A Production Theory of Pure Economic Loss

Robert J. Rhee

University of Florida Levin College of Law, rhee@law.ufl.edu

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INTRODUCTION

The pure economic loss rule dates back to the birth of negligence and is unique in the annals of tort law for its durability.¹ The rule states that one cannot recover economic loss as a consequence of an accident that results in no property loss or physical injury (hereafter "physical loss") to the claimant.² This rule sharply contrasts with the longstanding principle of consequential economic loss, which permits recovery for economic harms arising from the plaintiff's physical loss such as the loss of income from property

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¹ Professor of Law & Co-Director of the Business Law Program, University of Maryland School of Law; J.D., George Washington University; M.B.A., University of Pennsylvania (Wharton); B.A., University of Chicago. This article was presented at faculty colloquia at the University of Maryland School of Law and the University of Georgia School of Law, and I thank the participants for their helpful comments. I thank Brad Borden, Danielle Citron, Martha Ertman, Don Gifford, and David Gray for their helpful comments. I thank my wife Nicki and son Piers for their unconditional support.


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This apparent logical contradiction poses a classic riddle of the common law: both lost profit and property are easily reducible to fungible currency without much translational difficulty, yet the two losses are treated in entirely different ways. This Article resolves the apparent paradox. It advances a theory that the two rules are complementary rather than conflicting. This theory is rooted in the neoclassical economic understanding of the relationship between uncertainty and profit. It is independent of pragmatic concerns of implementing a rule of recovery, which have occupied the thoughts of scholars and courts. The theory explains the rule of preclusion within the spatial contours of tort law rather than seeing it as the outer limit of tort law's feasibility.

The pure economic loss rule derives its modern authority from Oliver Wendell Holmes's opinion in Robins Dry Dock & Repair Co. v. Flint, wherein the Supreme Court held that a charterer could not recover for economic loss resulting from negligent harm to the owner's boat. The rule is remarkable in several respects. Aside from a peculiar exception reserved for commercial fishermen, the rule is a bright-line policy precluding liability in a field of law dominated by malleable, sometimes opaque standards of liability. The economic loss rules in England and America are virtually identical, though they developed independently of each other. Despite the historical dynamism of Anglo-American tort law, the rule remains pure and has been unadulterated by the evolutionary forces of the common law.

However, the rule may not be as immutable as it appears. A regal history does not guarantee continued reign. Several factors work against the rule. The first and foremost is a theoretical deficit. Scholars have treated
the rule with "striking neglect." Until recently, the doctrine remained "a backwater within the discourse of American tort law." In spite of the rule's seniority in the common law, it lacks a theoretical consensus. There have been past attempts to fill the explanatory void. Scholars have argued that the rule is a pragmatic objection to recovery. It precludes arbitrary and disproportionate imposition of liability. It denies recovery because economic loss is not a social cost. It channels disputes into contract relationships and minimizes litigation cost. It advances the common law's systematic bias in favor of capitalists and promotes inegalitarian wealth redistribution. As evident, there is no scholarly consensus or even a well-entrenched school of thought, which is remarkable given the rule's durability and universality. This theoretical deficit destabilizes this rule of law by promoting the view that the rule is unprincipled. Scholars have engaged in a renewed, vigorous inquiry of the rule's theoretical foundation. This newfound interest is not just an agenda of American tort scholarship but is an international phenomenon.

Another factor undermining the rule is the complexity of modern society. The law of accidents developed at the dawn of the industrial age when property interests, such as factories and machines, were the principal factors of production. This fact dovetailed easily into a rule of law that

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13 James, supra note 5, at 48; see Perry, Economic Bias, supra note 3, at 1585–1604.
17 Perry, Economic Bias, supra note 3, at 1607–08.
19 See AARON D. TWERSKI & JAMES A. HENDERSON, JR., TORTS: CASES AND MATERIALS 367 (2d ed. 2008) (noting recent “explosion of interest”). In 2006, the Arizona Law Review published a twenty-one article symposium on the field of economic torts. See 48 ARIZ. L. REV. 687 (2006); see also Thomas J. Miles, Posner on Economic Loss in Tort: EVRA Corp. v. Swiss Bank, 74 U. CHI. L. REV. 1813 (2007) (discussing how a recent Judge Posner opinion demonstrates that the economic loss rule is consistent with other tort doctrines); Perry, Economic Bias, supra note 3 (discussing political underpinnings of economic loss doctrine); Perry, Relational Economic Loss, supra note 10 (proposing integrated economic justification for economic loss doctrine); Stapleton, supra note 11 (proposing that courts adhere to precise legal reasoning to create a high level of predictability in economic loss cases).
protected property and person, the essential capital needed for production. In old common law, the quintessential case arose from economic loss associated with damage to a third party’s property, and this remains the most common fact pattern. But the pure economic loss rule may be tested when the physicality of property, assets, and harm are more abstract, and the nature of our economic organization blurs the concept of injury to person and property. Modern enterprise increasingly relies on abstractized or financialized transactions, executed at the speed of electrons rather than the force of machine and labor. For example, negligent infliction of economic loss claims have been made in the context of bank errors, and technological innovations like the Internet, which can be seen as an information commons, have obvious effect on profitability though the injuries are only financial and the properties concerned are incapable of ownership. The trend toward intangible economic transactions will not be lost on courts fashioning tort law or entrepreneurs seeking lost profits. The confluence of these forces—the lack of a coherent theory and the complexity of modern enterprise—can eventually erode the hardest legal barriers, explaining why this “backwater” doctrine has gained prominence of late.

This Article advances a production theory of the pure economic loss rule. The theory is founded on a basic premise: the rules of economic loss fundamentally address business risk and its relation to broadly held views of economic organization. Although the sources of this risk are limitless, the risk can be compartmentalized into two basic concepts: risk to production assets, which is the potential loss of a factor of production, and risk to outcome, which is the potential loss of production itself. A factor of production is distinguished from property. An asset considered a factor of production need not be property in the legal sense of that concept, nor must the plaintiff have title to it. The distinction is critical to understanding the only generally recognized exception to the rule: namely, commercial fishermen have historically recovered pure economic loss.


24 See John Cahir, The Withering Away of Property: The Rise of the Internet Information Commons, 24 OXFORD J. LEGAL STUD. 619, 637-41 (2004) (arguing that the Internet provides a flourishing information commons); JoAnne Holman & Michael A. McGregor, The Internet as Commons: The Issue of Access, 10 COMM. L. & POL’Y 257, 281-87 (2005) (arguing that the Internet can be seen as a commons).


26 See infra Part I.A (discussing the fishermen exception).
The production theory is both positive and normative. Stated most simply, tort law does and should protect factors of production, but it does not and should not otherwise influence outcomes via ex post redistribution of profit and loss. For over a century, the common law has recognized harm to one's property or person as the line demarking consequential and pure economic losses. This conventional view is wrong in theory. Like Newtonian physics, it is widely regarded as a correct account only because it is a good approximation of empirical outcomes. But the conventional view breaks down when applied to cases in the grey area between the boundaries of the two rules, such as the widely recognized fishermen's exception. Correctly stated, the pure economic loss rule protects assets indispensably integrated into the production function, irrespective of private property rights or the entrepreneur's ownership of the assets. Without the loss of a factor of production, the law does not insure profit expectation.

The production theory solves a classic riddle of tort law. Under this theory, the pure and the consequential economic loss rules are not irreconcilable or antithetical, but are complementary. In stating inverse propositions—namely, economic losses flowing from some physical loss are recoverable but mere adverse economic outcomes are not—the two rules express a unified proposition: the law preserves the condition necessary for enterprise, which is the uncertainty of market outcomes, by abstaining from any effort to redistribute profit and loss ex post while at the same time promoting the normative goal of production by recognizing an economic loss claim when a factor of production is harmed. Under this unified principle, profit and loss are rearranged through a liability rule only if the defendant's conduct is determined to be inimical to economic productive capability of the claimant, which in most cases, but certainly not all, is an accident resulting in physical loss to his person or property.

This seemingly prosaic tort doctrine, one described in largely instrumental terms, must be contextualized to the philosophical underpinning of our economic organization. A competitive market is characterized by limitless, unpredictable, and uncontrollable factors of outcome. Although some aspects of business risk can be mitigated, financial intermediation such as insurance can never assure profit expectation. In essence, riskless arbitrage is not sustainable in a competitive economy. Since exposure to business risk defines the engagement of enterprise, a rule of recovery would distort outcomes of competition under Knightian uncertainty—imperfect and im-

27 The fishermen cases are the most prominent gray area cases. The physical harms in these cases encompass both harm to private property of third parties and the commons. But other cases also fall into the gray area, and are explained by the theory advanced in this Article. For example, some plaintiffs have an action for economic loss from public nuisance, and these cases can be explained under the theory proposed in this Article. See infra Part III.A; see, e.g., Masonite Corp. v. Steede, 23 So. 2d 756, 757–58 (Miss. 1945) (allowing owner of sporting rental and lodging business to recover for economic loss flowing from a public nuisance).
measurable knowledge of future outcomes—and would conflict with a commitment to a political economy based on competition, specialized labor, risk-taking, and innovation. Thus, corrective legal action is not required when the occurrence of economic loss is not a market failure of precaution but is instead a natural condition of the market.

The argument is presented in four parts. Part I states the doctrine and surveys the judicial and scholarly explanations. Part II critiques the current explanations and shows why a theoretical deficit remains. Part III discusses factors of production and the role of uncertainty in profit. Part IV harmonizes the consequential and pure economic loss rules within the broader view of economic organization and provides a theoretical account of the fishermen exception, which has puzzled tort scholars and economists.

I. PURE ECONOMIC LOSS DOCTRINE

A. General Rule and Exception

It is well established that consequential economic loss is recoverable as long as it is accompanied by a claimant’s physical loss. But claims for pure economic loss are more complex. They arise from different patterns of operative facts. Case theories include negligent misrepresentation, negligent harming of third-party beneficiaries, economic loss arising from product defect, and negligent infliction of economic loss where the parties are related only by the accident (this latter category is referred to as pure economic loss). This litany does not suggest a complete taxonomy;

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28 Frank H. Knight, Risk, Uncertainty and Profit 19–20, 232 (Dover ed. 2006) (1921); see infra Part III.B.
29 People Express Airlines, Inc. v. Consol. Rail Corp., 495 A.2d 107, 109 (N.J. 1985) (“It is well-accepted that a defendant who negligently injures a plaintiff or his property may be liable for all proximately caused harm, including economic losses.”).
30 See, e.g., Ultramares Corp. v. Touche, 174 N.E. 441, 448 (N.Y. 1931) (Cardozo, C.J.) (holding that accountant has no duty to creditors for negligent misrepresentation of company’s financial statements).
31 See, e.g., Biakanja v. Irving, 320 P.2d 16, 19 (Cal. 1958) (holding that a notary public has a duty when drafting a will to intended beneficiaries of will); Glanzer v. Shepard, 135 N.E. 275, 277 (N.Y. 1922) (Cardozo, J.) (holding that a public weigher had a duty to the purchaser of beans when defendant was hired specifically to execute the transaction).
33 See, e.g., In re Kinsman Transit Co., 388 F.2d 821, 825 (2d Cir. 1968) (holding that when a ship crashed into a bridge the defendant was not liable for lost profit of plaintiff who suffered no physical harm); Neb. Innkeepers, Inc. v. Pittsburgh-Des Moines Corp., 345 N.W.2d 124, 126–27 (Iowa 1984) (holding that defendant was not liable for economic loss to local businesses resulting from damaged bridge); Rickards v. Sun Oil Co., 41 A.2d 267, 269–70 (N.J. 1945) (holding that the lost profits of local businesses were not proximately caused by the defendant’s negligence that collapsed a bridge providing the only ingress and egress from island).
34 Scholars have provided more comprehensive taxonomies. See Bruce P. Feldthuelsen, Economic Negligence: The Recovery of Pure Economic Loss 1–3 (2d ed. 1989) (discussing vari-
ther, it is meant to convey a sense of the factual contexts giving rise to different policies, principles, and outcomes. When analyzing these claims, one must be careful not to overreach in either scope or conclusion. Although scholars disagree on the theory of the rule, there is a general consensus that a grand unified theory of the field of economic torts is infeasible.35

This Article analyzes the relationship between the consequential and pure economic loss rules only. The pure economic loss rule is viewed here as a distinct rule schema based on the common operative fact of unrelated parties with no prior transactional or relational history, which presents a unique set of policies.36 This schema is complete with the general rule of no liability and one well-recognized exception for fishermen. This organizational premise is a convenience, an initial framework to analyze the problem. Ultimately, the theory of the rule should not only be independent of the rule’s taxonomy, but it should inform the taxonomy.

