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A THEORY OF ECONOMIC LOSS IN THE
LAW OF TORTS

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IN
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ABSTRACT

"A Theory of Economic Loss in The Law of Torts"

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This paper presents a model, emphasizing the role of litigation costs, that explains the "pure economic loss" doctrines in American, English, Australian, and Canadian tort law. Pure economic loss is that which is not consequent on any physical harm to the victim. It frequently arises from interference with the contractual relations of the plaintiff and a third party who may himself be physically injured. Thus, if the wires of an electric power company are wrongfully destroyed and a hotel's power is cut off, the lost business of the hotel is a pure economic loss. This paper addresses the question of whether pure "economic" losses are true social costs. Specifically, the role of other firms (hotels) in picking up the lost business is analyzed. Further, the role of contractual arrangements between plaintiffs and the third parties to indemnify these losses is also examined. The paper concludes that courts are attempting to reduce litigation costs in this area of the law.



Liability for negligently-caused pure economic loss has been the subject of a considerable secondary literature in England and in the Commonwealth countries.¹ Pure economic loss refers to the financial harm arising out of wrongful interference with plaintiff's contractual relations or with his noncontractual prospective gain. This is quite distinct from the financial loss arising out of injury to plaintiff's person or property. If there is any physical harm at all in the former cases, it is to the person or property of some third party with whom plaintiff has a financial relationship. In the United States comparatively little attention has been given the difficult issues and problems that arise out of the law concerning pure economic loss.² This is, in part, no doubt due to the lack of American judicial interest and creativity in the subject. In England and Australia, however, two of the most interesting and important economic loss cases were decided in the past two decades.³ These cases have, in turn, spawned a significant literature on the entire subject. Unfortunately, most of these articles despair of a comprehensive explanation of the major cases and bemoan the morass of contradictions and conflicting goals evident in the law.⁴ In contrast, the fundamental purpose of this Article is to show how the economic loss cases can be understood from a unified perspective employing a simple economic model that stresses the desirability of reducing litigation costs. This has been hinted at in some court opinions⁵ and secondary literature⁶ but no one has yet developed a comprehensive explanation of the law on that basis. Indeed, the power of the hypothesis employed here is so great that it enables us to overcome the traditional dichotomy between intentionally and negligently-induced economic loss. The model demonstrates that these two seemingly-separate strains of the law are amenable to a unified analysis.

This Article is divided into five parts. In the first, the central hypothesis is developed and major specific implications for the law are derived. The second part uses standard tools of welfare economics to show that, in general, "economic losses" are true social costs and not mere transfers. Consideration is then given to the question of when it is appropriate to hold defendants liable for the social costs of their activity. In the third part, a theory of "channeling contracts" is developed to show that litigation can be reduced by encouraging those who suffer pure economic loss to channel their loss through other parties through contracts of indemnity. Part four turns to an analysis of those types of cases for which the model predicts that recovery will be denied. This implication is tested against a number of important cases. The fifth part is devoted to a detailed examination of the classes of cases for which a prediction of allowing recovery is made. This, then, is similarly tested against the major cases.

I. The Central Hypothesis

Contrary to the orthodox view,⁷ economic loss, whether negligently or intentionally inflicted, is actually recoverable at common law to a very significant extent. The appearance of nonrecovery for negligently induced losses arises out of the desire to reduce litigation costs. When there is more than one possible plaintiff and when the appropriate contracting costs are low, the law seeks to channel economic loss through the party suffering harm to his person or property ("physical" harm).⁸ This is the outcome of contractual arrangements whereby the latter party agrees to indemnify the former against wrongfully induced economic loss. Therefore, what would have been someone else's loss becomes the loss of the person suffering physical damage. Such channeling is encouraged by denying

recovery for pure economic loss and by permitting recovery for economic loss when it has been shifted to those bearing the physical loss. Thus incentives for the appropriate contractual arrangements are created. Since the physical effects arising out of wrongful conduct tend to be concentrated among fewer people (often on only one person) than the economic effects,⁹ this reduces the number of suits while still permitting the appropriate party to recover. On the other hand, when contracting costs are high or when there is no physical harm at all, the law permits direct recovery for pure economic loss as long as the cost of recovery (litigation costs)¹⁰ does not exceed the value of recovery.

In more formal terms, the courts act in accordance with maximization of the following simple social welfare (S.W.) function:

$$S.W. = E(V.R.) - E(L) - C$$

where E(V.R.) is the expected value to society of allowing recovery, E(L) is the expected all-inclusive cost of litigation, and C is the contracting cost of channeling losses through the party suffering physical harm.¹¹ The implications of maximizing this function are straightforward. Recovery ought to be denied in that class of cases where the expected litigation costs exceed the expected value of permitting recovery. In addition, recovery ought similarly to be denied whenever the expected litigation costs exceed the costs of making the appropriate channeling contracts. In these latter cases, the court need not concern itself with the value of allowing recovery since private agreements can handle matters more cheaply in any event.¹² This, of course, does not mean that the parties will actually engage in channel-contracting since the relevant contracting costs, although low relative to expected litigation costs, may be higher than the expected

recovery. On the other hand, the model implies that recovery ought to be permitted when the expected litigation costs are less than the expected value of recovery and the costs of contracting. Both of these conditions must hold simultaneously; it is not efficient for the court to permit recovery for economic loss directly if it can be recovered more cheaply through the contractual arrangements of the relevant parties.

The model presented here is more general than many of the recent "wealth-maximization" models of tort law. This is because the value of recovery need not be merely the reduction in expected resource waste due to increased incentive effects.¹³ This value can, and perhaps does, include "returns" to society in the form of greater equity through compensation of victims.¹⁴ Nevertheless, consistent with commonsense and observed behavior, the model implies that society is not willing to spend an unlimited amount to compensate the victims of economic (or physical) loss.¹⁵

In the foregoing discussion, a number of general implications for the law's handling of pure economic loss were derived. Fortunately, it is also possible to derive much more specific implications or predictions for that body of law. These can be summarized briefly.

(1) Recovery will be denied when plaintiff could have made (ex ante) at relatively low cost an appropriate contract to shift economic loss on to the party suffering physical loss. This rule reduces the amount of litigation especially because the number of people incurring economic loss is likely to be far greater than the number suffering loss to person or property.

(2) Since the law attempts to encourage channeling contracts through denial of recovery, it also will encourage them by upholding particular

contractual arrangements designed to shift losses.

(3) Recovery will be permitted when contracting costs are high and the relevant economic losses are concentrated on a few. The concentration requirement is necessary to ensure that the litigation costs do not exceed the value of recovery.

(4) Recovery of economic loss will be permitted by multiple parties experiencing physical loss due to defendant's conduct. Channeling all of the losses through one physically injured party is not feasible. It would be very costly to design rules that could enable the relevant parties to determine which of them should indemnify the others. Even if such a way were found such contracts would be costly to enforce. Furthermore, recovery is permitted by each of the physical loss parties even though the economic loss does not directly result from the physical. Where plaintiff can already recover for physical injury, the incremental costs of allowing recovery for wrongfully-caused economic harms as well is relatively low.

(5) Recovery will be permitted where there is no physical loss through which to channel economic losses and where the latter are concentrated. As an empirical matter, intentionally-inflicted economic harms almost always lack concomitant physical injury and also tend to be highly concentrated.

(6) Recovery will be permitted where there is no possibility of multiple suits. Thus, when the claim of the economic-loss party takes the place of a claim by the party physically injured, the model predicts recovery.¹⁶

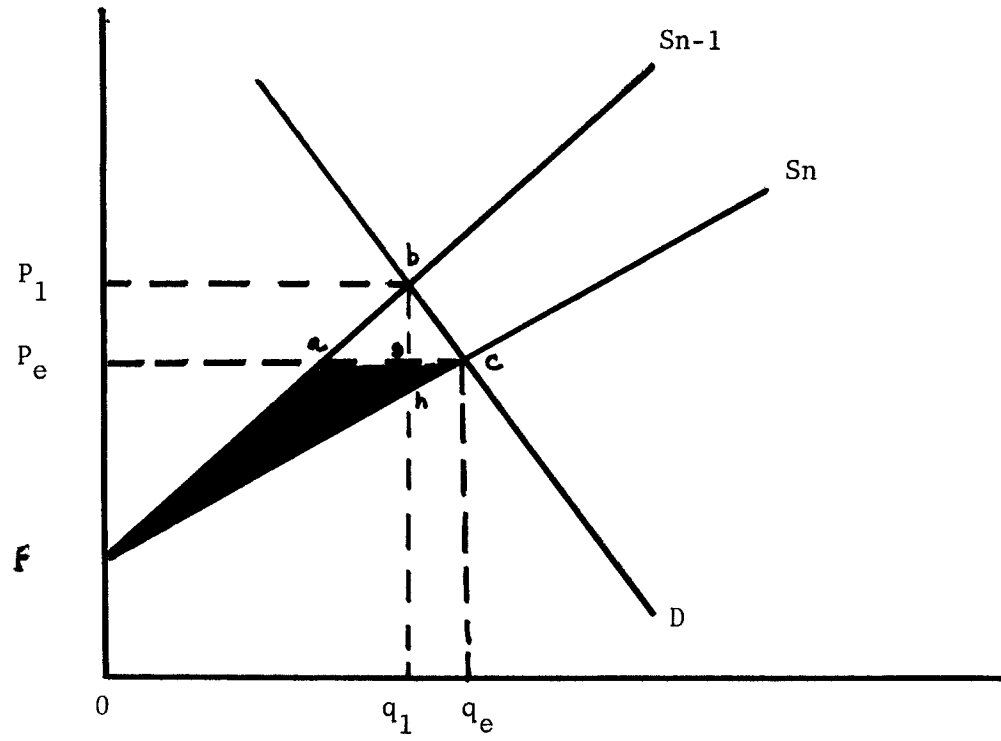
II. "Economic Loss": Transfers or Social Cost?

