in which the spill occurred would be a more manageable way of providing appropriate incentives to carriers of oil. But that takes us well beyond the scope of this article. Suffice it to say that the bar to recovery of economic loss or even a bar against any tort recovery does not necessarily enable the oil company to avoid financial consequences from a spill.

¹⁰⁶ *Id.* at 25–26.

¹⁰⁷ Measurement of environmental damages is an extraordinarily difficult task, and I have great skepticism about the numbers that would be produced in a neutral analysis, let alone those developed in an adversarial proceeding. For a collection of studies purporting to measure environmental damages, see Kevin M. Ward & John W. Duffield, *Natural Resource Damages: Law and Economics* (Wiley Law Publications 1992).

¹⁰⁸ Richard B. Stewart, *Tort Liability for Injury to Publicly-owned Natural Resources: A Category Mistake* (unpublished manuscript, New York Univ., School of Law, 1992).