The narrative of the general rule and its exception can be told through the tales of charterers and fishermen. The textbook case is Holmes’s opinion in Robins.37 There, the plaintiff charterer suffered lost profit when the defendant dry dock negligently damaged the propeller of the owner’s boat.38 The parties were connected by a nexus of contracts but were not in contractual privity.39 The Court held that the dry dock had no duty to the charterer.40 The rationale for the rule was terse:

[N]o authority need be cited to show that, as a general rule, at least, a tort to the person or property of one man does not make the tortfeasor liable to another merely because the injured person was under a contract with that other unknown to the doer of the wrong. The law does not spread its protection so far.41

The Court could have reasoned that the existence of contractual relationships distinguished Robins from economic accidents involving stran-
gers, with the argument that the parties could have contracted to allocate this risk ex ante, but it announced a broad rule of no liability. The case has been interpreted to exclude liability even when there is no contract. It is also irrelevant whether the cause of action is couched under negligence, admiralty, or nuisance, and whether harm is lost prospective profit or additional incurred cost. The general rule sets forth a bright-line proposition that a defendant owes no duty of care to protect against economic loss when only the accident relates the parties who were otherwise strangers.

To be sure, there are a few outliers—as would be expected among numerous common law jurisdictions. The most notable attempt to overthrow Robins is People Express Airlines v. Consolidated Rail. There, the plaintiff airline suffered loss of business when an accident at a nearby rail yard shut down the plaintiff's terminal. The New Jersey Supreme Court allowed recovery of pure economic loss because the airline was a “particularly foreseeable” plaintiff. This reasoning was a clarion call for case-by-case relaxation of the limitation principle, but “[w]ith a striking degree of unanimity, the highest courts in other states have failed to follow People Express.” The ruling is less a guiding light to an alternative path than the pole star to a doctrinal wilderness. Aside from these miscellaneous outliers, the pure economic loss rule has proven durable, resisting the evolutionary forces of tort law.

There is one clear, firmly established exception to the pure economic loss rule: fishermen may recover for pure economic loss associated with lost opportunity to fish even when they suffered no physical loss. This exception is not the child of a stray court; rather, its legitimacy is widely recognized. The exception is perceived to be so important that courts take

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42 See Perry, Relational Economic Loss, supra note 10, at 725 (citing cases).
43 Id. at 725–26; see, e.g., Burgess v. M/V Tamano, 370 F. Supp. 247, 250 n.2 (S.D. Me. 1973). Robins was technically an admiralty case, but its influence on the common law is unquestionable. See Goldberg, Recovery for Pure Economic Loss in Tort, supra note 6, at 249 n.3.
44 See, e.g., J’Aire Corp. v. Gregory, 598 P.2d 60, 63–64 (Cal. 1979) (upholding lost profit claim of a lessee restaurant against a contractor for negligent delays in its remodeling of a local airport). But see Rabin, supra note 14, at 1514 n.3 (criticizing J’Aire as “strained” reasoning); Schwartz, supra note 35, at 40 (arguing that J’Aire was wrongly decided).
46 Id. at 109.
47 Id. at 116.
49 See Bernstein, supra note 34, at 791 (“The bulk of economic-loss case law repudiates People Express and J’Aire.”); Rabin, supra note 35, at 858 (“People Express . . . stands as a lonely outpost.”).
50 See Louisiana ex rel. Guste v. M/V Testbank, 752 F.2d 1019, 1023 (5th Cir. 1985) (en banc) (“Retention of this conspicuous bright-line rule . . . is strong testament both to the rule’s utility and to the absence of a more ‘conceptually pure’ substitute.” (citations omitted)).
special precaution to protect it even when the issue is not at stake in the
case. The claims of fishermen are not necessarily small disputes as one
might assume. Instead, the claims can include sizable commercial claims. The
exception is seen in English common law as well, though the laws do
not appear to have influenced each other.

Are these cases mere oddities that sometimes reside in the obscure cor-
ners of common law, or do they hint at the workings of a more fundamen-
tal, yet unarticulated principle? On the surface at least, the fishermen
exception is puzzling. The lack of a theoretical account has led scholars to
dismiss these cases as quirks of common law. This is too convenient,
however. The exception is too strange, too prevalent in Anglo-American
law, and too consistent across jurisdictions to be without a well-founded
explanation, though it may have thus far escaped precise judicial and schol-
larly articulation. This Article provides a better explanation. The fisher-
men exception informs the theory of pure economic loss and exposes the
true divide between the pure and consequential economic loss rules. To see

berg, Recovery for Economic Loss Following the Exxon Valdez Oil Spill, 23 J. LEGAL STUD. 1, 4-7
(1994) [hereinafter Goldberg, Exxon Valdez]; Goldberg, Recovery for Pure Economic Loss in Tort, supra
note 6, at 271-72; Perry, Relational Economic Loss, supra note 10, at 716 n.16; Rabin, supra note 14, at 1535 n.72; Rizzo, supra note 16, at 298-99; Stapleton, supra note 11, at 567-70. Casebooks also
frequently acknowledge the fishermen exception. See, e.g., WARD FARNSWORTH & MARK F. GRADY,
TORTS: CASES AND QUESTIONS 279-80 (2004); TWERSKI & HENDERSON, supra note 19, at 356.

See, e.g., M/V Testbank, 752 F.2d at 1027 n.10; id. at 1034 (Williams, J., concurring). Defen-
dants seem to readily concede the question of liability. Pruitt v. Allied Chem. Corp., 523 F. Supp. 975,
978 (E.D. Va. 1981). The Fifth Circuit’s reservation of the issue concerning fishermen’s right to recover
lost catch in M/V Testbank will prove to be important. On April 20, 2010, Deepwater Horizon, an off-
shore oil rig operated by BP plc, exploded and thereafter continuously spilled oil into the Gulf of Mex-
ico. As of the final editing of this Article by the author, July 12, 2010, the leak has not been contained.
This disaster is probably the worst oil spill affecting the United States, and when the final assessment is
made the catastrophe will most probably far exceed the Exxon Valdez in environmental harm and liabili-
ty. On June 16, 2010, following a meeting with President Barack Obama, BP announced a commitment
of $20 billion toward a compensation fund. Press Release, BP, BP Establishes $20 Billion Claims Fund
for Deepwater Horizon Spill and Outlines Dividend Decisions, (June 16, 2010), available at
http://www.bp.com/genericarticle.do?categoryld=2012968&contentld=7062966. Fishermen in the ju-
risdiction covered by the Fifth and Eleventh Circuits, states abutting the Gulf of Mexico, will surely
claim their share of compensation from the fund. See infra notes 67-70 and accompanying text (discuss-
ing the law in the Eleventh Circuit).

In re Exxon Valdez, 270 F.3d 1215, 1225 (9th Cir. 2001) (awarding fishermen $287 million in
prospective catch with additional $5 billion in punitive damages). After the Exxon Valdez oil spill,
Congress regulated the liability of oil spills for vessels and facilities. A federal statute recognizes
“[d]amages for loss of subsistence use of natural resources, which shall be recoverable by any claimant
who so uses natural resources which have been injured, destroyed, or lost, without regard to the owner-
ship or management of the resources.” 33 U.S.C. § 2702(b)(2)(C) (2006) (emphasis added). This prov-
ision obviously covers fishermen’s rights to lost catch.

See supra note 9 & infra note 280 and accompanying text.

See EPSTEIN, supra note 51, at 610 (“[I]t is uncertain as to whether [fishermen] are the recipients
of an ad hoc privilege, or simply only [an] illustration of a general principle.”).

See infra notes 140-142 and accompanying text.
this, we first take a pleasant charter through the caselaw on commercial fishing.

In *Carbone v. Ursich*, the plaintiff fishermen were under a “lay” agreement with the shipowner to receive a majority percentage of the proceeds from the sale of fish caught after the deduction of specified expenses. The defendant damaged the plaintiff’s fishing net, which prevented the plaintiff from fishing while it was being repaired. The fishermen sued for the prospective catch. The court held that *Robins* did not control because there exists a long recognized exception to the general rule predating *Robins* for fishermen working under a lay agreement. The court reasoned that the case of fishermen presents a “special situation” because “seamen are the favorites of admiralty and their economic interests entitled to the fullest possible legal protection.”

In *Union Oil Co. v. Oppen*, a subsequent Ninth Circuit case and a favorite of scholarly discussion, fishermen suffered lost profit associated with an oil spill. The court noted that the injury was “a pecuniary loss of a particular and special nature, limited to the class of commercial fishermen.” The court cautioned that other plaintiffs could not recover. The fishermen’s injury is distinct from the injuries of others because their economic and personal affairs were entirely disconnected by the oil spill in a way that was qualitatively different from others who were adversely affected in a more indirect, incidental manner. The court implied this distinction when it further reasoned: “The plaintiffs in the present action lawfully and directly make use of a resource of the sea, viz. its fish, in the ordinary course of their business.”

In *Miller Industries v. Caterpillar Tractor Co.*, fishermen sued a boat engine manufacturer for lost profit when negligence delayed their fishing voyage. The Eleventh Circuit allowed their claim. It reasoned that the lost catch “was not merely prospective compensation, as the crew members

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57 The following case law focuses on federal cases. But the protection of fishermen’s prospective profit absent an accompanying harm to their property or person is not limited to federal cases. State cases based on negligence and nuisance claims have also held for fishermen. See, e.g., *Masonite Corp. v. Steed*, 23 So. 2d 756 (Miss. 1945) (en banc); *Hampton v. N.C. Pulp Co.*, 27 S.E.2d 538 (N.C. 1943); *Columbia River Fishermen’s Protective Union v. City of St. Helens*, 87 P.2d 195 (Or. 1939); *Morris v. Graham*, 47 P. 752 (Wash. 1897).

58 209 F.2d 178, 179 (9th Cir. 1953).
59 Id.
60 Id.
61 Id. at 179–80 (citing cases). In an earlier decision, the Ninth Circuit had invoked *Robins* to deny lost profit claims of fishermen. See *Borcich v. Ancich*, 191 F.2d 392, 396–97 (9th Cir. 1951). But the *Carbone* court overruled the prior precedent. 209 F.2d at 183.
62 *Carbone*, 209 F.2d at 182.
63 501 F.2d 558, 559–60 (9th Cir. 1974).
64 Id. at 570.
65 Id.
66 Id.
67 733 F.2d 813, 815 (11th Cir. 1984).
had been working since the summer to prepare for the fishing voyage and their compensation for this work was to come solely out of their shares of the catch. Moreover, the court reasoned that allowing the shipowner to recover for the catch based on the consequential economic loss rule while precluding the fishermen from recovering for the same catch under the pure economic loss rule would be anomalous, presumably because the shipowner and fishermen were working toward a common enterprise and shared the same risk with the expectation of profit.

In Yarmouth Sea Products, Ltd. v. Scully, the defendant’s yacht collided with a fishing boat, and the fishermen sued for lost profit. Faced with prior precedent in which the court affirmed the denial of lost future wages of the crew of a dredge, the Fourth Circuit held for the fishermen and provided a nuanced economic rationale to distinguish sailors from fishermen. Fishermen are distinct from sailors because the latter do not “invest in a voyage as do fishermen on a lay, nor are they typically paid a percentage of the profits.” Instead, sailors are compensated through fixed, contractual wages. Their contract relationship is like the one between the charterer and the shipowner in Robins, and thus the risk is allocated through contract law rather than tort law. In Yarmouth, however, the shipowner and the fishermen “were engaged in a kind of joint venture.”

In summary, the rationale for the fishermen exception is imprecisely stated in caselaw. Courts do not distinguish among the laws of admiralty, negligence, or nuisance. Economic considerations are clearly influencing outcomes and rationale, but a coherent policy is not apparent. Fishermen are said to be the favorites of admiralty, while other seafarers do not enjoy the same benefit. The former invests in an enterprise; the latter earns a
fixed wage. Fishermen are considered joint venturers of an enterprise, and courts consider relevant the loss of their labor and risk taken. Beyond these observations, what is the theory? After all, many business venturers suffer lost profit and investment after taking significant business risk, but they do not enjoy the benefit of an exception.

B. Proffered Explanations

The pure economic loss rule has been explained and justified on a number of grounds, which can be grouped into two broad categories. The first concerns doctrinal and instrumental limitations, the "pragmatic objection" that liability would be too vast, indeterminate, and administratively difficult to sort out in any practical sense. The second category provides economic justifications, centering on two questions: whether economic loss is a social cost, and whether these claims can be more efficiently channeled through contracts and physical loss claims.