(A.) Most cases of "pure economic loss" constitute, from the perspective of economic theory, true social costs. They are not losses that are, in some sense, made up by gains to people elsewhere in the economy. Instead, they are net reductions in the total social product. The purpose of this section is to demonstrate the validity of the foregoing statement by analyzing two typical economic loss fact patterns. The first is an illustration of the effects of cutting off the supply of a vital input. The second is an example of the costs arising from the destruction of an output and the derivative effects on those who are part of the marketing process for that good.

1. Input Cutoff Cases. In a number of actual cases either the supply of power or the means of access to plaintiff's business was negligently cut off by defendant.¹⁷ In these situations, plaintiff typically sued for the profits lost during the period in which operations ceased. Are these losses true social costs, or are they transfers insofar as other firms produced more and earned greater profits in an effort to make up for the lost production?

The most convenient way to analyze the input cutoff situation is by reference to figure 1. D represents the market demand curve for the product produced by the cut-off firm. S_n is the industry supply curve with all firms in operation. $S_{(n-1)}$, on the other hand, is that supply curve when one firm or group of firms cease production because of the cutoff.¹⁸ The area above the old supply curve (S_n) and below the former equilibrium price line (P_e) represents the total amount of rent ("profits")¹⁹ earned by the quasi-fixed factors before the cutoff. After the cutoff, a part of

Figure 1



these rents is eliminated by the upward shift in the supply curve to $S_{(n-1)}$.²⁰ These lost profits can be depicted by the shaded triangle-like area fac . All of these losses must be incurred by the firm or firms which cease production because the remaining firms find that their profits have increased. The lost profits suffered by the cut-off firm(s) are coincident with part of the true social cost of the defendant's activity. The portion of losses represented by $fagh$ represents profits that have been transformed into resource cost in the process of continuing to produce $\overline{oq_1}$ output. This amount of output must now be produced at a higher cost. On the other hand, the triangle ghc represents the profit on the output $\overline{q_1q_e}$ that is no longer produced because of the new higher price (P_1). This is part of the social benefit from that output that is lost forever. Thus, the areas $fagh$ and ghc represent profits that have been transformed into resource cost and those that have been completely eliminated. Consequently, the affected firms' lost profits constitute true social costs.²¹

The shaded area is not, of course, the entire social cost of the cutoff. The areas bgc and abg are losses in net consumer surplus and an additional resource cost respectively. The law does not, in general, attempt to compensate these costs directly or indirectly. This is not surprising since they are normally spread quite widely over the mass of consumers in the form of part of the increased price of the $\overline{oq_1}$ output and the net surplus loss on the output $\overline{q_1q_e}$ eliminated. In addition, the latter cost is extremely difficult to measure. Thus, the litigation costs are likely to exceed the value of recovery for this class of losses.

Finally, the area P_1baP_e depicts a pure transfer from consumers to the remaining producers. This transfer is seen by the still-producing firms as

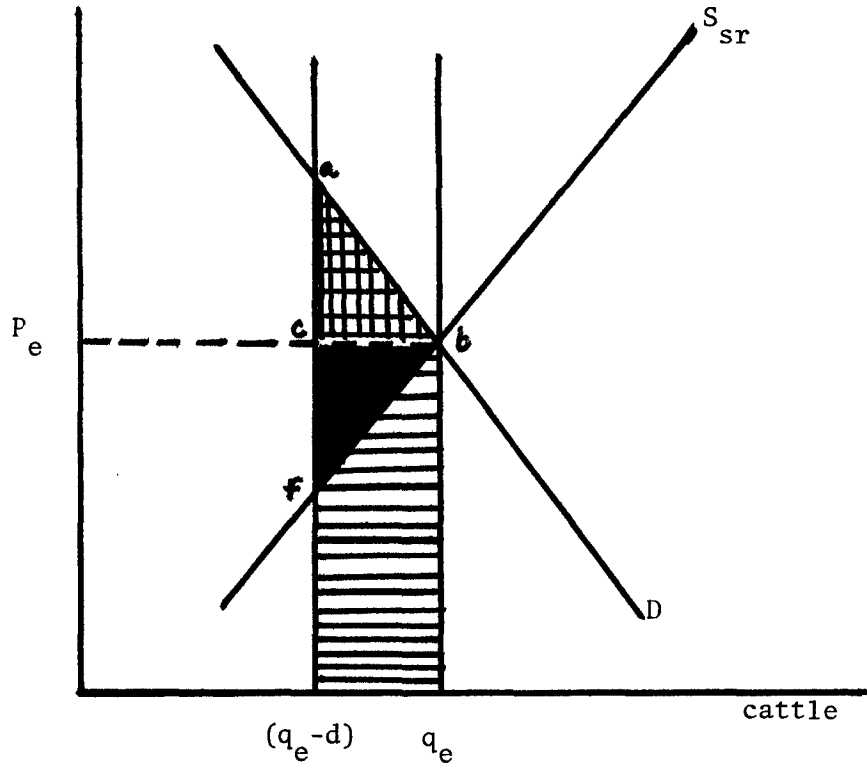
increased profits. In no sense, however, is it an "offset" to the lost profits of the cut-off firms. These profits were not transferred to the other producers but transformed into social cost.

2. Output Destruction Cases. In Weller & Co. v. Foot and Mouth Disease Research Institute,²² the Minister of Agriculture closed a livestock market for six days due to a cattle epidemic caused by a virus which escaped from defendant's laboratory. It was established that defendant had been negligent in not taking greater precautions to prevent the escape. During this shut-down period, plaintiff-auctioneers were unable to perform their services and they sought to recover their lost earnings.²³ In this subsection we shall answer two questions with respect to Weller-style cases: first, what were the social costs of defendant's negligence? and second, can the auctioneers' lost earnings be seen as a part of this social cost?

For purposes of the analysis, assume that all of the inputs, besides auctioneering services, had been incorporated into the cattle before some of them became diseased. Assume, further, that the auctioneer services are perfectly inelastic in supply over the short run. Finally, let us assume that the auctioneers are paid on a fee per unit-of-cattle-sold basis. These assumptions and our analysis can now most usefully be incorporated into figure 2. Here q_e is the number of cattle that would have been brought to market had the virus not escaped; d is the number of diseased cattle taken off the market; and S_{sr} is the short-run supply curve if the disease had not broken out.

The distance between points $(q_e - d)$ and q_e represents the number of cattle no longer available to the market. The area under the demand curve, but above the price line (P_e) , between these two points is the consequent net loss in consumer surplus (the cross-hatched triangle abc). The shaded

Figure 2



triangle right below this (cbf) is the aggregate loss in quasi-rents or profits to the auctioneers and other factors. Since the supply of the former is assumed to be perfectly inelastic their entire earnings are captured in this area. Finally, the resource cost of producing the unmarketable cattle (waste) is depicted in the striped area $fbq_e(q_e-d)$.²⁴ These three areas constitute the first-order social cost of the Institute's negligence.

Thus, if the lost earnings of the autcioneers²⁵ and the ultimate market value of the cattle less auction fees are recovered from defendant, then the sum of areas cbf and $fbq_e(q_e-d)$ are internalized with respect to the wrongful conduct. The lost consumer surplus (triangle abc) is not, in general, recoverable and hence an element of the social cost is not imposed on the tortfeasor. As before, this omission is reasonable in view of the probably high costs involved in the litigation of such recovery.²⁶

The second-order social losses arising out of defendant's negligence need not be graphically illustrated and can be briefly summarized:

- (1) delay of about six days in bringing the healthy cattle to market;²⁷
- (2) differentially higher resource cost in auctioning the cattle later if there are increasing marginal costs per unit of time in auctioning;
- (3) loss in net consumer surplus on marginal healthy cattle that are never auctioned because of high auction fees in the period when the market reopens. These cattle would be used in the next best alternative such as skinning for hides, etc.²⁸

These three second-order losses are unlikely to be large at least relative to the first-order losses. They are also unlikely to be compensable because of the difficult evidential problems involved and the disperate nature of their impact.

(B.) In the previous subsections we implicitly accepted the view that the optimal damages to be assessed against the tortfeasor are precisely equal to the social cost of his conduct (allowing, of course, for discovery and litigation costs).²⁹ In general, this is correct but there are two major exceptions.

(1) When defendant intentionally and wrongfully captures a gain that would otherwise accrue to someone else, the optimal damages are the social cost of defendant's activity plus this gain.³⁰ Thus, when A intimidates B's customers in order to obtain their business,³¹ the damages imposed on A should include not only the increased resource cost and lost net consumer surplus but also A's increased profits. Unless the latter is included A will continue his activity whenever the social cost is less than the mere transfer from consumers to producers (increased profits).³² This, of course, would be inefficient. The need to charge an intentional tortfeasor more than the social cost of his activity provides a rationale for punitive damages.³³

(2) When plaintiff's goal is to receive a transfer from a third party (as in a will or life insurance policy³⁴) and defendant intentionally or negligently prevents this, the optimal damages are the amount of the transfer. To assess the social cost as damages does not produce the wrong incentives but the correct result can be reached more cheaply in this other way.