The pragmatic objection is intuitive. Far-reaching foreseeability can lead to ruinous liability. In most accidents, the negligent person can wreak only so much destruction because the laws of physics naturally limit the concept of foreseeability. In economic loss cases, foreseeability slips its

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78 The following authors' dialogue between Aaron Twerski and James Henderson in their casebook illustrates perhaps in an amusing way the essential problem:

Aaron: But what if he had burned me out—he would have to pay me lost profits then, wouldn’t he?

Jim: Not exactly. He would have to pay you the value of the Deli he destroyed, part of which would reflect its capacity to earn profits. But then, he destroyed your “property,” after all. Maybe that’s another way of explaining the “no recovery” rule for pure economic loss—you don’t have a property interest in the expectation of future profits, apart from your property interest in the Deli, itself.

Aaron: Then why do fishermen recover when fishing grounds are damaged? They don’t own the fish ‘til they catch them.

Jim: They have a “quasi-property interest” in the fish, I suppose. Same with the airline in People Express—they had a “quasi-property interest” in the operation of their terminal facility.

Aaron: And you, my friend, are left with a “quasi-theory.” To get Judge Henderson’s attention, all I have to do is assert a “quasi-property interest” in the uninterrupted operation of my Deli. I didn’t realize until this moment how susceptible to legal fictions you are.

TWERSKI & HENDERSON, supra note 19, at 365.


80 James, supra note 5, at 48; see Louisiana ex rel. Guste v. M/V Testbank, 752 F.2d 1019, 1028–29 (5th Cir. 1985) (en banc) (considering “pragmatic” limitations); Stephen R. Perry, Protected Interests and Undertakings in the Law of Negligence, 42 U. TORONTO L.J. 247, 262 (1992) [hereinafter Perry, Protected Interests] (observing that the standard explanation “is pragmatic in character”).

81 See infra notes 97–106 (discussing the theories of William Bishop and Mario Rizzo).


83 Barber Lines A/S v. M/V Donau Maru, 764 F.2d 50, 54 (1st Cir. 1985) (Breyer, J.); Rabin, supra note 14, at 1531–32.
earthly bound and enters the realms of complex causation and counterfac-
tuals. This concern is captured by the oft-cited hypothetical of the negli-
gent driver who blocks rush hour traffic in the Brooklyn Battery Tunnel. The magnitude of the economic losses is certainly foreseeable, but there cannot be tort liability for lost time and opportunity of perhaps thousands of stranded motorists and the people who depend on them. Recall, for example, Cardozo’s admonition of liability “in an indeterminate amount for an indeterminate time to an indeterminate class.” While foreseeability is a vital concern in the calculus of duty, it is not always the sine qua non. Duty is not an a priori law of nature, but a practical social calculation of courts. The concept of efficient deterrence may lose meaning when potential liability may exceed by many orders the utility of the activity. Such liability may impose a disproportionate penalty, a concept inimical to the Anglo-American tradition.

The ripples of foreseeability pose more problems than just large numbers of plaintiffs. Widely varying degrees of injuries and causalities would result. Numerosity of victims and heterogeneity of injuries and causalities would result in extensive litigation and inefficient administration of disputes. There may be a lack of a “preexisting normative guidance,” which may shift the judicial role from an adjudicatory to a “managerial” function. Arbitrary outcomes may result, compromising both the fairness and predictability of law. Variability of claimants and claims also makes risk management more difficult than the precautions necessary to prevent physical injuries. Freak accidents aside, there are only so many ways in which harm can be inflicted on person or property, and a negligent person can wreak only so much destruction. This is not the case with purely economic loss, which may result from a traffic jam in the Brooklyn Battery Tunnel, an accident at a rail yard next to the Newark International Airport, the collapse

\[84\] See M/V Testbank, 752 F.2d at 1021 (“[W]ithout this limitation foreseeability loses much of its ability to function as a rule of law.”); Rabin, supra note 14, at 1526 (“Foreseeability proves too much, as has been frequently demonstrated.”).

\[85\] See In re Kinsman Transit Co., 388 F.2d 821, 825 n.8 (2d Cir. 1968).

\[86\] Id.

\[87\] Ultramares Corp. v. Touche, 174 N.E. 441, 444 (N.Y. 1931).


\[89\] See William L. Prosser, Palsgraf Revisited, 52 MICH. L. REV. 1, 15 (1953) (“These are shifting sands, and no fit foundation. There is a duty if the court says there is a duty . . . .”).

\[90\] Louisiana ex rel. Guste v. M/V Testbank, 752 F.2d 1019, 1029 (5th Cir. 1985) (en banc).

\[91\] Rabin, supra note 14, at 1534.

\[92\] Barber Lines A/S v. M/V Donau Maru, 764 F.2d 50, 54 (1st Cir. 1985) (Breyer, J.).

\[93\] Id. at 54–55; see Rabin, supra note 35, at 862 (stating that courts must sort out an “exceedingly fine and elaborate network of interdependencies”).

\[94\] M/V Testbank, 752 F.2d at 1028–29.

of a nearby building on Madison Avenue, or any other infinite number of situations that can adversely affect one’s business. The scope and scale of potential liability would adversely affect an enterprise’s operations and would result in higher insurance or capital costs.

Economists have been more ambitious than courts and tort scholars in attempting to find a theoretical account of the pure economic loss rule, and their works have substantially contributed to legal understanding. Two theories in particular advanced by William Bishop and Mario Rizzo are widely recognized, if not accepted, in tort literature.96

Bishop argues that the general rule denies liability because in many cases of private economic loss there is not a social cost but simply a transfer payment—a private cost to one but an equal private benefit to another.97 By imposing liability, the law may overdeter an activity that is otherwise efficiently deterred for the purpose of mitigating social cost. This hypothesis is conceded to be “a little too simple,”98 because it depends on empirically unverified assumptions99: sufficient excess capacity to meet demand overflow; no marginal cost increases associated with capacity increase; elasticity of supply and demand as to substitute inputs, goods, and services; investor risk neutrality towards variability of returns under different liability rules, and so forth.100 If one relaxes these assumptions, the argument becomes far more complicated.101 Despite these concerns, Bishop speculates that in most cases the administrative costs of a detailed economic inquiry would exceed whatever social cost was lost.102

Rizzo provides an alternative “channeling” explanation. He argues that there is always social cost associated with economic loss.103 The destruction of input typically increases the marginal cost of production, leading to higher prices and production decrease. Social cost also arises if the supply of output is inelastic because this would lead to price increases. Rizzo argues that the existence of social cost necessitates the pure economic loss rule.104 When there are multiple plaintiffs and when contracting costs

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96 See Epstein, supra note 51, at 606; Landes & Posner, supra note 51, at 251–55 & n.48; Goldberg, Recovery for Pure Economic Loss in Tort, supra note 6, at 267 n.75; Goldberg, Exxon Valdez, supra note 51, at 11–14 & n.49; Perry, Economic Bias, supra note 3, at 1588–96, 1601–04; Perry, Relational Economic Loss, supra note 10, at 733–38, 774–77; Rabin, supra note 14, at 1535–36 n.72.

Bishop and Rizzo’s ideas are widely taught to law students. See Richard A. Epstein, Cases and Materials on Torts 1266 (9th ed. 2008); Twerski & Henderson, supra note 19, at 359 n.25.

97 Bishop, supra note 15, at 4.

98 Id. at 11.

99 Bishop clarifies that many of his assumptions are "an empirical question" and that "financial losses are only poorly correlated with social cost." W. Bishop, Economic Loss: A Reply to Professor Rizzo, 2 OXFORD J. LEGAL STUD. 207, 207 (1982).

100 Bishop, supra note 15, at 11.

101 Id. at 13.

102 Id. at 17.

103 Rizzo, supra note 16, at 282.

104 Id.
are sufficiently low, the pure economic loss rule seeks to channel economic loss through the party suffering physical injury. The rule incentivizes parties to contract for the appropriate risk allocation. The effects of channeling reduce social cost by limiting the expenditure of administrative cost. Thus, like Bishop, Rizzo is concerned about minimizing cost, and his channeling theory is based on instrumental foundations.

II. CRITIQUE OF THE EXPLANATIONS

The explanations for the pure economic loss rule are incomplete and fail as theoretical accounts. Consider first the pragmatic objection. It is true that the application of foreseeability can certainly lead to large and indeterminate liability. However, this conclusion does not necessarily lead to a per se rule of no liability. We can draw an important lesson from the doctrinal development of emotional distress actions. These claims share the same instrumental problems: namely, indeterminate, unpredictable, and potentially vast liability, and the inefficacy of foreseeability as a limiting principle. Scholars and courts have noticed the obvious parallels between the instrumental policy considerations of the pure economic loss rule and the rules of negligent infliction of emotional distress. It is true that the two doctrines were conceived during the same time period. In old common law, the general rule for emotional distress, like the pure economic loss rule, was one of per se preclusion of liability. But the parallel stops here. In the past one hundred years, the two doctrines have taken entirely different paths: the emotional distress doctrine has undergone a chaotic evolution, and the economic loss doctrine has remained pure. Over time, the common law developed a number of exceptions to the rule of no liability in the field of emotional distress, resulting in great jurisdictional dispersion of approaches and doctrines. This history shows that the instrumental con-

105 Id. at 283.
106 Rizzo was not the first to argue that the rule channels claims into physical loss claims. See Atiyah, supra note 4, at 274 ("[T]he law should try to channel all the claims through the person who has suffered the physical damage."). Atiyah, however, concludes that such "channeling" would be unsatisfactory and arbitrary. Id.
107 See Rhee, supra note 88, at 836–42 (discussing the instrumental problems surrounding emotional distress claims).
109 See supra note 1 and infra note 110.
111 See Rhee, supra note 88, at 816–23 (describing various rules and jurisdictional dispersion of rules).
cerns, shared by both doctrines, cannot be the underlying principle of the pure economic loss rule.

Taking a cue from the field of emotional distress, we can conceive islands of liability while adhering to the principle of limitation. There are many potential exceptions. A rule of liability can exclude the economic loss claims of all but owners of enterprises on the theory that employees and creditors can contract with owners to protect themselves against such adverse contingency.\(^\text{112}\) A rule can be based on the parties' participation in a common nexus of contracts, with perhaps a limitation on the degrees of removal from privity. Under this rule, the plaintiff in \textit{Robins} would recover based on the nexus of contractual relationships as opposed to no recovery on the basis that the plaintiff and the dry dock were strangers. A rule of contractual tracing would still exclude the majority of pure economic loss cases because in most the parties are complete strangers. A rule can restrict the concept of foreseeability, for example, by requiring that the identity of the plaintiff, the specific manner of harm, and specific extent of harm be foreseeable, thus restricting the ordinary benchmarks of duty and proximate cause, or a rule can distinguish between "direct" and "indirect" injuries.\(^\text{113}\) And \textit{People Express} still stands as a leader waiting for followers. Common law courts have not lacked for creative solutions to difficult social problems. Sometimes procedural barriers force courts to innovate,\(^\text{114}\) but procedural innovation can also advance substantive policies.\(^\text{115}\) For example, a creative court can heighten the burden of proof to identify only the most meritorious claims, as is frequently the case with punitive damages.\(^\text{116}\) Lastly, these rules need not be exclusive, and an innovative court can mix and match them to achieve, in its wisdom, the appropriate level of liability, justice, or deterrence, whatever the normative goal may be.

These proposals are not without problems. While they are arbitrary to varying degrees, they are no more arbitrary than a bright-line denial of recovery based on an admission of the law's limit.\(^\text{117}\) A principled justifica-


\(^\text{113}\) See Atiyah, supra note 4, at 262--64 (discussing this distinction); see also Rhee, supra note 88, at 859--60 (discussing cases in emotional distress claims using this distinction).

\(^\text{114}\) See, e.g., Haft v. Lone Palm Hotel, 478 P.2d 465, 475 (Cal. 1970) (shifting burden of proof on the issue of causation to defendants in negligence action when requiring plaintiff to prove proximate causation would advantage the defendant); Byrne v. Boodle, (1863) 159 Eng. Rep. 299, 300 (Exch. Div.) (officially instituting the doctrine of res ipsa loquitur when breach is obvious but impossible to prove); see also Robert J. Rhee, \textit{Probability, Policy, and the Problem of Reference Class}, 11 \textit{Int'l J. Evidence \& Proof} 286, 290--91 (2007) (discussing the problem of systemic error in tort law and the law's "normative correction" of this problem through special doctrines).


tion is preferred. The problem is one of finessing doctrine, a core competency of common law courts. Line drawing is always susceptible to a charge of arbitrariness, even when it serves a legitimate policy (e.g., the concept of statute of limitations). Many pliable concepts, such as foreseeability and the direct-indirect distinction, are means of judicial elision toward case-by-case customization of legal rules to serve felt social necessities.

It is helpful again to analogize to the historical development of the emotional distress doctrine. The rules there have been criticized as arbitrary, but in the course of one hundred years of experimentation courts have reluctantly accepted them as theoretically unsound, perhaps, but doctrinally palatable. Over time, the common law has recognized that liability to some worthy plaintiffs is better than no liability to the entire class of victims, and the execution of this sentiment results in normative selection of the relative worthiness among plaintiffs, which is sometimes arbitrary or dubious from the standpoint of logic alone.

The above litany of alternative approaches is limited by the imagination and foresight of the author, which do not compare favorably to the collective wisdom of courts thinking through problems in real cases over many years (that is, had they chosen to pursue the route of finessing doctrine). But it shows, at least, that the pure economic loss rule need not be stated as a per se limitation on recovery. Pragmatic options are available, however messy, and no one suggests that the common law process always produces elegant, beautifully logical solutions to myriad of difficult social problems. At the least, we would have expected some experimentation across jurisdictions, some process of creative evolution if only to retreat later to the original point. The bright line of the pure economic loss rule is not a creature of pragmatic necessity, but rather an explicit policy choice of courts.

This observation raises the obvious question of why courts have not yet experimented with the doctrine. The pursuit of legitimate policies may require some arbitrary lines, and courts may find this uncomfortable. We would still expect some doctrinal dispersion rather than a monolithic allegiance to a single policy. After all, this was the route courts took for emotional distress cases, which are "conceptual cousins" of the economic loss cases. While there are a few outliers as discussed earlier, they do not constitute divergent schools of doctrinal thought so much as lonely voices of dissent. What accounts for this largely singular view? One answer is that the pragmatic objection must be so compelling that courts have uniformly arrived at the same conclusion throughout the course of common law history. This would be a large leap in reasoning when we consider the

118 See id. ("Policy-driven line-drawing is to an extent arbitrary because, wherever the line is drawn, invariably it cuts off liability to persons who foreseeably might be plaintiffs.").
119 See Rhee, supra note 88, at 806–07.
120 Silverstein, supra note 108, at 429.
dynamic history of tort law, the chaotic evolution of the doctrine of emotional distress, and the ability of courts to innovate solutions to difficult social problems. The pragmatic objection rationally supports the rule, but does not support “the full weight of the conclusion that negligently caused economic loss ought not in general to be recoverable in tort.”

Nor are the economic theories entirely satisfactory. The elegance of Bishop’s hypothesis is appealing. As an example, consider 532 Madison Avenue Gourmet Foods v. Finlandia Center, where a building collapse closed a Manhattan street and the plaintiff delicatessen suffered lost profit. The harm to the deli was not a social cost such as crushed bodies or demolished buildings. Since there is a deli in virtually every city block in Manhattan, the plaintiff’s lost profit was offset by gains of other shopkeepers, and one would expect no increase in marginal cost to meet excess demand. The theory works well here to explain the denial of recovery.

Bishop recognized that some cases may be neatly explained. A number of variables can affect the calculus, including risk preference, excess capacity constraints, and marginal cost functions. These complicating factors are seen in various cases. In Rickards v. Sun Oil Co., bars, hotels, and restaurants suffered economic harm caused when the defendant negligently collapsed the only bridge connecting their island to the mainland. Although these claims were properly denied, Bishop’s theory does not work well here. An efficient transfer payment does not explain the denial. Some businesses on the mainland may pick up excess demand for certain goods and services without much friction, but the availability of excess capacity is not so apparent. There may be inelasticity of demand or supply for certain goods and services. For instance, the number of hotel rooms cannot be increased absent both excess of demand over a prolonged period and capital commitment to increase the supply. If the demand for hotel rooms is tied to the island location and so they are imperfect substitutes, some of the demand may go unmet and be lost forever. A reduction in hotel capacity may increase hotel rates. Bars and cafes on the mainland may be imperfect substitutes as well, resulting in lost output. We can also speculate that the attractions of the island are a source of tourist-generated income, from which the mainland businesses collaterally benefit. If so, the mainland

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121 See generally G. Edward White, tort law in America: an intellectual history (expanded ed. 2003) (examining the shifting and varied ideas underpinning tort law as developed over time).
122 Perry, protected interests, supra note 80, at 263.
124 Bishop, supra note 15, at 5–11.
125 41 A.2d 267 (N.J. 1945). This fact pattern of access cutoff occurs in other cases as well. See supra note 33.
businesses may actually suffer rather than gain as one may have initially as-
sumed. This simple accident poses complex economic calculations.

The assessment of social cost often "depends upon innumerable partic-
ular facts of interacting markets," suggesting a case-by-case resolution ra-
ther than a per se rule of no recovery—assuming courts are even capable of
such calculations. Common sense suggests that the hypothesis of no social
cost is unrealistic in a world of imperfect information and transactional fric-
tion. In 532 Madison, the deli in Manhattan remained closed for two
weeks. The court's focus was on the deli owner's lost profit. But we
should not ignore the loss of labor. Transition in the labor market is not in-
stant or frictionless. Nor would there have been transfer payment to other
workers. The uptick in business for competitors would have been suffi-
ciently diffused such that they would have drawn upon excess capacity in
labor without purchase of additional labor. Substantial private loss is posi-
tively correlated with social cost, whether due to lack of excess capacity,
imperfect substitution of products or services, inelastic supply or demand,
imperfect information, or transactional friction.

Rizzo is more realistic about social cost. When contracting costs are
low, he argues, the pure economic loss rule "channels" economic loss
claims into physical loss claims to mitigate administrative cost. The ruling
in Robins is justifiable because a denial of recovery incentivizes the char-
terer to contract for the allocation of risk with the shipowner. However,
Rizzo contends that when contracting costs are high, the law permits eco-
nomic loss so long as litigation costs are not too high. This explanation
does not fit the data. Most cases of pure economic loss involve high con-
tracting costs because the parties are strangers. In this respect, Robins is an
unusual case because it involves a nexus of contracts. Rizzo's theory sug-
uggests that the rule of no liability is incorrectly applied in most cases. He ar-
gues, for instance, that Rickards was wrongly decided. This conclusion is
problematic because there is no more quintessential application of the pure
economic loss rule than cases like 532 Madison and Rickards. Notwith-

128 750 N.E.2d at 1099.
129 Bishop's theory has been roundly criticized by others. See Schwartz, supra note 12, at 128; Ra-
bin, supra note 14, at 1536 n.72; Mario J. Rizzo, The Economic Loss Problem: A Comment on Bishop, 2
OXFORD J. LEGAL STUD. 197 (1982); see also Perry, Relational Economic Loss, supra note 10, at 738–
45 (summarizing the criticisms). But see LANDES & POSNER, supra note 51, at 252–53 (rebuttering Ra-
bin's critique of Bishop's theory).
131 Id. at 298.
132 Id. at 301. Like Bishop's theory, Rizzo's theory has been criticized. See Rabin, supra note 14,
at 1535 n.72; see also Perry, Relational Economic Loss, supra note 10, at 777–81 (summarizing criti-
cisms).
133 These cases are frequently cited in scholarship and casebooks. See, e.g., FARNSWORTH &
GRADY, supra note 51, at 281–82; LANDES & POSNER, supra note 51, at 251–54; Perry, Relational Eco-
standing high contracting cost, courts properly and without visible angst deny recovery under the operative facts of a stranger inflicting economic loss on another.134

The reliance on ex ante private risk allocation is misplaced. As explained below, such allocation is not better than letting the losses lie where they fall. The cost of contracting can be high even when ex ante parties are able to identify each other. To show this, we analyze the effect of the liability rule under two conditions.

In the first condition, parties have optimal information, defined as costless knowledge of the probability distribution of the future states of accidental economic loss.135 The risk is uniformly distributed such that no competitor has a pricing advantage. Here, the rule of liability would simply add to a party’s cost of operation, which then flows through to the price in the chain of commerce. In the case of Robins, for example, it does not matter to whom the law assigns the liability (the charterer, the shipowner, or the dry dock), as the cost is ultimately passed through in the pricing to the end users of the ship. The liability rule is irrelevant if the expected cost of liability is perfectly known.

In the second condition, there is suboptimal information, characterized by unknown distribution of future states of accidental economic loss. The parties can estimate the probability, manner, and scale of occurrence, subject to error. This condition better reflects the reality of commerce. In this example, contracting would be difficult. Even if the right contracting party is identified, that party would be uncertain as to pricing of the risk transfer. The parties must estimate the loss and predict liability. Since such estimates would be subjective and susceptible to error, and since each contracting party must price this uncertainty, each would want to be paid a risk premium.136 The effect is predictable: prices would diverge, cost of contracting would increase, and a bargaining impasse would likely result.

This problem is illustrated by Oppen.137 Presumably, the oil company and the fishermen were not total strangers. Working in the vast expanses of the blue sea, each would probably have known of the other’s activity and the oil company’s potential to impart cost on the fishermen’s activity. But there was no contract between them. Nor would we expect one. Know-

nomic Loss, supra note 10 at 725, 779; Rabin, supra note 14, at 1528 n.47, 1535 n.72; Rizzo, supra note 16, at 301.

134 See, e.g., Robins Dry Dock & Repair Co. v. Flint, 275 U.S. 303, 309 (1927) (stating that “no authority need be cited” to justify the pure economic loss rule).

135 To keep this condition somewhat realistic at least, we assume that there is not perfect information as to all other factors of outcome, such as judicial outcomes.

136 The pricing of insurance premiums is instructive. The premium is calculated as: \( P = E(S) + k + R \), where \( E(S) \) represents the mathematical expectation of claims, \( k \) is the operating expenses, and \( R \) is a risk premium that allows for unforeseen deviations in the claims amount. ERIC BRIYS & FRANCOIS DE VARENNE, INSURANCE FROM UNDERWRITING TO DERIVATIVES: ASSET LIABILITY MANAGEMENT IN INSURANCE COMPANIES 6 (2001).

137 501 F.2d 558 (9th Cir. 1974); see supra text accompanying note 63.
ledge of the contracting party's identity and even some crude estimate of the risk are not enough. Assuming that both parties had a common understanding of the liability rule of the fishermen exception (a reasonable assumption for a sophisticated oil company at least), an ex ante agreement on risk allocation would still have been difficult. There would have been no measurable risk to calculate expected loss. Also, there would have been asymmetric information: the oil company as to prospective oil spill and the fishermen as to prospective catch. Bargaining would have been difficult given the uncertainty, information asymmetry, and each party's need for a risk premium. In a condition of uncertainty, the belief that parties can adequately contract to allocate the risk of pure economic loss is illusory.

Lastly, a theory of the pure economic loss rule, at least one purporting to be a positive theory, should account for the fishermen exception. Yet tort scholars have not only failed to explain the exception, but have also shown a puzzling lack of interest. Scholars have dismissed the exception as an esoteric oddity that merits no general interest, or have proffered conclusory explanations, or have suggested that the doctrine is simply wrong. Economists have considered the exception more ambitiously, trying to glean some theoretical significance. But the exception has become a Rorschach test. Rizzo explains that the fishermen in Oppen recovered because the lack of ownership of the commons precludes channeling the dispute through contracts. Bishop explains that they recovered because there is clearly a social cost associated with an oil spill. William Landes and Richard Posner similarly explain that the supply of fish was inelastic. Since their inelasticity argument is based on a social harm to the commons for

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138 Cf. Barber Lines A/S v. M/V Donau Maru, 764 F.2d 50, 54-55 (1st Cir. 1985) (Breyer, J.) (arguing that contractual risk allocation may be more efficient); EVRA Corp. v. Swiss Bank Corp., 673 F.2d 951, 957-59 (7th Cir. 1982) (Posner, J.) (arguing that the plaintiff was in a better position to measure the risk and take precautions against economic loss); see Miles, supra note 19 (analyzing Posner's opinion in Swiss Bank).


140 See Perry, Economic Bias, supra note 3, at 1616 (doctrine is "irrelevant"); Rabin, supra note 14, at 1535 n.72 (Union Oil Co. v. Oppen holds "no general interest").