Consider first the case in which there are no alternative means of effecting the transfer (i.e., defendant's activity completely blocks it). Here the social cost is, for example, the incremental value that (future) testators place on bequeathing their estates (over the latter's next best use). This increment can easily be greater or less than the market value of the estate. Nevertheless, by forcing defendant to pay plaintiff-beneficiary exactly the market value the social cost is eliminated because the testator's

wishes are thereby fulfilled. This solution does not require the court to figure out what the subjective value to testators is of transferring their estates and hence it reduces litigation costs.

If, on the other hand, the testator or the beneficiary can find some alternative, but more expensive, method of effecting the transfer (e.g., drawing up the will themselves), this extra expense is the social cost of the activity. Imposing the amount of the transfer as the damage assessment is the correct solution whether the social cost is less than or equal to the transfer.³⁵ All social costs will be eliminated by ensuring that the will is carried out, without the need to compute anyone's expenditures on alternative means.

III. Channeling Contracts

The underlying rationale for denying recovery in certain types of economic loss cases is to encourage contracts of indemnity between the physically-injured party and those suffering pure economic harm. Such channeling contracts reduce the amount of litigation by enabling, so far as feasible, the latter to recover through the former. In this section, we shall examine the function of these arrangements in greater detail from three perspectives. First, an analysis will be made of the cases in which the courts have clearly implied that they would have held defendant liable for economic losses if proper contractual arrangements had been made between plaintiff and the physically-harmed party. Second, we shall study other cases in which the courts have explicitly upheld "channeling contracts" when they have been challenged by defendants. Finally, third, an examination will be made of the structure of a possible channeling contract in one very famous case in which recovery for economic loss was denied.

(A.) In Byrd v. English³⁶ defendants wrongfully excavated the earth in a lot nearby one on which they were constructing a building. Due to the negligence of defendants, a wall of earth fell on the conduits that carried electric power to plaintiff's printing factory. The wires were broken and, as a consequence, power was interrupted for several hours. Plaintiff sued for damages arising from not being able to engage in his business. The court denied recovery. Although this type of case does generate true social costs,³⁷ the decision of the court was nonetheless correct. The reasoning in the opinion is explicitly along the lines suggested by our hypothesis. The failure of plaintiff to secure indemnification of his losses from the electric power company under their contract "is a matter between themselves, for which the defendants certainly cannot be held responsible."³⁸ The defendants were only liable for damages caused to the power company whose lines had been broken. Nevertheless, these damages "might well [have been] held to include any sums which the company was compelled to pay in damages to its customers."³⁹ Under the appropriate indemnification arrangements plaintiff would have recovered, in effect, through the power company. As matters stood, however, allowing recovery would have encouraged too much litigation and hence it had to be denied.⁴⁰

Perhaps the most famous of the American economic loss decisions is to be found in Holmes' opinion in Robins Dry Dock & Repair Co. v. Flint.⁴¹ Here plaintiffs, who were time charterers of a steamship, sought to recover their lost use arising out of the negligence of the dry dock. The ship had been brought in for semi-annual servicing and repair. During the process of repair defendant negligently damaged the propellor. As a result, there was a fifteen-day delay in bringing the boat back into operation. Since the

charterers were not obligated to pay hire during this period,⁴² their suit was to recover lost profits only. The Court denied recovery. Clearly, there was a social cost here since this case is fundamentally no different from the paradigmatic input cutoff scenario previously analyzed. Again, channeling contracts provide the key to understanding Holmes' decision. The opinion of the Court is explicit: "The question is whether the [plaintiffs] have an interest protected by the law against unintended injuries inflicted upon the vessel by third persons who know nothing of the charter. If they have, it must be worked out through their contract relations with the owners, not on the postulate that they have a right in rem against the ship."⁴³ While Holmes does not specifically say that, if there had been a contract to indemnify the time charterers' profits, the owners could have recovered these from defendants, there is little doubt on this matter. Byrd v. English⁴⁴ clearly points in this direction and at least two subsequent major cases have actually held that they could recover.⁴⁵ If this is the case, then plaintiffs could have, in effect, recovered through the ship's owners who had sustained the physical damage.

(B.) If the law attempts to channel losses by denying recovery when appropriate indemnification arrangements can be made at low cost, then it ought to uphold these contracts when they are challenged by defendants. Unless indemnifiers can recover, plaintiffs will bear economic losses either directly or indirectly through the payment of insurance premiums. Fortunately, the law has, in fact, upheld these arrangements.

In The "Mergus"⁴⁶ defendants were owners of a ship by that name which collided with plaintiff's steamship, Kul. Defendants admitted liability for the collision. The only question was whether plaintiffs could recover for

a refund in the hire (and some other costs) that had been incurred by the charterers during the three days the ship was out of service. The court allowed recovery on the basis of the contractual relationship between the owners of the Kul and the time charterers. The relevant clause in the charter-party was the following:

... in the event of loss of time arising from collision neither hire nor [some other expenses] ... shall be payable by the charterer to the extent to which the owners would have a right to recover ... from the other colliding vessel loss of hire [etc.] ... if under this charter-party the charterer's liability ... ceased at the commencement of and during such loss of time.⁴⁷

Although the language is no doubt awkward and somewhat confusing, the meaning of the provision is clear. The charterers did not have an obligation to pay hire to the extent that: the owners could recover hire from the Mergus if (hypothetically) the charterers obligation to pay abated at the moment of the collision and during the loss of use. The effect of the contract is thus to relieve the charterers of the obligation to pay hire only when the ship is taken out of service due to the wrongful conduct of a third party.⁴⁸ However, the risk of lost use due to nonnegligent accidents or other causes must still be borne by the charterers. Hence the contract does not fundamentally disturb the (optimal) allocation of risk between charterer and owner; it merely ensures that the defendants will bear the risks associated with their negligence.

In Deep Sea Tankers Ltd. v. S.S. "Tricape"⁴⁹ the Supreme Court of Canada followed the lead in Mergus and upheld a similar indemnification agreement. Defendant's ship, the Tricape, wrongfully collided with plaintiff's

tanker. As a result, the tanker was out of service for nineteen days while undergoing repairs. The plaintiff-owner sued for the charterers hire during this period. A provision in the charter-party required the owner to refund all such payments to the extent that the owner could recover these from the party liable for the ship's injury. The charterer, in effect, had indemnified the owner against all loss of hire. The court said that the wrongdoer could not validly plead that he need not pay because the owner had been indemnified. The court thus allowed recovery.⁵⁰ Here again, the party that would have incurred economic loss recovered through the ship's owner whose property had been injured. This was furthermore accomplished without disturbing the allocation of risks between owner and charterer.

(C.) Cattle v. Stockton Waterworks Company⁵¹ is the leading common law decision denying recovery for negligently-caused pure economic loss. The purpose of this subsection is to examine in some detail the structure and legal environment of a possible channeling contract under the facts of this case. In Cattle defendants were a waterworks company that had negligently laid and maintained a pipe under a turnpike road. As a consequence, the pipe leaked and a great deal of water accumulated in the soil. At the time this was unknown to anybody. Knight, the owner of the adjoining land and of the soil over which the road ran, wanted to have a tunnel constructed under that road. He therefore contracted with Cattle for a fixed sum. After he had begun his work, Cattle "cut further in, and so removed the soil which dammed back the water, [then] the flow of water increased and his works were obstructed."⁵² Cattle completed the job at increased cost but thereafter unsuccessfully sued defendants for recovery of his damages.

Before examining a channeling contract that could have led to recovery in this case, it is important to establish the precise extent of the damages.

These depend heavily on Cattle's conduct after his works had been flooded. If Cattle were given the appropriate incentives to behave efficiently, the damages would be minimized. In that case they would be the resources previously sunk into the project plus either the lost net consumer surplus as a result of not building the tunnel or the increased cost of completion, whichever is smaller.⁵³ If Cattle is properly induced to compare the value of the tunnel to Knight with the full remaining higher cost to complete, he would go ahead only when the former exceeds the latter. An optimal channeling contract ought to incorporate the appropriate incentives and not result in the project always being completed.

Knight was viewed by the Turnpike Act⁵⁴ as the owner of the road's soil. As such, he was the party who had incurred the physical harm when the land was flooded. Suppose now that K agrees to reimburse C for the increased costs of completion when these are caused by the wrongful conduct of a third party. Will this give the builder, C, an incentive to complete the tunnel even when the remaining higher cost to continue far exceeds the tunnel's value to K? The answer is no. To see this, it is important to realize that K would probably not be able to recover "unreasonable" completion costs from Stockton.⁵⁵ Knowing this, K would have every incentive to repudiate the contract before C continued to build the tunnel. Under these circumstances, C would, in turn, have no incentive to continue since he could not recover if he did so.⁵⁶

The outcome is that C would, in fact, be reimbursed only when the completion costs were less than the maximum value of the tunnel to K. Thus, the original reimbursement contract would be likely to specify that condition. K, as we might expect, is unlikely to find it in his interest to give "blank

check" indemnification. Under this type of channeling contract, then, C would recover for his economic loss and the correct completion incentives would be ensured.⁵⁷

IV. The Denial of Recovery

One implication of our theory is that recovery will be denied when the costs of channeling are lower than the expected litigation costs. We have already analyzed three relevant cases in which channeling costs appeared to be very low. Recall that in Byrd,⁵⁸ Robbins,⁵⁹ and Cattle⁶⁰ plaintiff was already in a contractual relationship with the party suffering physical harm. There is consequently a strong presumption that the marginal costs of including an appropriate indemnification clause were not high. In such cases denial of recovery produces a tendency for channeling provisions to emerge.⁶¹ In this section, we shall examine a number of other cases in which channeling costs appeared to be relatively low and hence in which our theory predicts no recovery.