141 See TWERSKI & HENDERSON, supra note 19, at 365 (fishermen have "quasi-property interest" in the bounties of the sea); Denise Antolini, Modernizing Public Nuisance: Solving the Paradox of the Special Injury Rule, 28 ECOLOGY L.Q. 755, 773 n.65 (2001) (preclusion would result in "unfairness"); Richard A. Epstein, Too Pragmatic by Half, 109 YALE L.J. 1639, 1654 (2000) ("[C]onvenience favors allowing actions by immediate parties with large stakes, such as fishermen."); Stapleton, supra note 11, at 568 (fishermen had a "reasonably foreseeable, special connection" to the sea).

142 See Goldberg, Recovery for Pure Economic Loss in Tort, supra note 6, at 273 ("The case for compensating the future losses [of fishermen] is much weaker.").


144 Bishop, supra note 15, at 25-26 (citing Union Oil Co. v. Oppen, 501 F.2d 558 (9th Cir. 1974)); see also LANDES & POSNER, supra note 51, at 251-52 (agreeing with Bishop's theory).

145 LANDES & POSNER, supra note 51, at 252.
which private citizens should have standing to prosecute a socially beneficial suit, Landes and Posner do not distinguish between commercial and recreational fishermen.146

These explanations are not implausible. The cost of contracting was high in Oppen, and harm to the commons is a social cost. But these facts do not inevitably merit an exception for fishermen. The cost of contracting was no less for other victims of the oil spill, such as boat owners, hotels, restaurants, and bars. Rizzo explains that only fishermen were allowed recovery to keep down litigation cost. This argument still does not explain why fishermen benefit, unless one supposes that someone has to have standing to pursue a claim and fishermen are just as good as anyone else. This explanation of keeping down litigation costs seems rather random. The result is even stranger if recreational fishermen are allowed to sue for the value of sporting enjoyment or catch, as Landes and Posner suggest, but businesses such as hotels and restaurants could not recover.

Bishop is more specific. Unlike other economic accidents, there is a clear social cost in the spoliation of the sea.147 It is widely accepted that the commons creates classic resource allocation issues.148 Bishop argues that fishermen are allowed recovery because their self-interest makes them the most reliable parties to enforce proper activity on the commons.149 But this explanation is incomplete. Sanctions and deterrence are not exclusive to tort law. An oil spill can result in regulatory fines and mandated cleanup.150 There is no explanation for why public enforcement could not deter suboptimal behavior, particularly if there is a wide discrepancy between public harm and private loss, or why the combination of public and private actions would achieve better results. Given that the commons is a public resource, the government should be the natural plaintiff and all recoveries should go to the public treasury, from which presumably compensation to private victims can be made through the political process.151 In this respect, the fishermen can be seen as jumping the queue of compensation. It is not clear why they should be specially entitled. They are not the only self-interested victims of an oil spill. As the caselaw notes, the shipowner and the fishermen are involved in a joint enterprise. Borrowing from Rizzo, we can make

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146 Id. at 252 n.50; see also Pruitt v. Allied Chem. Corp., 523 F. Supp. 975, 978 (D. Va. 1981) ("Presumably, sportsfishermen share the same entitlement to legal redress for damage to the Bay's ecology.").
148 See generally Harold Demsetz, Toward a Theory of Property Rights, 57 AM. ECON. REV. 347 (1967) (exploring different types of property ownership rights, including communal ownership).
150 See, e.g., In re Exxon Valdez, 270 F.3d 1215, 1223, 1225 (9th Cir. 2001) (Exxon spent over $2 billion in cleanup of Prince William Sound, settled $900 million with Alaska and the United States to restore the environment, and was fined $125 million); 33 U.S.C. § 2702(a) (2006) (providing liability for "removal costs" incurred in an oil spill).
the equally plausible argument that shipowners should receive the benefit of the exception because this rule of liability would channel economic claims to property owners.152

The proffered explanations are not meritless. The pragmatic objection cannot be ignored, if for no other reason than it figures prominently in judicial deliberation. The economic explanations are important as well. The calculation of social cost in an accident involving a physical loss is simpler; the calculation in the cases of pure economic loss is ambiguous and subject to a more complex calculus.153 Administrative costs of dispute resolution are substantial and are a major aspect of the problem. Still, the proffered explanations are incomplete. An accident involving private economic loss typically involves some social cost, though the latter may be less apparent than a physical loss and perhaps less than the private cost as well.154 The cost of contracting among strangers is prohibitively high, and the cost of resolving the indeterminacies of economic loss can be high as well. But tort actions always involve high cost. The pragmatic objections can be assuaged through a refined system of exceptions, similar to the way that claims for emotional distress are handled. The absence of any judicial attempt in the past one hundred years of tort law's evolution (perhaps revolution) speaks volumes. It is unlikely that instrumental concerns alone would have produced the rule's universalism.

The pragmatic objections are, as Stephen Perry has observed, "just an incidental aspect of a more fundamental but not very clearly delineated concern that even so has at least occasionally surfaced in the case law."155 This Article intuits a theory percolating below the instrumental concerns that has silently preserved the distinction between the consequential and pure economic loss rules. Absent the precise articulation of this theory, these instrumental explanations, which are consistent with judicial decisions, have created a doctrinal mythology that is correlative as to the outcomes but misleading as to their underlying cause. The current intellectual framework is unsatisfactory because it tends to conceptualize the rule as an insulated body of tort law rather than situating the doctrine in the broader context of economic organization.

III. PRODUCTION, UNCERTAINTY, AND PROFITS

The pure economic loss rule is unique in tort law in that it fundamentally deals with business affairs. The essential complaint is that negligence

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152 But see Exxon Valdez, 270 F.3d at 1221 ("This is a case about commercial fishing... The verdict in this case was for damage to economic expectations for commercial fishermen.").
153 See Bishop, supra note 15, at 13 ("But what exactly is the social cost of an accident is a very complex matter. The answer depends upon innumerable particular facts of interacting markets.").
154 Schwartz, supra note 12, at 128.
155 Perry, Protected Interests, supra note 80, at 263, 266 ("The so-called pragmatic concerns... [are] just the surface symptoms of an underlying concern along these lines.").
adversely deviates outcome from expectation, which should be entitled to legal protection. An axiom of tort law is that wrongfulness of an act cannot be answered in the abstract. It is irrelevant that the defendant economically harmed the plaintiff in some causally irrefutable way. In claiming, the plaintiff would inflict loss on the defendant. The indeterminacy arising from reciprocity of harms is more acceptable in the doctrine of economic loss as it is difficult to elevate tort analysis to the realm of morality and corrective justice when the stake is no more than money and risk in commercial activity. The doctrine is more suited to a contextualized economic analysis. That context requires an understanding of (1) business risk and its relation to factors of production, and (2) the relationship between uncertainty and profit.

A. Factors of Production

The central problem in business enterprise is the management of risk in the pursuit of profit. The world is not static; the future is not preordained; the outcome is contingent. Business risk is the risk associated with operating cashflow: for example, an outcome hinges on economic environment, competitive landscape, management competence, legal liability, and fortuitous events, to name a few factors. Profit or loss flows from the outcomes of these contingencies, and thus business risk is the risk associated with profit expectation. Although infinitely diverse, the sources of business risks can be organized into two categories: risk affecting the factors of outcome, and risk affecting the factors of production. Factors of outcome are self-explanatory: all sources of contingencies influencing profit or loss. From this complete set of risks, we carve out a special subset of risk affecting factors of production. These are the indispensable assets of the production function, as explained below.

1. Property and Asset Distinguished.—A factor of production includes capital assets, such as machinery and buildings, and any other kinds of private property used in the production function. Wrongful destruction results in recovery under the consequential economic loss rule. A factor of production, however, is not limited to private property protected under tort

156 See Palsgraf v. Long Island R. Co., 162 N.E. 99, 99 (N.Y. 1928) ("Proof of negligence in the air, so to speak, will not do." (quoting SIR FREDERICK POLLOCK, TORTS 455 (11th ed. 1920)) (internal quotation marks omitted)).
160 FABOZZI & MODIGLIANI, supra note 159, at 455.
law: namely, assets characterized by physicality, precise definition, ascertainable value, private ownership, and alienability. The fishermen exception demonstrates this fact, as fishermen need not own the damaged boat to recover. Certain enterprises, such as fishing, mining, energy, and even technology, integrate assets including rights with an economic value that are not private property in the production function. For instance, seas and rivers may be public property or not, and the Internet is a thing not capable of private or public ownership but nonetheless has profound consequences on economic production. For some firms or enterprises, communal property and other economic assets not subject to private ownership are the most important factors of production. Thus, a factor of production need not be property, but may be a part of the broader class of economic assets such as the Internet or natural resources that are integrated into the production function.

2. Requirement of Integration.—A property owner has the power to exclude others from possession or use, thereby enjoying the right to use or consume an asset. Consequential economic loss is recoverable because remedy for lost consumption or use should incorporate the earning capacity of the property, as property in general is frequently valued in these terms. If, however, the thing harmed is not property and economic loss results, the asset must be indispensible to the production function. It is crucial to understand that mere importance of the asset to outcome is not enough. There are many assets or factors that are important to business outcome. For example, a resort hotel has a crucial interest in the quality of the surrounding neighborhood, the pristine state of natural attractions, the quality of air, and—the most important factor of profitability—the state of the national economy. But obviously harm to these things, however important to the hotel’s business, cannot give rise to a claim for economic loss. If the particular asset is not controlled through private property rights, the criterion by which a thing is a factor of production or merely a factor of outcome is the integration of the particular asset directly into the production function. When feasible, courts seek to protect enterprise in a manner consistent with this principle. This concept is abstract, perhaps illusory, but we can discuss it more concretely.

162 See Kaiser Aetna v. United States, 444 U.S. 164, 176 (1979); Thomas W. Merrill, Property and the Right to Exclude, 77 NEB. L. REV. 730, 730 (1998). Knight notes that ownership "consists essentially of the combination of the rights of control and of usufruct." KNIGHT, supra note 28, at 352. Stephen Perry argues that the distinction between pure and consequential economic loss is not arbitrary because the harm invoked by the consequential economic loss cases "is the loss of use of the property." Perry, Protected Interests, supra note 80, at 269. The loss of use of property, however, cannot be the distinction as this would entail contractual rights seen in Robins.
163 See infra note 179 and accompanying text.
Compare a parcel delivery firm’s interest in a well-maintained bridge to a fisherman’s interest in the sea. The fisherman cannot be excluded from the commons, absent the exercise of the state’s police power, and he has extraction rights in the bounty of the sea’s resources. The sea is an asset that is integrated into the production function, meaning that the activity of fishing is not possible without the particular asset. Without that asset, the production capability is lost. On the other hand, any given road or bridge is important to the delivery of a package, but we cannot say that the production function is impossible without the integration of the particular road or bridge into the production function.

It is true that a transportation infrastructure, to which any road or bridge belongs, is a vital element of production, and this is a point that critics of the production theory will surely raise. However, this argument is a slippery slope that leads to both nothing and everything. Sometimes lines must be drawn finely. In this example, there is a qualitative difference between the fishermen’s extraction rights in the sea and the general interest of all businesses in a well-maintained transportation infrastructure. The litmus test is indispensability as evinced by an integration of the particular asset into the production function. If a particular road or bridge is so indispensable, a parcel delivery firm can pursue ownership of it, can contract for its control, or can find substitutes such as other routes or modes of delivery such as air, ship, or electronic. Indeed, one way to view a firm is as a nexus of factors of production bound by contracts and property, the inference drawn being that assets that are not a part of this nexus are not indispensable to production. Both the bridge and the sea are important to the outcome, but the nature of the interest in them is different by virtue of the rights in them and the nature of asset in relation to the business model. The bridge is a factor of outcome, but the sea is a factor of production.

This analysis is supported by the law of public nuisance. In Burgess v. M/V Tamano, the defendant spilled oil onto the coastal waters of Maine, and fishermen and clam diggers sued for loss of prospective catch. The right to fish and harvest clams is not a private right, but a public right held in trust by the state. Nevertheless, a private plaintiff may recover for an invasion of a public right if he can show “damage different in kind, rather than simply in degree, from that sustained by the public generally.” While noting that this line is sometimes difficult to draw, the court distinguished the fishermen’s and clam diggers’ “special interest, quite apart from that of the public generally,” from the claims of other harmed businesses such as motels, restaurants, and groceries whose businesses de-

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166 id. at 249–50.
167 Id. at 250 (citing, among others, William L. Prosser, Private Action for Public Nuisance, 52 VA. L. REV. 997, 1004–11 (1966)).
sisted on the tourist trade associated with a pristine Maine coastline. Fishermen and clam diggers had their livelihood and businesses destroyed, whereas other businesses "[did] not assert any interference with their direct exercise of a public right." The latter simply suffered the "common misfortune" of living life in an uncertain world. The essential lesson is that fishermen and clam diggers have a right to integrate the sea into the production function in a way that the particular asset is indispensible to the enterprise. Stated differently, the activities of fishing and clam digging, which are economically important, cannot exist without the sea or coastline.

Another illustrative case is *Masonite Corp. v. Steede.* The plaintiff's business, located adjacent to a river, provided fishing equipment rentals, boats, lodging, and food, but the plaintiff was not engaged in the activity of fishing. The defendant polluted the river and as a result killed its fish stock. The defendant argued that the plaintiff cannot claim lost profit because she did not own the river or its fish stock. The court rejected this argument. It noted that the plaintiff had the right to take the fish and also the right to permit or exclude on her terms others from obtaining access to the river through her property. This right was integrated into a "commercial purpose" so much so that the business, located on the plaintiff's private property abutting the river, could not be extricated from the right to permit others to access the river and so became "virtually a part of it." The killing of the fish stock destroyed the plaintiff's essential business model by taking away an indispensible asset that is integrated into the production function, and thus "the principal element of the value of this right of the plaintiff was destroyed."

These public nuisance cases highlight the distinction between a factor of outcome and a factor of production. Mere bad outcomes cannot be the bases for recovery of profit expectation. Innumerable factors affect the outcome of businesses, but these factors cannot be the bases for a proposition that tort law does or should protect profit expectation. This line is not always clear, but generally tort law does not and should not protect adverse outcomes in economic loss cases. Courts understand that the future is inherently uncertain. Only when that adverse outcome flows from a destruction

168 Id. at 250–51.
169 Id. at 251.
170 Id. (quoting WILLIAM L. PROSSER, LAW OF TORTS, § 88, at 591 (4th ed. 1971)).
171 Other cases have recognized a fishermen's "special interest" in the public right to fishing and thus their right to recover economic loss. See, e.g., Columbia River Fishermen's Protective Union v. City of St. Helens, 87 P.2d 195, 197 (Or. 1939).
172 23 So. 2d 756 (Miss. 1945).
173 Id. at 758. The point here is that the "fishermen" exception is not an exception for a special occupational class but is a part of a class of cases with a common principle. The fishermen cases are prominent because these cases most commonly present the fact pattern that invokes the principle.
174 Id. at 757–58.
175 Id. at 758.
176 Id.
of a factor of production tort law does and should provide a remedy because production is a normative good. A fundamental attribute of a factor of production is the integration of a particular property or asset into the production function such that the particular asset is indispensable to production.

3. Requirement of Noncontractual Right.—A contractual right in property used in the production function, as was the case in Robins, is not a factor of production. An enterprise, whether through a firm or an entrepreneur, must collect all factors of production. These rights can be either acquired or rented.\(^1\) We limit the definition of a factor of production to a noncontractual interest in property or asset. The reason is simple: leased property is a factor of production for the owner.\(^2\) The owner has rights in the value of the property, which if rented throughout the useful life should equal the capitalized value of the rental income.\(^3\) The structure of these rights means that, in a competitive market, the lessee cannot earn profit from the leased property unless one of two possibilities exist: (1) the market rate subsequently exceeds the contract rate (because the lessee had better judgment on price or was lucky), or (2) the lessee adds value to the property in the production of the output.\(^4\)

The first possibility is seen in Robins. The plaintiff charterer lost profit from the negligence-induced delay because the price of shipping services soared in World War I and the charter market price exceeded the charter contract rate.\(^5\) Here, the true determinant of profit (the factor of outcome) is not the existence of the contractual right to possess and use the boat. To be sure, the contractual right is the condition precedent to the outcome, but the outcome itself is not contingent upon the contract. The contingency is exogenous. After the execution of the lease with the shipowner, war could have come to an end and the market price for charters could have declined, in which case the dry dock's negligence would have terminated the charterer's high cost rent to the shipowner. The value of the contractual right is


\(^{178}\) SeeKnight, supra note 28, at 306 (residual income belongs to the owner of property as property rent).

\(^{179}\) "The theory of the income capitalization approach is based on the premise that value is equal to the present value of the cash flow and reversionary value the property will produce over a reasonable holding (ownership) period." JAMES R. HITCHNER, FINANCIAL VALUATION: APPLICATIONS AND MODELS 352 (2d ed. 2006). This method is the primary value indicator for commercial assets. Id.

\(^{180}\) The suggestion is not that the actual market is perfectly competitive, but simply that contract spreads on rentals, like other arbitrage opportunities, are hard to find.

\(^{181}\) Goldberg, Recovery for Pure Economic Loss in Tort, supra note 6, at 252. The parties agreed to a rent of £250 per month. Id. This price was well below the market price. Id. The plaintiff chartered the ship in 1915 for twenty-six months at a rate of £11,200 per month, and the ship was rechartered to another party for nearly £16,995 per month for a sixteen-month term beginning on August 1, 1917. Id.
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contingent on fluctuating forward prices, which is simply a price risk. By renting property, the entrepreneur bets on a favorable movement in price; profit is earned because she is either skilled in such prediction or is lucky. Thus, the source of profit is the fortuity of the forward price rather than the existence of the contractual right, which is the condition precedent to the outcome.

In the second possibility, the profit is not made from the rented property, but instead from the lessee's addition of input. In this example, there is no positive spread between the contract and market rates. The charterer profits only by providing a value-added service or good. Perhaps the charterer provides a safer shipping route in a time of war, or the ship is modified for special services. The profit is contingent on the lessee's inputs and not on a contract spread. The loss of a chartered ship may result in lost profit, but since there is no positive rate spread we assume that adequate substitutes would be available without economic loss. The charterer's inputs are the factors of production, and not the leased property.

This example illustrates two key points. First, it shows that property is a factor of production for its owner, who earns a yield on property equal to its value. Second, the risk of property loss is a factor of outcome for the renter, who either earns an ex post profit or loss from an ex ante wager on the value of the contract or profits from some valued-added production process. As Holmes alluded in Robins, the loss of the charterer is the loss of contractual value. A loss would result in a claim of economic loss by its owner, and the renter is left to his rights in contract or the market for substitute assets, though obviously the loss could cause a poor outcome. Thus, rented property is excluded from the definition of a factor of production because profit flows not from the contract, which is simply a means of economic exchange, but rather from prospective changes in price or the lessee's inputs.

182 KNIGHT, supra note 28, at 281-82, 311.
183 Market participants are not helpless in the face of fortune's winds. The charterer could have taken a number of steps to hedge this risk: for example, entering into forward contracts with subcharterers to lock in prices, or, less likely, a derivative type wager on the forward prices of shipping contracts. Such contracts have existed for centuries. See ARISTOTLE, POLITICS, bk. I, ch. 11, reprinted in THE BASIC WORKS OF ARISTOTLE 1142 (Richard McKeon ed., 2001) (describing the use of option contracts in the olive oil market). Alternatively, if war was the principal driver of price, the charterer could have entered into a wager on war's end or continuance, which would have imperfectly hedged the risk of an adverse future price movement. These steps would not secure prospective profit because such hedging is always associated with a cost. There is not only the obvious transaction cost associated with hedging, but also we cannot ignore the fundamental nature of the transaction, namely, the charterer must assume an adverse economic consequence of a forward rate swap if the rates increase.
184 275 U.S. 303, 308 (1927) ("Their loss arose only through their contract with the owners.").
We can now give a precise definition to a factor of production, which is the concept that distinguishes the consequential and pure economic loss rules: a factor of production is an indispensible economic asset, owned or unowned, that is integrated into the production function of the enterprise in which the entrepreneur has a noncontractual right directly affecting profit or loss.

B. Uncertainty and Profit

The relationship between uncertainty and profit is an essential foundation for the normative implications of fashioning a liability rule on pure economic loss. The thesis here is that the pure economic loss rule expresses a judicial acknowledgement of a market economy and the structure of our political economy. In such a system, uncertainty of outcome is a condition precedent to market transactions, and thus courts abstain from rearranging outcomes under uncertainty.

Before unpacking the analysis, we need precise definitions of risk and uncertainty. As used in this Article, risk means the chance or possibility of a loss. This is the ordinary dictionary use of the term, expressing the quality of a contingency. True risk is the economic definition of risk, which is a measurable contingency, such as a priori or statistical probability, reducible to a statement of relative frequency. Uncertainty is an immeasurable contingency. This concept is important because, as explained later, most business decisions are made in the context of uncertainty.

The relationship between uncertainty and profit was studied by Frank Knight in his classic treatise Risk, Uncertainty and Profit. There, Knight said that uncertainty presents a great paradox of life: “the very idea of intelligent conduct implies an effort to reduce uncertainty, while none the less we recognize, on any calm, cool contemplation of the matter, that a life with uncertainty eliminated or perhaps even very greatly reduced would not appeal to us.” This insight applies to business affairs as well. A rational market actor does not assume risk without compensation. Although people have different attitudes towards risk, rational conduct in business

185 KNIGHT, supra note 28, at 224–25.
186 Id. at 19–20, 232.
188 KNIGHT, supra note 28, at 348; see also Fischer Black, Noise, 41 J. FIN. 529, 530 (1986) (positing that a stock market is impossible without uncertainty).
189 Harry Markowitz, Portfolio Selection, 7 J. FIN. 77, 77 (1952).
strives to mitigate uncertainty. But there are limits to how much risk can be reduced, even with devices such as insurance. The outcomes of what risk remains, which is great, are subject to the law’s rearrangement if courts or society so wishes.

This Article argues that courts have a sophisticated intuition of the role that uncertainty plays in commerce. As discussed below in this section, the pure economic loss rule reflects the reality that most market transactions are subject to uncertainty. Risk management techniques, here primarily insurance, can only mitigate some risk, and there are inherent limitations on insurability. The implication of these realities, this section shows, is that when fashioning liability rules, courts have recognized that market outcomes are in part a function of uncertainty, and that the law should not intervene by rearranging outcomes absent a compelling policy prescription.

1. Uncertainty and Market Transaction.—Uncertainty is the vital element in an economy based on market exchange. It is the condition precedent to profit. The source of profit is “a margin of error in calculation on the part of the non-entrepreneurs and entrepreneurs who do not force the successful entrepreneurs to pay as much for productive services as they could be forced to pay.” In other words, an entrepreneur profits only upon the error of those with whom she contracts for rent of their factors of production. This was the case in Robins before the defendant dry dock negligently eliminated the charterer’s opportunity to profit from its favorable bargain. An entrepreneur engages in enterprise for a claim on the residual income because she believes her skills and judgment are superior to the skill and judgment of others.

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191 KNIGHT, supra note 28, at 285 ("The presence of true profit, therefore, depends on an absolute uncertainty in the estimation of the value of judgment, or on the absence of the requisite organization for combining a sufficient number of instances to secure certainty through consolidation."). Knight defines standard business usage of profit as “the entrepreneur’s net income, what remains out of the gross proceeds of the business after paying the hired labor and capital at the agreed rates, determined by market competition.” Frank H. Knight, Profit and Entrepreneurial Functions, 2 J. ECON. HIST. 126, 127 (Supp. 1942); see also KNIGHT, supra note 28, at 280, 284 (defining profit as the residual income after the payment to all factors of production). Knight distinguishes this general understanding of profit from “pure profit,” which also deducts the “going rate” wages of the entrepreneur were he to rent his labor. Knight, Profit and Entrepreneurial Functions, supra, at 127.

192 KNIGHT, supra note 28, at 284.

193 See supra notes 181–183.

194 Knight commented that entrepreneurs have “an irrationally high confidence in their own good fortune.” KNIGHT, supra note 28, at 366. Adam Smith similarly observed that overconfidence “is an ancient evil.” ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS 124 (Edwin Cannan ed., 1994) (1776). As a result of this overconfidence, Knight believes that “business as a whole suffers a loss.” KNIGHT, supra note 28, at 365.
Profit can exist only in a state of uncertainty because the absence of uncertainty leads to a state of perfect competition. There is perfect information, meaning costless communication among all members of society. Production is in perfect relation to wants and needs, and thus supply and demand are met perfectly. Uncertainty is eliminated. All economic exchanges can only take place at one price. All transactions are self-executing. Division of labor and specialized risk-taking by entrepreneurs lose their meaning because there would be no markets for such functions. Economy and life run automatically based on perfect, costless information that eliminates uncertainty. Under these conditions, profit is impossible.

Perfect competition would ensure that the marginal cost of a production input is priced at the marginal benefit such that there is no profit.