In Elliott v. Sir Robert McAlpine & Sons, Ltd.,⁶² while defendants were demolishing a building they negligently dropped concrete on a telephone junction box thereby cutting a cable. As a result, plaintiff was without phone service in his business and home. He sued for damages, the major part of which was claimed to be lost profits from his publishing business. The court correctly denied recovery. This is a standard input cutoff case in which plaintiff and the telephone company were already in a contractual relationship and hence the marginal costs of channeling were presumptively low.

In another case,⁶³ plaintiffs, the French government, had requisitioned a ship under the terms of a charter-party. It was subsequently damaged in a

collision with defendants' ship owing to the latter's negligence. As a consequence, plaintiffs lost the use of their ship for thirty-two days while it underwent repairs. By the terms of the charter-party, the French government was obliged to pay hire during this period and, therefore, sued for recovery from defendants. Recovery was denied.

Unlike the Robins Dry Dock case, plaintiff here sued for lost hire and not for lost profits. Suppose the time charterer suffered no lost profit perhaps because he found a substitute ship elsewhere. Can we say that the disabled ship's hire is a social cost? Yes. The hire represents the value of the ship in its marginal use. This is the activity that must forego the use of a ship because its value in that use is below the now slightly higher price charged for ship rentals. On the other hand, the charterer ought to recover both the hire and lost profits when he is unable to find a good substitute means of transportation. While the lost hire represents the value of the ship in the next best alternative, the profits represent the surplus over that in the best use. Both are true social costs.

The court's denial of recovery for an element of the social cost of defendant's conduct can be explained by our theory. Charter-parties are already very complex agreements that specify in detail the relative obligations when something goes wrong.⁶⁴ Therefore, to deny recovery is to encourage channeling clauses in a context in which their marginal cost is surely very low.⁶⁵

The social cost ramifications of defendant's activity in the Weller⁶⁶ case have been discussed in part two. It is unclear whether the court's denial of recovery for the lost earnings of the auctioneers is consistent with our theory. The record of the facts is somewhat cloudy on the relevant

points. This decision makes sense under the theory if the cattle owners were in a continuing contractual relation with the auctioneers. The former could have then arranged to compensate the latter anytime the flow of cattle was disrupted by the wrongful conduct of a third party. If, on the other hand, the cattle were just brought to market whenever the owners desired without any contractual arrangements, then recovery ought to have been permitted.

V. The Approval of Recovery

Our hypothesis implies that recovery will be permitted when the expected litigation costs are less than both the expected value of recovery and the costs of channeling. In this part we shall test this implication by reference to several important classes of cases. First, there are those in which contracting and channeling costs between the relevant parties are high. These include situations of common property resources, reimbursement of victims for medical expenses incurred by their family, loss of consortium, and certain instances of input or access cutoff. Second, there are cases in which multiple parties suffer physical loss. In these situations the costs involved in denying recovery to any one of these individuals are quite high. Third, there is a class of cases in which channeling through the party incurring physical loss is impossible since all of the harm is purely economic. Finally, fourth, there are situations in which the economic-loss party sues in place of the physically-damaged party. Here there are no additional litigation costs involved in permitting recovery.

(A.) High Contracting Costs

(1.) Common Property Resources. When property rights are not clearly established as, for example, with respect to fish in streams, rivers and

oceans, channeling costs are virtually infinite. Since no one owns the relevant resource it is not possible to direct losses through the party suffering injury to his property. Under these circumstances, we would expect the law to permit recovery for economic loss so long as the expected litigation costs are not too high.

In Hampton v. North Carolina Pulp Co.⁶⁷ defendant owned a pulp mill which poured out "a great volume of poisonous, deleterious and objectionable waste and substances, inimical to the fish inhabiting"⁶⁸ the waters of the Roanoke river. As a consequence, plaintiff suffered injury in the form of lost profits to his fishery. Plaintiff was a riparian owner who did not have any ownership rights in the fish until they were caught. The court held that this lack of ownership did not bar plaintiff's action and hence pure economic loss was recoverable.⁶⁹

Union Oil Co. v. Oppen⁷⁰ is the most famous and important of recent common property resource cases. Here plaintiffs were commercial fishermen who lost profits resulting from an oil spill in the Santa Barbara Channel. A vast quantity of crude oil was released while defendant was drilling. The oil spread along the Southern California coast destroying many fish. The U.S. Court of Appeals allowed recovery for the purely economic loss. Since there was no owner of the fish or water with whom to contract, such direct recovery is reasonable on the theoretical grounds we have developed. Nevertheless, the court was careful to limit its decision, again in accordance with our theory. In effect, only the fishermen and not everyone who suffered losses could recover.⁷¹ Thus, people who suffered inconvenience in not being able to sail out in their boats presumably could not recover. The large, relatively concentrated losses could be recovered, but the smaller, dispersed losses could not be recovered. The litigation costs would be too high.

(2.) Victim's Medical Expenses. Suppose A injures B whose medical expenses are paid by a member of the latter's family, C. B has not personally incurred any medical costs and C has suffered a pure economic harm. Since family members are normally not in any contractual relationship with one another, there are significant costs (relative to the expected gain) of reaching an explicit ex ante indemnification agreement. Unlike some of the previous situations, there isn't a preexisting contract to which the parties need add only an additional clause at low marginal cost.⁷² Therefore, it might seem, on the basis of our theory, that the law ought to permit C to recover for his economic loss. However, it does not.⁷³ Instead, the law allows the victim to recover these expenses.⁷⁴ This refusal to allow recovery by the provider is, nevertheless, still consistent with our theory. The special familial circumstances surrounding these cases make it likely that the same result will be achieved whether the victim or the provider recovers the expenses. Presumably, there is a strong moral and familial incentive to pay over the appropriate amount when recovered.⁷⁵ There may also be a moral obligation to reciprocate in kind at some later time in which the provider is injured.⁷⁶ At least one court held that although there need not be a legal or moral obligation for the victim to repay, recovery requires some indication of willingness to do so.⁷⁷ Other courts, however, have refused to require this.⁷⁸ Indeed, such a commitment to repay would, in a family context, be redundant. When the provider is in a legal position that requires him to care for the victim (e.g., a parent of a minor or a husband), recovery by the latter just reduces the amount the former must pay out of his earnings. Recovery is a "gain" and nonrecovery is a loss to the "family exchequer."⁷⁹

If there is not much of a problem of interfamilial "injustice," then denying recovery for pure economic loss and permitting the victim to recover the medical expenses is solely a social benefit. The expected value of recovery is no different in either case because defendant pays and the proper party is ultimately compensated. On the other hand, the expected litigation costs are lower in the second case because one suit (for medical expenses and the victim's other losses) is substituted for two or more.⁸⁰

(3.) Loss of Consortium. Traditionally, a husband could recover for the loss of his wife's companionship consequent on her injury by defendant.⁸¹ In the past thirty years or so, this has been extended in most American jurisdictions to include the right of a wife to recover for the lost companionship of her injured husband.⁸² From the perspective of our theoretical framework, it is reasonable to ask why the consortium losses cannot be channeled through the injured party? Since standard marriage arrangements do not involve automatic indemnification by one party of the other's losses, to contract separately and specifically for this would be costly. Therefore, the law permits recovery for what is to the other party a pure economic loss.⁸³ Nevertheless, a puzzle remains deriving out of the analysis of the previous subsection. Why doesn't the law permit the injured spouse to recover the other's loss of consortium? Usually assets are held jointly and there is a moral-familial pressure to pay over if they are not. To this extent, then, the law's handling of consortium cases is somewhat inconsistent with our theory. In practice, however, this does not greatly increase litigation costs since, for example, the husband's consortium action is usually joined with the wife's negligence action.⁸⁴

(4.) Access Cutoff. Most of the input or access cutoff cases can be explained in terms of the analysis of the low channeling costs situations. In Rickards v. Sun Oil Co.⁸⁵ this is not possible. Here plaintiffs operated businesses on an island that was connected to the mainland by only one bridge. Defendant negligently operated his barge and crashed into the drawbridge putting it out of service. Plaintiffs then sued for their lost profits but recovery was denied.