Perfect competition is not reality. Life and commerce are subject to risk, which explains the existence of insurance. Contingencies can be distinguished between uncertainty and true risk. Knight reasoned that the outcomes of most business decisions are uncertain because they are made under unique circumstances such that all future states of outcome or their statistical probabilities cannot be known. One may think of an outcome in terms of relative frequency or statistical likelihood, but such thinking is "meaningless and fatally misleading." As a general rule, information is less than perfect and knowledge is incomplete. If most business decisions are a matter of calculating a measurable risk (true risk), outcomes would be known and business operation would be a series of self-executing transactions. We would see such equilibrium in a state of perfect competition, particularly for large enterprises that can rely on repeat play and the law of large numbers to ensure minimal variance from probabilistic expectation. While this suggests the business model of an insurer, the business of insurance, like all other enterprises, is not guaranteed a profit. Otherwise, insurers would soon discover that there would be no profit to enjoy as the arbitrage opportunity would disappear with competition. Risk classification is imprecise. There remains a large degree of uncertainty in the insurance business as the industry has learned from its exposure to underwriting risk, market risk, bad management, legal liability, and natural and manmade catastrophes. Thus, the production function of any enterprise is fraught with uncertainties of future outcomes.

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195 KNIGHT, supra note 28, at 78, 86.
196 Id. at 82.
197 See Knight, supra note 191, at 127 ("[f]or it will be evident to anyone with a rudimentary understanding of economic processes and analysis that profit (always in the sense of pure profit) would be absent under the conditions of equilibrium with 'perfect competition' . . . .").
198 See supra notes 185–186 and accompanying text.
199 KNIGHT, supra note 28, at 231.
200 Id.
201 Id. at 199, 259.
202 Id. at 237–38.
2. Limits of Risk Mitigation and Transfer.—Because uncertainty is a bad thing, the rational person strives to mitigate it. An entrepreneur can mitigate risk of an adverse outcome through financial intermediation. The most obvious is insurance. But only a limited segment of the factors of outcome are subject to control through insurance. The limitation follows from the standard for insurability, which is characterized by: existence of insurable interest; homogenous, quantifiable, fortuitous, noncatastrophic, and noncorrelative qualities of risk; definable and measurable parameter; absence of moral hazard; and economic feasibility of premiums.

There is no robust insurance market for pure economic loss. Third-party liability insurance for economic loss claims does not exist because the pure economic loss rule eliminates the need for it. If the general rule allows recovery, then liability insurance must figure prominently. But the provision of such insurance would be challenging. An insurable risk should be definite and measurable. It requires a sufficiently large number of homogenous exposure units for losses to be predictable and individual risk should be uncorrelated such that the law of large numbers reduces the risk of the pool. As Cardozo observed, however, the risk of economic loss is more heterogeneous and indeterminate. Liability for economic loss can vary greatly among individual accidents such that the risk pool would experience greater variance. This concept does not preclude insurance, but it does increase cost. Furthermore, there may be significant correlation of losses as well. Among other reasons, events like flood and nuclear accidents are excluded in the private market because there is high correlative risk. A single event, such as an auto accident in the Brooklyn Battery Tunnel during rush hour, can trigger large liability due to the correlative nature of the risk pool. This potential for catastrophe creates parameter uncertain-

203 Markowitz, *supra* note 189, at 91; see also Knight, *supra* note 28, at 347 (calling uncertainty "evil").


205 Telephone interview with Barry Bablin, Senior Vice President, Cas. & Actuarial Servs., Farm Family Cas. Ins. Co. (Feb. 17, 2009). Bablin suggested that a policy for business interruption for covered loss of another person’s property is not prevalent. Such risks are difficult to price and premiums would not be price effective for policyholders. If such a market for pure economic loss exists, he suggested that it would be found in the specialized excess and surplus lines. *Accord* Telephone interview with Steven Sachs, Managing Dir., Nat’l Real Estate Practice, Hilb Rogal & Hobbs (Feb. 10, 2009) (confirming broadly Bablin’s points).


207 Vaughan & Vaughan, *supra* note 204, at 41.

208 Id.

209 See *supra* note 87 and accompanying text.

210 See Pryor, *supra* note 206, at 908 ("On the supply side, combining coverage for pure economic losses into the same coverage as accidental bodily harm would be difficult.").
on the true expected losses of the pool, which would require a substantial
risk premium.\textsuperscript{211}

Because we do not anticipate the sudden death of \textit{Robins} anytime soon,
an insurance market, if feasible, would provide first-party loss insurance.
This market, however, faces hurdles. First, identifying a policyholder’s in-
surable interest may be difficult.\textsuperscript{212} A policyholder cannot insure prospective profit expectation because of moral hazard. An insurable interest exists only if the insured would incur a financial loss upon the occurrence of a covered fortuitous event.\textsuperscript{213} Lack of ownership of property does not preclude an insurable interest required to define a covered loss, but it does make insurability more difficult. If the insured would sustain a loss by a direct harm to a specific property, the policyholder could be said to have an insurable interest irrespective of title or possession.\textsuperscript{214} At the same time, the loss must be “a direct, and not mere remote or consequential, effect.”\textsuperscript{215} In some cases, the fortuitous event can be narrowly defined—for example, a store in a strip mall can purchase business interruption insurance by defining a covered event as a fire that closes a third-party’s anchor store. In many cases, however, the fortuitous events cannot be so limited. The fortuities that can close a Manhattan street or cut off an island access are too many and varied in nature. The risk may not be so easily defined or measured for the purpose of contracting for a risk transfer.\textsuperscript{216}

Another consideration is the cost of insurance. \textit{Robins} is again illustrative in the sense that the plaintiff charterer may have had an insurable interest in the boat. Insurance would not have been efficient for both the owner and the charterer to purchase separate policies. Private insurance includes a substantial loading charge ranging from ten to fifty percent of the premium.\textsuperscript{217} Efficient contracting should require one party to bear insurance, and the parties would privately apportion this cost in the charter contract.

\begin{itemize}
\item \textsuperscript{212} Absent an insurable interest, an insurance contract is void as a wagering contract. \textit{Lee R. Russ \& Thomas F. Segalla, 3 COUCH ON INSURANCE} §41:1 (3d ed. 2009).
\item \textsuperscript{213} HARRINGTON \& NIEHAUS, \textit{supra} note 159, at 195; VAUGHAN \& VAUGHAN, \textit{supra} note 204, at 41, 161.
\item \textsuperscript{214} 3 COUCH ON INSURANCE, \textit{supra} note 212, §41:11, at 21–22.
\item \textsuperscript{215} \textit{Id. at 26; see also Secura Ins. Co. v. Pioneer State Mut. Ins. Co.}, 470 N.W.2d 415, 415–16 (Mich. Ct. App. 1991) (leasehold is not an insurable interest).
\item \textsuperscript{216} Interestingly, the deli in 532 Madison Avenue achieved a $100,000 settlement for business interruption with its insurer though it did not suffer a physical loss. \textit{Interview with Ms. Cho, in her store at 532 Madison Avenue (Feb. 27, 2009)} (full name not given). Cho indicated that most other businesses that suffered economic loss did not recover from their insurers.
\item \textsuperscript{217} HARRINGTON \& NIEHAUS, \textit{supra} note 159, at 170. The loading cost of insurance is cheaper than the cost of litigation. \textit{Rhee, \textit{supra} note 25}, at 159 n.159, 164–65; \textit{see also} \textit{Barber Lines A/S v. M/V Donau Maru}, 764 F.2d 50, 54 (1st Cir. 1985) (Breyer, J.); \textit{James, \textit{supra} note 5}, at 52.
\end{itemize}
In other words, bearing the cost of contracting would probably be cheaper than paying the loading charge twice through the purchase of two policies.

Still other problems may practically limit the use of insurance to mitigate fortuitous economic risk, as in the situation of fishermen. Even if there is an insurable interest in the owner’s boat, feasibility of a marketable product is not likely. The shipowner has made a permanent capital investment in the boat, which necessitates insurance to protect it. The relationship between ship owner and fishermen may be coequal in substance, but the enterprise may be temporary arrangements. Fishermen would seek business interruption insurance contingent on a covered loss of the boat only during the time it is in service, and they may not be connected to a particular boat for sustained durations. Not insubstantially, the administrative cost may be abnormally high as the insurance product would not be standard. Thus, an insurance market does not exist here because the fisherman is better off absorbing the cost of searching for another job rather than paying for a complex, costly insurance policy on a temporally indeterminate basis.

A standardized private insurance market for pure economic loss would be difficult to achieve at feasible pricing.\(^2\)\(^1\)\(^8\) Foremost, there would be a substantial risk premium added to such insurance. The factors of outcome in business are potentially infinite. The uncertainty of potential liability creates an information void, which widens the bid-ask spread on risk transfer. Supply and demand may be constrained by difficulties of insurability, and these constraints may preclude a clearing price, or if there is such a price the supply demand may dictate an equilibrium at low quantities and high prices. Such policies would serve special risks of sophisticated policyholders, who can exercise bargaining leverage to include such nonstandard coverage as part of a larger risk management program.

These difficulties in contracting are not exclusive to the formal risk market of insurance, but such difficulties also influence the calculation of contracting parties when they seek to allocate risk directly as counterparties. As a general proposition, risk transfer solution to economic accidents is superficially appealing, but its execution would be difficult. Notably, it would not be cost free—the contractual arrangement must include an estimate of loss or liability and risk premium commensurate with the type of risk. Risk transfer, per financial intermediation or nonintermediated private contract, is most efficiently realized when the contingency is true risk, a calculable probability. Many of the standards of insurability function to

\(^2\)\(^1\)\(^8\) See Rabin, supra note 14, at 1537 (noting the insurability problem); supra note 205 (describing the absence of a general market for pure economic loss coverage); see also ROBERT E. KEETON & ALAN I. WIDISS, INSURANCE LAW § 3.4(a)(5), at 168–72 (West 1988) (discussing the problem of finding an insurable interest in factual pecuniary expectancies). The economist Robert Shiller notes that insurance removes only a small slice of the potential risks facing most people, and that the most important risks, such as a market decline in home value and the economic value of one’s occupation, cannot be insured against or hedged. ROBERT J. SHILLER, THE NEW FINANCIAL ORDER: RISK IN THE 21ST CENTURY 21–45 (2004).
drive insurable risk towards true risk.\textsuperscript{219} When uncertainty is involved, risk transfer becomes more difficult and there is a commensurate risk premium charged. Insurance or private contract can only transfer such risk at greater cost, and this reality makes the removal of uncertainty in a transaction less practicable for any party. Thus, prospective profit cannot be assured, and any attempt to mitigate uncertainty cannot be achieved in a manner that assures the profit expectation.

Insurance is not the only means of financial intermediation. The entrepreneur can also mitigate risk by spreading it to a group of capital providers and structuring economic claims against the enterprise with tiered risk and return.\textsuperscript{220} The most elementary form of economic enterprise is the sole entrepreneur. Beyond this simple model, an enterprise can be seen as a collection of economic claims in a process of joint production.\textsuperscript{221} Certain groups are more risk averse and therefore choose a higher priority claim, such as a fixed wage in employment or a fixed claim for trade credit. Other groups choose to bear more risk, such as capital creditors. Others choose the riskier form of equity investment, but also spread the risk through diversification such as holding a portfolio of stock.\textsuperscript{222} Still others choose the riskiest endeavor of all and select to receive only firm-specific residual income. One should note that risk cannot be eliminated for anyone, at least not without cost, but this order of priority is established according to the gradation of risk assumed. The fundamental issue in pure economic loss is lost profit, which concerns the residual claimants of the enterprise, namely those who bear the residual risk.\textsuperscript{223} In fashioning a liability rule, tort law must determine whether this residual risk should be assigned to someone else under certain circumstances.

3. \textit{Implications on the Liability Rule}.—In this context, the law must fashion liability rules concerning adverse outcome from an ex ante condition of uncertainty. An entrepreneur always undertakes a business venture expecting to earn profit, with most rational venturers realizing that the expectation may not be met. Courts and scholars cannot formulate the liabili-

\textsuperscript{219} See supra note 204 and accompanying text. Economists have argued that Knight’s distinction between risk and uncertainty really refers to insurable and uninsurable risk. See, e.g., LeRoy & Singell, supra note 187, at 394.

\textsuperscript{220} See KNIGHT, supra note 28, at 252–54.

\textsuperscript{221} See Jensen & Meckling, supra note 177, at 311 (“The private corporation or firm . . . is also characterized by the existence of divisible residual claims on the assets and cash flows of the organization . . . .”).

\textsuperscript{222} See Eugene F. Fama & Michael C. Jensen, \textit{Agency Problems and Residual Claims}, 26 J.L. & ECON. 327, 329 (1983) (“Common stock allows residual risk to be spread across many residual claimants who individually choose the extent to which they bear risk and who can diversify across organizations offering such claims.”).