In this case the means of access was public, and there was no pre-existing contract to which a channeling clause could be appended. Hence channeling costs were no doubt high and it would appear as though the court's decision was wrong. This may be, but there is at least one consideration which indicates that the court may have been correct. Plaintiff's failure to recover may have arisen out of simply choosing the wrong defendant. There is an economy to be realized, in terms of greater legal simplicity, in creating as few exceptions as possible to the black letter rule of no direct recovery for negligently-induced economic loss. In cases where channeling costs are high the law may wish to make an exception to the extent that recovery cannot be achieved in any other way. In Rickards, however, there is the possibility that plaintiffs could have successfully sued the county which maintained the bridge. Although the county had no duty to provide the bridge in the first place, once it did, people moved to the island in the reasonable expectation that the service would continue. When it was suddenly interrupted, plaintiffs may have been able to recover from the county.⁸⁶ If they had been able to do so, there is little doubt that the county would have, in turn, been able to recover these damages from the barge-owner. Hence not only would plaintiffs have recovered but defendant would ultimately have borne

the liability. Furthermore, litigation costs would have been no higher than if plaintiff had been able to recover directly. In both cases there would be two suits: one by the county to recover at least the cost of repair and another by the businesses on the island to recover lost profits.⁸⁷

(B.) Multiple Physical Losses

In situations where more than one party suffers physical loss due to defendant's wrongful conduct, the law allows each party to recover his associated economic loss. There is no attempt to channel all the economic losses through a single physical-loss party. There are two reasons for this. First, a simple rule allowing each party to recover for all losses associated with physical injury is consistent with the general rule in tort law enabling the single physically-harmed victim to recover for lost wages or lost profits.⁸⁸ Maintaining consistency in these two areas reduces the complexity of the legal system. Second, it is difficult to imagine a feasible way to determine the particular party through whom the economic losses are to be channeled. Suppose, for example, that losses are to be directed through the party suffering the greatest physical loss. How is this to be determined, especially if the parties disagree among themselves? A court will presumably have to engage in the usual two-stage determination with respect to each of the parties: a proximate cause analysis and then an evaluation of the relevant damages. This would not be consistent with the hypothesized underlying goal of reducing the costs of litigation.

In Concordia Fire Ins. Co. v. Simmons Co.⁸⁹ defendants were a construction company that so negligently drove foundation piles into the ground that they pierced a municipal water-intake pipe. As a result, the city's water pressure was significantly reduced making it impossible

adequately to extinguish a fire which had spread to plaintiff's building from a neighboring structure. Plaintiff's property was destroyed and he sued the construction company for damages. The court correctly allowed recovery. Under the relevant Wisconsin statutes there could be no liability of a municipal corporation.⁹⁰ Therefore, neither channeling nor a suit based on plaintiff's reasonable expectation of water service was possible. In addition, here the party incurring economic loss also suffered physical loss to his property. Thus, he could recover on the basis of the general rule that allows recovery for consequential damages.⁹¹

Seaway Hotels Ltd. v. Consumer Gas Co.⁹² makes an important contribution toward clarifying the relation between economic and physical harms. In this case, defendants, a construction company, negligently cut an underground power line with a pneumatic drill. Plaintiff's hotel was left without power with the result that refrigerated food spoiled, the dining room and cocktail lounge had to be closed, and some rooms couldn't be rented. Plaintiff sued for damages with respect to all three events. While the latter two were not connected with the physical loss of food, the court nevertheless allowed complete recovery. This is consistent with the litigation cost aspect of our model. Once recovery is allowed for any physical loss (the spoiled food), the incremental costs of allowing further recovery for pure economic loss are very small.⁹³ Hence the law will compensate economic harms that are not causally connected to the physical loss, as long as they are causally connected to defendant's wrong.

The "liberal" association of economic with physical loss begun in Seaway was admirably followed in the very important Australian case, Caltex Oil v. The Dredge "Willemstad."⁹⁴ Caltex supplied crude oil for

processing by Australian Oil Refining Ltd. A.O.R. returned the refined oil through an underwater pipeline in Botany Bay. The cause of action arose out of the negligence of a dredge in breaking the pipeline. A.O.R. owned the line but Caltex retained ownership of the oil in transit and thus both recovered in the Supreme Court of New South Wales for damage to their property (i.e., the broken pipeline and the spilt oil). However, this court would not permit recovery of Caltex's additional costs of arranging alternative means of transporting petroleum. This was a pure economic loss unrelated to Caltex's physical damage.

The High Court of Australia correctly reversed the opinion of the court below. The explicit reasoning used in the reversal, especially that of Jacobs J., tends to be rather strained. While the loss did not arise from injury to plaintiff's property narrowly conceived, it still arose from something that prevented "physical movement or operation of [his] property."⁹⁵ "Immobilization" can be viewed as a category of physical damage: since the oil couldn't move along its usual lines it was, in some sense, damaged. On our theory, however, this awkward reasoning is unnecessary. Once there has been physical harm, the escape of plaintiff's oil, it is reasonable to allow recovery for the economic harm as well because the marginal costs of that recovery are small.⁹⁶

(C.) The Absence of Physical Loss

As we have seen, the law attempts to channel economic losses through the party or parties suffering harm to their person or property. In those cases, however, where such physical loss is completely absent, recovery will, nonetheless, be permitted as long as the economic effects are sufficiently concentrated.⁹⁷ For any given aggregate loss, the more concentrated its

impact the lower will be the expected litigation costs. On the other hand, the value of recovery will be either unaffected by concentration or, possibly, increased by it.⁹⁸ Thus, we ought to expect a greater likelihood of recovery for cases with no physical harm but with concentrated economic harms.

M. Miller Company v. Dames & Moore⁹⁹ is an excellent illustration of the kind of case under consideration. Plaintiff entered into an agreement with the county sanitary district for construction of a sewage system. The district had previously hired soil engineers to conduct tests in order to determine the stability of the material under the construction site. The engineers made their report available to all of the various bidders on this job. Their investigation, however, was negligent and it misled the bidders. As a result, the successful bidder (now plaintiff) was led to bid too low, and suffered a nearly one million dollar cost overrun. The court allowed recovery for his extra costs of completion. In this case, although many bidders had been misled, the damages were concentrated on only the successful bidder. Hence the cost of allowing recovery was low since the number of potential plaintiffs was restricted to one.

Glanzer v. Shepard¹⁰⁰ is a famous Cardozo decision in which the court again correctly permitted recovery when the losses were highly concentrated. Here the seller of beans requested defendants, who were public weighers, to weigh various bags of beans and to provide plaintiff-buyers with written statements of the weights. When plaintiffs attempted to resell the beans they were found to be short. As a consequence, they had been overcharged¹⁰¹ and recovery was sought and granted against the weighers. Under the facts of this case there was no possibility that permitting recovery would open

the doors to a whole host of potential plaintiffs. The number of those affected was limited to one and so the costs to the legal system were low.¹⁰²

Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd.¹⁰³ is an extremely important English case that has been subjected to detailed and sometimes confusing analysis in the secondary literature.¹⁰⁴ Plaintiffs, Hedley Byrne, were advertising agents who asked their bank to inquire into the financial stability of a client, Easipower Ltd. The bank in turn requested the relevant information from Easipower's bank, Heller & Partners. Heller responded to Hedley Byrne's request by giving a favorable report but stipulated that this was done "without responsibility." Easipower was later unable to pay for the ads that plaintiffs, relying on the information, had placed on their behalf. Although Heller was held to have given a negligent report, plaintiffs' suit against them was not successful. The court's decision was based on the disclaimer that Heller had given. From an economic perspective, this outcome is correct. Hedley Byrne was on notice that it was receiving lower quality information and hence could not reasonably expect a standard of care associated with reports that do not contain a disclaimer. Nevertheless, it is quite clear from the opinions of all five judges that plaintiffs would have recovered absent the disclaimer. This again would be correct since Hedley Byrne's reasonable expectations would have been different under those circumstances. In addition, the litigation costs involved in allowing recovery in a case such as this would doubtless be relatively low because of the concentration of the harm involved.

The decision of Cardozo in Ultramares Corporation v. Touche¹⁰⁵ can easily be seen as inconsistent with his decision in Glanzer. In both cases there was negligently-created economic loss; yet in the latter recovery was

allowed but in the former it was denied. The theory developed here, however, enables us substantially to reconcile the two cases. In Ultramares the accountants, Touche, Niven & Co., negligently prepared a balance sheet for the Stern Company. Although a positive net worth in excess of one million dollars was shown, the client was actually insolvent. On the basis of the balance sheet, however, plaintiffs lent the company substantial sums of money. About a year later the client-company defaulted and declared bankruptcy. Plaintiffs then sued the accounting firm for their losses. The denial of recovery in this case can be explained by the relatively greater dispersion of the losses. Consider that the balance sheet had been shown to many different "banks, creditors, stockholders, purchasers or sellers, according to the needs of the occasion, as the basis of financial dealings." Furthermore, "defendants supplied the Stern Company with thirty-two copies certified with serial numbers as counterpart originals." Thus, Cardozo reasonably concluded, "the range of the transactions in which a certificate of audit might be expected to play a part was as indefinite and wide as the possibilities of the business that was mirrored in the summary."¹⁰⁶ The number of potential plaintiffs was likely to be far greater in this situation than in the previous which involved merely the misweighing of beans. Once again, the high litigation costs that could emerge from allowing recovery served effectively to bar such recovery.¹⁰⁷

Haig v. Bramford¹⁰⁸ is a useful case with which to conclude this subsection since it explicitly follows the logic of Ultramares and yet arrives at a different result. Defendant was an accounting firm that negligently prepared a financial statement for its client. The client-firm used the statement to acquire loans from plaintiff Haig. When the firm went bankrupt,

Haig sued the accountants for recovery of the loans. Here the Supreme Court of Canada allowed recovery. This court followed Cardozo's reasoning but differentiated the instant case on the basis that the client-firm was a private company. "The number of potential investors," the court wrote, "would, of necessity be limited because the company, as a private company was prohibited by ... the Companies Act of Saskatchewan ... from extending any invitation to the public to subscribe for shares or debentures of the company."¹⁰⁹ Therefore, unlike the situation in Ultramares, the number of potential plaintiffs was small. The precedential effect of recovery would not, under these facts, generate high expected litigation costs.¹¹⁰

(D.) Intentional Infliction of Economic Loss

Most of the cases of intentional creation of economic loss that are still important, at least in the United States, are often categorized under the heading "Interference with Contractual Relations."¹¹¹ These cases sometimes involve situations where A induces B to breach his contract with C, or where A's behavior makes compliance with a contract between two other parties more costly. It is often thought that there is some fundamental difference in the law's handling of the intentional and negligent economic loss cases.¹¹² This is untrue. Although it is doubtless accurate to say that direct recovery for economic loss is less likely in the negligence cases than in the intentional, this reflects no basic cleavage between the two strains of law. From the perspective of the theory developed here, the law's treatment of these cases is essentially unified. The reason for the general difference in outcomes is that a greater proportion of the intentional cases are those in which there is no physical loss and in which the economic loss is concentrated.

Since the harms in intentional cases arise, in general, out of direct interference with contractual relations, it is relevant that most harms occurring in contractual contexts are purely economic.¹¹³ Indeed, an informal survey of many of the leading cases in this area shows the overwhelmingly nonphysical character of the damages.¹¹⁴ In addition, the requirement that defendant intentionally interfere with contracts between other parties tends to limit the range of the harms inflicted. For example "[a] person cannot be held liable for inducing a breach of contract which he neither knew or had reason to know existed"¹¹⁵ while he can no doubt negligently interfere with a much wider range of economic relationships than he actually knows exist. Thus, in cases where the intentionality requirement is fulfilled the dispersion of losses is likely, on average, to be lower than where it need not be fulfilled. Intentional economic loss is thus a subcategory of the general economic loss phenomenon and, consequently, can be explained on the same theoretical basis. Whenever there is no physical loss and concentrated economic loss recovery will be allowed regardless of the "negligent" or "intentional" divisions.¹¹⁶

Lumley v. Gye¹¹⁷ is the seminal case concerning the intentional infliction of economic harm. Plaintiff was the manager of a theater who contracted with Johanna Wagner to sing exclusively for him during a three-month period. About a week before that engagement was supposed to begin, defendant persuaded her, with intent to injure plaintiff, to breach the contract. When Mrs. Wagner did not perform during the agreed-upon term, plaintiff suffered losses for which he sought to recover. The Queen's Bench allowed it. This decision is clearly in accordance with our theory. There was (a) no physical harm and (b) the type of damages claimed¹¹⁸ were

concentrated on the theater manager. If, on the other hand, theater-goers in the area had sued for the lost opportunity to hear Mrs. Wagner, they would, no doubt, have failed to recover. The explicit justification might have centered around the lack of intention for that harm. Nevertheless, on our theory the reason is simply the dispread nature of those losses and the consequent high litigation costs.

American Surety Company v. Schottenbauer¹¹⁹ is a good example of the flexible attitude adopted by the courts with respect to the intention requirement. Defendant, an employer's workmen's compensation insurer, falsely claimed that the plaintiff-employee's finger was so seriously diseased that maintaining him on the job involved a serious risk of accident. Defendant further gave the employer an ultimatum: either fire the employee or we will cancel our coverage. The employer then dismissed the worker and the latter sued the insurer for damages. The defendant, it was claimed, intentionally procured the termination of plaintiff's contract without justification. The court allowed recovery. The element of intention here is not the same as in Lumley v. Gye. In that case no allegation had been made about any mistake on the part of defendant leading to the breach of contract. In American Surety, however, defendant presumably had every right to pose the ultimatum to the employer had his information been accurate. There was no evidence that the false report on plaintiff's finger was made intentionally. If the report had, at worst, been negligently made, then, from an economic perspective, the case is no different from that of negligent misstatement. The virtue of fitting it into the intentional mold, however, is to ensure recovery. In our framework, this would be unnecessary since the losses were highly concentrated and consequent litigation costs low.¹²⁰

(E.) Plaintiff Substitution

The party responsible for maintaining the property of another is often allowed to recover his economic losses where that property is damaged by defendant. A rigid view of the principle that economic losses are to be channeled through the person suffering physical damage would make these cases inexplicable. Where channeling costs are low we might expect the law to deny recovery. However, the inconsistency between these cases and our theory is only superficial. Recall that the underlying rationale for the channeling principle is to reduce the number of suits. In this set of cases, there is only one party incurring economic loss and that party is allowed to recover in place of the one incurring physical harm. Since there are no additional damages for which the latter party has a separate cause of action, litigation costs are not increased by allowing such recovery.

In McNary v. Chamberlain¹²¹ plaintiff was under contract with the town to keep a highway in repair. Defendant, intending to cause harm to plaintiff, deposited stone and garbage on the road and obstructed a drain resulting in the flooding of the road. Plaintiff sued for the increased costs he incurred in keeping the road in good condition. The court permitted recovery and rationalized its decision largely by reference to defendant's intent to harm. From our perspective, the case is straightforward, regardless of the question of intent. The social cost imposed upon the owner of the highway (the town) was the value of the resources that must be used to return the highway to its original condition. Since these were expended by plaintiff, it is reasonable to permit him to recover. The town, as far as we know, was not significantly injured in any other way so as to make a separate cause of action possible.

The facts in Cue v. Breeland¹²² were almost identical to those in McNary except that defendant did not intentionally inflict economic harm. Here plaintiff was obliged by contract with the county to maintain a bridge in good condition. Defendant, in the process of floating logs downstream, negligently destroyed the bridge. Plaintiff then rebuilt it and sued for the associated costs. The court permitted recovery despite the absence of intention. This was correct since litigation costs would not be increased by allowing recovery.¹²³

Conclusions

In this Article a simple economic model emphasizing the desire to reduce litigation costs was used to explain common law economic loss doctrines. Specifically, it was shown that both recovery and nonrecovery for pure economic loss could be explained by balancing the value of recovery on the one hand and both expected litigation and channeling costs on the other. Recovery is denied when expected litigation costs exceed the expected value of such recovery or the costs of channeling the losses through the party incurring physical damage. Similarly, when expected litigation costs are less than both the expected value of recovery and the cost of channeling losses, then recovery is permitted.

This Article differs from some of the "wealth-maximization" literature on the common law insofar as it does not necessarily exclude non-efficiency based equity considerations.¹²⁴ The "value of permitting recovery" is a general phrase allowing for different interpretations. A main contribution of our theory, however, is to show that whatever the equity considerations, they are constrained by the costliness of using the legal system.¹²⁵

Footnotes

*Assistant Professor of Economics, New York University. This Article was written while I was a Fellow in Law and Economics at the University of Chicago Law School. I am indebted to the Fred C. Koch Foundation, Pfizer, Inc., the Scaife Family Charitable Trusts, and the Spender Foundation for financial assistance. I am also grateful to Frank Arnold, Patrick Atiyah, William Bishop, Dennis Carlton, Richard Epstein, William Landes, and Richard Posner for helpful discussions or comments. I was also fortunate to have seen a draft of William Bishop, *Economic Loss in Tort* (forthcoming in *Oxford Journal of Legal Studies*, 1981) while I was doing research on this topic. Although Bishop does an economic analysis of the economic loss doctrines, his approach is very different from mine.

The central difference between our approaches is that Bishop contends that most economic losses are not true social costs but are merely transfers from one group of producers to another. This position is largely derived from an assumption that firms have unexplained excess capacity and hence that there are no additional costs when output reductions by one set of firms (those injured) are "offset" by increases in output by another set. For a criticism see note 21 infra and, in general, part II infra. Bishop then justifies non-recovery of pure economic loss by the absence of any social costs.

1. See, e.g., P.S. Atiyah, *Negligence and Economic Loss*, 83 L.Q. Rev. 248 (1967); Peter F. Cane, *Physical Loss, Economic Loss and Products Liability*, 95 L.Q. Rev. 117 (1979); P.P. Craig, *Negligent Misstatements, Negligent Acts and Economic Loss*, 92 L.Q. Rev. 213 (1976); Christopher Harvey, *Economic Losses and Negligence*, 50 Can. Bar Rev. 580 (1972); Robert Hayes, *The Duty of Care and Liability for Purely Economic Loss*, 12 Melbourne U.L. Rev. 79 (1979); Phillip S. James, *The Fallacies of Simpson v. Thomson*, 34 Mod. L. Rev. (1971); D. Marshall, *Liability*

- for Pure Economic Loss Negligently Caused - French and English Law Compared, 24 *Internat'l & Comp. L.Q.* 748 (1975); David Partlett, Recovery of Economic Loss for Negligence in Australia, 9 *Sydney L. Rev.* 121 (1980); L.L. Stevens, Negligent Acts Causing Pure Financial Loss: Policy Factors at Work, 23 *U. Toronto L.J.* 431 (1973).
2. See, however, Charles E. Carpenter, Interference With Contract Relations, 41 *Harv. L. Rev.* 728 (1928); Note, Foreseeability of Third-Party Economic Injuries - A Problem in Analysis, 20 *U. Chi. L. Rev.* 283 (1953); Note, Negligent Interference With Economic Expectancy: The Case for Recovery, 16 *Stan. L. Rev.* 664 (1964).
3. *Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd.*, [1964] A.C. 465; *Caltex Oil v. The Dredge "Willemstad"*, (1976) 11 A.L.R. 227 (H.C. of Australia).
4. See, e.g., Atiyah, supra note 1 at especially 265-276.
5. See, e.g., *Stevenson v. East Ohio Gas Co.*, 47 *Ohio Law Abs.* 586, 73 N.E. 2d 200 (1946).
6. See, e.g., Atiyah, supra note 1 at 270.
7. See, e.g., William L. Prosser, *Handbook of The Law of Torts* 939-940 (4th ed. 1971).
8. Patrick Atiyah briefly discusses this idea but does not fully develop it, see, Atiyah, supra note 1 at 265-268.
9. Note, Foreseeability of Third-Party Economic Injuries, supra note 2 at 294-295.
10. Much of the cost of litigation is not borne by the parties to a dispute but is borne by the public-at-large through taxation.

11. Since litigation costs arise only if the accident occurs and there is a dispute, they must be discounted by the probability of occurrence. Hence the relevant magnitude is "expected" litigation costs. The channeling costs, on the other hand, are incurred ex ante, i.e., before any accident comes about. Therefore, we need not discount these by a probability factor.

12. This is not quite precise. See infra note 14.

13. There is another important difference from the standard literature as well. This model makes no efficiency claim in the sense of overall social efficiency. (For a critique of the later view see Mario J. Rizzo, *The Mirage of Efficiency*, 8 Hofstra L. Rev. 641 (1980) and Mario J. Rizzo, *Law amid Flux: The Economics of Negligence and Strict Liability in Tort*, 9 J. Legal Stud. 291 (1980)). The behavior of the court is efficient only in the narrow sense that all individual action involves the balancing of costs and benefits. The value of recovery, as perceived by the court, is balanced against the cost of allowing recovery when channeling costs are high. When they are low relative to litigation costs, then the court is merely minimizing its own costs (to the extent, of course, that litigation costs are not borne by the litigants). See also n. 29 infra.

14. To the extent that "society" places a value on recovery in any given situation that is significantly higher than the dollar amount of the economic loss, there may be insufficient channel contracting. Private individuals see only the (expected) dollar amount of recovery as the return to contracting and not its full social value (or the value to the court). In these cases the courts would allow recovery as long as its value exceeded the expected litigation costs even if the latter were greater than channeling costs. The evidence discussed in this Article does not permit us easily to differentiate between

situations in which there is and is not a significant equity valuation (this is not say that it cannot be done). However, this factor could explain why in certain cases of low contracting costs recovery is permitted.

15. Richard A. Epstein, Nuisance Law: Corrective Justice and Its Utilitarian Constraints, 8 J. Legal Stud. 49, 75-76 (1979).

16. This, of course, assumes that the de minimis requirement has been met.

17. See, e.g., Byrd v. English, 117 Ga. 191, 43 S.E. 419 (1903); Rickards v. Sun Oil, 23 N.J. Misc. 89, 41 A.2d 267 (1945).

18. S_n and $S_{(n-1)}$ begin at the same point, f , because all firms are assumed to be identical.

19. These are not profits that arise out of uncertainty ("Knightian profits") but merely quasi rents. The terms rents and profits will be used synonymously.

20. Suppose there is another source of power or means of access. In this case, part of the social cost will be equal to the difference between the resource cost involved in using the alternative means and that arising out of the old method.

21. The argument in the text implicitly assumes that the cutoff was totally unexpected (even in a probabilistic sense) by plaintiff. If this were not the case, then for an industry consisting of firms in a similar position there would be some planned excess capacity to absorb the additional production when one firm is cut off. This extra capacity is part of the social cost of defendant's negligence. The industry is too large relative to its no-negligence optimum.

It is also possible to argue as Bishop apparently does, that there may be unplanned excess capacity. This, then, can absorb additional production without increased marginal cost. However, this leaves the existence of excess capacity totally unexplained. In addition, if short-run supply curves were horizontal (as the excess capacity argument implies) then there would be no lost profits at all and hence no cause of action in the first place.

22. [1966] 1 Q.B. 569.

23. For the outcome and further discussion of this case see infra text at note 66.

24. The convenience of assuming that the supply of auction services is inelastic should now be evident: none of the earnings of the auctioneers is depicted in the wasted resource area $fbq_e(q_e - d)$. This is consistent with our intent to use this as a measure of the resources already used and wasted in the production of the diseased cattle. The auctioneer services had not been so used.

25. If auctioneer services are not perfectly elastic in supply then compensating their total fees is inappropriate (overcompensation). Only the lost "profits" or rents should be compensated.

26. However, if the auctioneers are, in fact, overcompensated by giving them their full earnings (e.g., thus ignoring the alternative opportunity of leisure), this may be a partial substitute for the consumer-surplus compensation insofar as efficient allocation is concerned.

27. The delay would probably be somewhat longer than six days since all of the healthy cattle of the previous period and those that were planned to be sold in the next period will not be brought to market at the same time. As long as there are increasing marginal costs of bringing the cattle to market, the

the quantity held back will be sold over a period of time.

28. There is also a transfer from consumers to producers arising from the higher price of auction services. This, of course, does not offset, from a social perspective, the lost profits during the period in which the market was closed.

29. The fact that these are true "social" costs rather than transfers does not automatically imply that allowing recovery when channeling costs are high and litigation costs are low is socially or globally optimal. In a world of many distortions from competitive equilibrium it may be better, from the social efficiency viewpoint, to deny recovery. A second best optimum may be to let victims bear their losses. See, e.g., Rizzo, The Mirage of Efficiency, supra note 13 at 652-653. Nevertheless, that activities impose "social" costs is a necessary condition for the imposition of liability to be globally efficient.

30. Gary S. Becker, Crime and Punishment: An Economic Approach, 76 J. Pol. Econ. 169, 191-192 (1968).

31. Evensen v. Spaundling, 150 F 517 (9th Cir. 1907).

32. It may be insufficient to assess the defendant only this transfer. If, for example, defendant saves on advertising costs by eliminating his competitor then "charging" him the transfer will not be adequate. Only if the defendant is assessed the transfer arising out of the new higher price and the social cost of his activity will he be led to balance these against the possible cost savings. Whenever the sum of the first two is greater than the cost reduction, the activity is inefficient (and vice versa).

33. In zero profit equilibrium the tortfeasor would have spent so many resources on committing the act that the extra profits would be eaten away and that amount would then constitute a social cost. See Becker, supra note 30 at 171, n. 3.

34. *Biakanja v. Irving*, 49 Cal.2d 647, 320 P.2d 16 (1958); *Walker Bank & Trust Company v. First Security Corporation*, 9 Utah 2d 215, 341 P.2d 944 (1959).

35. The sum of the testator's and beneficiary's expenditures to effect the transfer will never be greater than the transfer itself. The testator could merely hand over his potential expenditures to the beneficiary if the sum were greater. Under those circumstances, the beneficiary would be better off by doing nothing.

36. 117 Ga. 191, 43 S.E. 419 (1903).

37. See supra part II(1).

38. 117 Ga. 191, 194, 43 S.E. 419, 420 (1903).

39. Id.

40. Id. at 194-195, 43 S.E. 419, 420-421 (1903). See also *Stevenson v. East Ohio Gas Co.*, supra note 5.

41. 275 U.S. 303 (1927).

42. The lost hire was thus directly recoverable from defendants by the owners. On the relation between hire and profits see infra part IV.

43. 275 U.S. 303, 308 (1927), emphasis added.

44. 117 Ga. 191, 43 S.E. 419 (1903).

45. See infra part III(B).

46. (1947) 81 Ll. L.R. 91. This and the following case are very briefly discussed by Atiyah, supra note 1 at 50.

47. The "Mergus", (1947) 81 Ll. L.R. 91, 92, emphasis added.

48. Of course, if the owners or charterers are contributorily negligent, recovery is reduced.

49. (1958) 16 D.L.R. (2d) 600.

50. Permitting recovery for loss of hire rather than for loss of profits seems to be the optimal damage figure in this case. By saying that the cost of replacement was about equal to the hire actually paid for the injured ship (Id. at 603), the court seemed to be implying that plaintiff found another ship with which to work during the detention period.

51. (1875) L.R. 10 Q.B. 453.

52. Id. at 456.

53. See William Bishop, Economic Loss in Tort 28-30 (unpublished paper at the London School of Economics, 1981).

54. 19 & 20 Vict. C. XXXIX. S. 17.

55. "The cost of restoration of the property to its former condition does not necessarily furnish a true criterion for determining damages. Sometimes to make such a restoration would be an uneconomical and improper way of using the property. It might involve a very large and disproportionate expense to relieve the consequences of a slight injury." Hopkins v. American Pneumatic Service Co., 194 Mass. 582, 000, 80 N.E. 624, 624 (1907). See also Watson v. Mississippi River Power Co., 174 Iowa 23, 156 N.W. 188 (1916).

56. "The plaintiff is not even permitted ordinarily to continue to perform services under a contract, where the other party repudiates." Charles T. McCormick, Handbook on the Law of Damages 131 (1935).

57. The wasted sunk costs involved in beginning the project could be recovered through a channeling contract regardless of whether the project is completed.

58. Byrd v. English, 117 Ga. 191, 43 S.E. 419 (1903).

59. Robins Dry Dock & Repair Co. v. Flint, 275 U.S. 303 (1927).

60. Cattle v. Stockton Waterworks Company, (1875) L.R. 10 Q.B. 453.

61. This does not guarantee that they will emerge because the expected recovery may be less than the marginal contracting costs.
62. [1966] 2 Ll. L.R. 482.
63. Chargeurs Reunis Compagnie Francaise de Navigation a Vapeur v. English & American Shipping Company, (1921) 1 Ll. L.R. 464.
64. Grant Gilmore and Charles L. Black, Jr., The Law of Admiralty 209 (1957).
65. See also La Société Anonyme de Remorquage à Hélice v. Bennetts, [1911] 1 K.B. 243; but see the minority view cases, The Okehampton, [1913] P. 173 and The Aquitania, 270 F. 239 (1920).
66. Weller & Co. v. Foot and Mouth Disease Research Institute, [1966] 1 Q.B. 569.
67. 223 N.C. 535, 27 S.E. 2d 538 (1943).
68. Id. at 536; 27 S.E.2d 538, 539 (1943).
69. See also Masonite Corporation v. Steede, 198 Miss. 530, 21 So.2d 463, modified 198 Miss. 547, 23 So.2d 756 (1945) (fishing resort recovered lost profits due to fish killed by pollution of creek).
70. 501 F.2d 558 (9th Cir. 1974).
71. Id. at 570.
72. Even ex post (i.e., after the injury) there are substantial costs in coming to an agreement for reimbursement of expenses. Both the family and injury context militate against this. See Donnelly v. Joyce, [1974]

1 Q.B. 454, 462; *Wattson v. Port of London Authority*, [1969] 1 Ll. L.R. 95, 102.

73. The law has refused to extend the doctrine of subrogation to allow providers to sue. If the provider had a legal right to recover then that is a matter for a suit between him and the victim. See *Donnelly v. Joyce*, supra note 72 at 462.

74. McCormick, supra note 56 at 323 and John G. Fleming, *The Law of Torts* 642 (5th ed. 1977).

75. See *Wilson v. McLeary*, [1961] 106 C.L.R. 523, 526 (H.C. of Australia) and *Schneider v. Eisovitch*, [1960] 2 Q.B. 430, 437-438.

76. See *Wells v. Minneapolis Baseball & Athletic Ass'n.*, 122 Minn. 327, 142 N.W. 706 (1913).

77. *Schneider v. Eisovitch*, supra note 75 at 440.

78. *Wattson v. Port of London Authority*, supra note 72 at 102.

79. *Donnelly v. Joyce*, supra note 72 at 456.

80. In addition to the cases cited in the previous notes, the following cases also support the view outlined here: *Chicago, Duluth & Georgia Bay Transit Co. v. Moore*, 259 F. 490, 170 C.C.A. 466 (1919) (two plaintiffs permitted to recover the medical and nursing expenses paid by their parents; another plaintiff recovered the value of his wife's home nursing); *Strand v. Grinnell Automobile Garage Co. et al.*, 136 Iowa 68, 113 N.W. 488 (1907) (recovery by plaintiff of wife nursing services).

81. See McCormick, supra note 56 at 332.

82. See Prossner, supra note 7 at 895.

83. Unless, of course, one spouse is viewed as the other's property.

84. See Millington v. Southeastern Elev. Co., 293 N.Y.S.2d 305, 239 N.E.2d 897 (1968); Kotsiris v. Ling, 451 S.W.2d 411 (1970).

85. 23 N.J. Misc. 89, 41 A.2d 267 (1945).

86. See Erie R. Co. v. Stewart, 40 F.2d 855 (6th Cir. 1930); Marsalis v. LaSalle, 000 La. 000, 94 So.2d 120 (1957).

87. It may be possible to explain plaintiffs failure to recover in Rickards by arguing that the losses were too dispersed and hence there were high litigation costs involved in permitting recovery (see Section V(c), infra). However, the court's opinion gives us no idea of the magnitude of the losses involved (or even how long the bridge was out).

88. British Celanese Ltd. v. A.H. Hunt Ltd. [1969] 2 All E.R., Q.B.D., 1252, 1259.

89. 167 Wis. 541, 168 N.W. 199 (1918).

90. Id. at 544, 168 N.W. 199, 200 (1918).

91. For another similar case see Newlin v. New England Telephone & Telegraph Co., 316 Mass. 234, 54 N.E.2d 929 (1944) (As a result of power interruption plaintiff's mushroom crop was destroyed. Losses recovered because consequential on physical damage).

92. (1959) O.L.R. 177.

93. "... (I)f an actionable wrong has been donè to the claimant he is entitled to recover all damage resulting from that wrong, and none the less because he would have had no right of action for some part of the damage if the wrong had not also created a damage which was actionable." Horton v. Colwyn Bay and Colwyn Urban District Council, [1908] 1 K.B. 327, 341 (Buckley, L.J.).

94. (1976) 11 A.L.R. 227 (H.C. of Australia).

95. Id. at 278.

96. In accord with this view, see British Celanese Ltd. v. A.H. Hunt, supra note 87; S.C.M. (United Kingdom) Ltd. v. W.J. Whittall and Son Ltd., [1971] 1 Q.B. 337. Inconsistent with this view is Spartan Steel & Alloys Ltd. v. Martin & Co., (1973] 1 Q.B. 27.

97. See Prosser, supra note 7 at 709; Restatement 2d Torts, §552, explanatory note.

98. If the equity of ensuring compensation is greater the larger the individual losses, then the value of recovery will be higher.

99. 193 C.A.2d 305, 18 Cal. Rptr. 13 (1961).

100. 233 N.Y. 236, 135 N.E. 275 (1922).

101. The overcharge is not a mere transfer because future people in plaintiff's role would spend up to the expected value of the overcharge to avoid it.

102. See also *Biankanja v. Irving*, supra note 34 (plaintiff recovered proper inheritance against notary public who negligently prepared a will); *Walker Bank & Trust Company v. First Security Corporation*, supra note 34 (beneficiary recovered amount of life insurance policy from bank that negligently permitted policy to lapse); *McPherson v. Western Union Telegraph Co.*, 189 Mich. 471, 155 N.W. 557 (1915) (plaintiff recovered for missed job opportunity due to negligent transmission of telegram). In general, recovery is permitted in the cases involving negligent transmission of telegrams. See Prosser, supra note 7 at 940. Here the losses are usually concentrated on one party.

103. [1964] A.C. 465.

104. See, e.g., *Harvey*, supra note 1 at 597-606.

105. 255 N.Y. 170, 174 N.E. 441 (1931).

106. *Id.* at 000, 174 N.E. 441, 442 (1931). Of course, it still might be possible for the value of recovery to be so large that the costs of additional litigation would be swamped. However, since the courts are quite willing to allow recovery for this type of loss when the number of potential plaintiffs is small (see, especially, *Haig v. Bramford*, infra text at n. 108), it seems reasonable to infer that the losses were not large. If they were, then recovery ought to have been allowed, as it was in the fraudulent misrepresentation aspect of this case. See n. 107 infra.

107. There was also a second cause of action for fraudulent misrepresentations by the accountants. Here Cardozo said that recovery would be allowed. Since both the fraudulent and negligent misrepresentations had the same potentially widespread effect, this aspect of his decision is inconsistent with our hypothesis. (*id.* at 000, 174 N.E. 441, 448-450 (1931)).

108. (1976) 3 W.W.R. 331.

109. Id. at 340.

110. For a view of the liability of accountants in misrepresentation cases that is consistent with the one developed here, see, Note, Torts: Accountant Liable to Third Party for Negligent Misrepresentation, 53 Minn. L. Rev. 1375 (1969). Liability is also imposed on other professionals on the basis of the principle outlined in the text (id. at 1379).

111. See Prosser, supra note 7 at 927-949.

112. See, e.g., Atiyah, supra note 1 at 248 and Prosser, supra note 7 at 938-942.

113. H.L. A. Hart and A.M. Honore, Causation in the Law 277 (1959).

114. See, e.g., Fowler V. Harper and Fleming James, Jr., 1 The Law of Torts 500-501 (1956); Prosser, supra note 7 at 927-942.

115. Harper and James, supra note 114 at 497.

116. The analysis in the text answers the question why recovery is allowed at all. However, it does not explain why the plaintiff can choose to recover from the party inducing the breach rather than from the breaching party. Since there will be only one suit in either case, the theory developed here is inappropriate to analyze this issue. For one possible set of explanations, see William M. Landes and Richard A. Posner, Joint and Multiple Tortfeasors: An Economic Analysis, 9 J. Legal Stud. 517, 552-555 (the other party to the contract may be judgment-proof or the "inducer" may be the cheaper cost avoider).

117. 2 El. & Bl. 216, 118 Eng. Rep. 749 (1853).

118. It is not entirely clear what the damages were. Presumably they were out-of-pocket expenses and lost profits during the period she had promised to sing. Since she breached so close to the scheduled opening date the manager probably had difficulty rescheduling someone of equal quality.

119. 257 F.2d 6 (8th Cir. 1958).

120. See the different analysis of this case in Landes and Posner, supra note 116 at 554-555.

121. 34 Conn. 384, 91 Am. Dec. 732 (1867).

122. 78 Miss. 864, 29 So. 850 (1901).

123. This differs from the situation in *Cattle v. Stockton Waterworks Company*, (1875) L.R. 10 Q.B. 453. In that case there was overall damage to the property of the landowner (flooding) and the plaintiff was not under a contract for general repair. Instead, he had agreed to build a tunnel. To allow recovery here would have opened the door, in the class of such situations, to litigation by the landowner for his physical damage and by the builder for his economic loss.

124. For the idea that moral considerations may have a base in efficiency considerations, see, e.g., Richard A. Posner, *Economic Analysis of Law* 179-191 (2d ed. 1977).

125. See Epstein, supra note 15 at 75-76.