\textsuperscript{223} Residual risk is “the difference between stochastic inflows of resources and promised payments to agents.” Eugene F. Fama & Michael C. Jensen, \textit{Separation of Ownership and Control}, 26 J.L. & ECON. 301, 302 (1983).
The expectation of profit cannot be protected through market mechanisms. More fundamentally, profit requires a natural condition of uncertainty. In addition to the economics of uncertainty and profit, the most important principle of financial economics also guides us here—namely, riskless arbitrage is not sustainable in an efficient market. A competitive market does not allow riskless arbitrage because once an opportunity is spotted and exploited, that opportunity will be eliminated through competition. This fact is simply another illustration that profit cannot be certain in a market economy and the condition precedent to an economic organization based on market exchanges requires entrepreneurial risk-taking. This basic principle of finance is relevant to tort law. Why should tort law protect against fortuitous risk when the existence of such risk is fundamental to the raison d'être of the market? The answer is not so obvious. The doctrinal language of tort law—it is a wrong, it is unjust, it is derivative, it is negligent, it is foreseeable, it is a direct harm, it is a duty—are analytically unhelpful labels; particularly when the essential scrutiny of the conduct in question is the division of money and risk in the broader milieu of modern commerce. There is no legal or moral principle that requires the dissociation of our economic organization from one of these basic principles.


225 This inquiry concerning uncertainty and the law is not limited to tort law. The law is generally biased toward adhering to the principle of no arbitrage in economic transactions. Business risk cannot be eliminated without cost or manipulation. The most obvious adoption of this principle is the law prohibiting riskless profit through price fixing and insider trading. See KNIGHT, supra note 28, at 334 (describing problem of managers using inside information). The tentacles of this principle reach further. A transaction between capital creditor and issuer is strictly enforced even though an unforeseen contingency creates a harsh, even unfair, circumstance because the transaction is a party's commitment to a particular view of outcome, which the law does not rearrange per contract doctrine. See Sharon Steel Corp. v. Chase Manhattan Bank, N.A., 691 F.2d 1039, 1053 (2d Cir. 1982); Metro. Life Ins. Co. v. RJR Nabisco, Inc., 716 F. Supp. 1504, 1518 (S.D.N.Y. 1989). In corporate affairs, the overwhelming bias is toward respecting the reality that the engagement of enterprise is risky. See Stephen M. Bainbridge, The Business Judgment Rule as Abstention Doctrine, 57 VAND. L. REV. 83, 110–17 (2004). The business judgment rule provides a virtually impenetrable legal shield against liability so long as the manager acted in good faith. Einer Elhauge, Sacrificing Corporate Profits in the Public Interest, 80 N.Y.U. L. REV. 733, 770 (2005); see also Robert J. Rhee, Corporate Ethics, Agency, and the Theory of the Firm, 3 J. BUS. & TECH. L. 309, 320 (2008). Although the stupid, negligent, or unlucky manager can impose great economic havoc on creditors and shareholders, the law prohibits retroactive legal correction of a bad or stupid business decision, no less a fortuitous mishap. See, e.g., In re The Walt Disney Co. Derivative Litig., 906 A.2d 27 (Del. 2006) (finding decision to give poorly performing manager $130 million severance payout protected by business judgment rule); Kamin v. Am. Express Co., 383 N.Y.S.2d 807 (N.Y. Sup. Ct. 1976) (finding decision to distribute stocks and thereby forego approximately $8 million in potential tax savings is protected by business judgment rule).
IV. STATEMENT OF THE PRODUCTION THEORY

A. Solving the Riddle of Economic Loss

The economic loss rules of tort law are rooted in the neoclassical theory of uncertainty and profit. A business, according to Knight, is exposed to categories of contingencies from uncertainty: “It is manifestly impossible to carry on production without incurring both sorts of uncertainties, uncertainty as to the results and as to the preservation intact of the means of production employed, both human and material.”\(^{226}\) In this context, the production theory of the pure economic loss rule is simply stated: tort law protects factors of production, but not otherwise assure outcome.

This theory approximately corresponds to the conventional view of the consequential and pure economic loss rules, but the fit is not exact. It produces and predicts different outcomes in the grey area between the two rules, such as the fishermen exception and the public nuisance cases discussed above. These cases are really not exceptions to the pure economic loss rule, but are in fact a variant of the consequential economic loss rule. Thus far, they have been perceived as odd quirks of the common law only because the explanatory framework has been inadequate. The main hypothesis of this Article contains two propositions: the treatment of poor outcomes arising from a loss of a factor of production; and the same arising from all other adverse factors and contingencies. The first is the basis for the consequential economic loss rule, and the second is the basis for the pure economic loss rule. This hypothesis provides a better positive theory of how the two rules work together.

1. The Liability Rule Concerning Factors of Outcome: Pure Economic Loss.—Embedded in the pure economic loss rule is a particular view of the political economy in which tort law resides. The philosophical, political, and economic underpinnings have largely gone unnoticed in judicial opinions, though we see some glimmers in the fishermen and public nuisance cases. These matters, however, have not escaped astute scholarly attention.

Ronen Perry argues that the rule is associated with “a certain political inclination of Anglo-American judges.”\(^{227}\) As a result, the law favors of the wealthy and the capitalist class, “those who own means of production.”\(^{228}\) By distinguishing between pure and consequential economic losses, the Anglo-American judicial system has “advanced an inequalitarian redistributive scheme, at least unconsciously.”\(^{229}\) In light of the favorable treatment of property, he concludes that a “systematic bias exists in favor of the weal-

\(^{226}\) Knight, supra note 28, at 356 (emphasis added).

\(^{227}\) Perry, Economic Bias, supra note 3, at 1609.

\(^{228}\) Id. at 1606.

\(^{229}\) Id. at 1608. Perry adds, “I hesitate to attribute to common-law judges any intention to widen socioeconomic gaps.” Id. at 1609.
Eileen Silverstein argues that the rationale for the pure economic loss rule is grounded in capitalist ideology. The law is reluctant to examine the events surrounding economic loss because “[m]arket ideology tells us that if we work hard we will have economic security. It is frightening to contemplate, instead, that economic vulnerability is only one accident away.” Precluding recovery obfuscates the nature of business risk and softens “the rough edges of capitalism.” Although luck may be a large determinant of success, the rule of preclusion maintains the façade of capitalist ideology that merit and diligence are rewarded in a market based on competition and skill.

Stephen Perry argues that the pragmatic, instrumental concerns of courts are superficial symptoms of larger considerations. As he writes:

The more fundamental point is that economic interests in liberal societies are by their very nature inherently vulnerable to many sorts of interference by other persons. The character of such interests is in large measure determined by the fact of a market economy, and the competitive aspects of a market necessarily entail . . . that economic interests can intentionally be set back in various ways.

The pure economic loss rule is problematic because it can be attributed “to a sense that recovery on an open-ended basis would not be compatible with the inherently vulnerable nature of economic interests.” Thus, Stephen Perry endorses a more limited approach to recovery for economic loss unaccompanied by physical loss, circumstances that do not run afoul of this problem.

These scholars have identified an important relationship between the pure economic loss rule and the broader political economy. But their explanations of the relationship are off to varying degrees. Silverstein’s argument—that the rule seeks to obfuscate the riskiness of market

\[\text{id. at } 1607.\]
\[\text{id. at } 1604.\]
\[\text{Silverstein, supra note } 107, \text{ at } 431.\]
\[\text{id. at } 437.\]
\[\text{id. at } 432.\]
\[\text{id. at } 437.\]
\[\text{Perry, Protected Interests, supra note } 80, \text{ at } 266.\]
\[\text{id. at } 264; \text{ see also } \text{Home Office v. Dorset Yacht Co., Ltd., [1970] A.C. 1004, 1027 (H.L.) (Atkin, L.)} \text{("[F]or one thing it is often caused by deliberate action. Competition involves traders being entitled to damage their rivals' interests by promoting their own . . . ")}.\]
\[\text{Perry, Protected Interests, supra note } 80, \text{ at } 266.\]
\[\text{id. at } 267.\]
\[\text{Cf. Rhee, supra note } 25, \text{ at } 170-82 \text{ (arguing that the dominance of negligence as the standard in accident law is the result of "a compromise within the broader political economy").}\]
transactions—is unpersuasive because market participants understand that arbitrage is not sustainable. No obfuscation is needed because the secret is already out. The jagged, sharp edges of capitalism are readily seen and experienced by all concerned.

As for Ronen Perry’s argument that courts protect capitalists, inferring the motive of a collective body is always a speculative endeavor. The common law is not a single, monolithic institution, but is made up of a great number of courts and judges. It is unlikely that in the course of Anglo-American common law history there has been a perfectly coordinated synchronicity to a single, offensive socioeconomic policy. This vision of the Third Branch is unappealing, and frankly disturbing. Moreover, the thesis is inconsistent with many of the progressive developments in tort law, which dramatically expanded liability to industry and the capitalist class. For example, twentieth century tort law witnessed the elimination of the privity requirement, the development of enterprise liability, and the elimination of causation in some circumstances where traditional causation cannot be proven. One need only be slightly more sanguine about judicial impartiality and independence to reject this conspiratorial explanation of doctrinal universalism.

Stephen Perry’s concern is that there is a logical contradiction in that negligence is less culpable than intentional harm and yet society expects economic competitors to do precisely that by besting each other in market competition. The contradiction is more apparent than real. Cardozo’s admonition that duty is “a term of relation” is relevant here. Economic competitors are related by the rules of the game in which they play, clearly suggesting that intentional infliction of economic harm is simply the market custom, whereas unrelated parties may be subject to a different form of legal analysis if the same norm cannot be ascribed to their implicit assent. In fact, everyone loves a winner, and beating the competition through lawful, productive means is generally considered a positive attribute. There is no moral, legal, or economic contradiction, only situational context.

The situational context leads to the proposition that courts do not and should not protect a party from factors of outcome. They are rightfully

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241 Based on this theory, it would appear that the New Jersey Supreme Court, the author of People Express, which radically departed from the general rule of Robins, would be the sole dissident and guardian of egalitarian sentiments. But see Gary T. Schwartz, Tort Law and the Economy in Nineteenth-Century America: A Reinterpretation, 90 Yale L.J. 1717, 1720 (1981) (observing that even early common law courts displayed an “impressive sternness to major industries and that tort law exhibited a keen concern for victim welfare”).


245 “[N]egligently harming another is morally less reprehensible than doing so intentionally, and economic interests are not generally protected against intentional interference.” Perry, Protected Interests, supra note 80, at 265.

concerned about redistributing wealth per judicial reallocation of profit and loss in commercial transactions. On this point, Stephen Perry makes an insightful observation: "It seems plausible to suggest that judicial unease with the unrestricted recovery of negligently caused, pure economic loss can at least sometimes be attributed to a sense that recovery on an open-ended basis would not be compatible with the inherently vulnerable nature of economic interests."\(^{247}\) The fundamental attribute of engaging in enterprise is the undertaking of risk. There are only limited ways in which business risk can be mitigated, and only with the assumption of cost. Financial intermediation such as insurance can mitigate certain risk, but only if the standard for insurability is met. Parties can also contract to limit risk exposure. They can select the level of risk tolerable by choice of economic activity. Most people are risk averse, and as a means of satisfying wants and needs they select employment, which is a contractually fixed claim having priority over the entrepreneur's economic claim. Only a handful of people choose to become entrepreneurs. Even so, financial intermediation such as investments in capital markets can provide some means to diversify our investment.

The proposition that business risk is an inextricable part of market activity poses a deep normative question with political and economic implications: On what principled basis should courts eliminate certain aspects of this risk? The apparent moral and legal contradictions, which Stephen Perry suggests are a problem, are aptly explained with conventional tort analysis. The problem should not be framed as whether courts can distinguish legal and moral culpability when one economically harms another—they can—but instead whether courts should remove certain aspects of risk from the market per legal rule—they do not and should not.

The instrumental concerns are relevant to explain the rule. The problem of stating a precise standard that predictably distinguishes covered and exposed risks is significant. But as Stephen Perry notes, the instrumental concerns are "the surface symptoms of an underlying concern."\(^{248}\) There are deeper reasons not to remove or rearrange market outcomes. The market allows parties to select the level of risk desired through occupational choice and financial intermediation, but once this level is selected it provides no means to mitigate risk without a cost. This characteristic is the principle of no arbitrage. To provide recovery, courts must explain why a failure to transfer risk is a market failure rather than an inherent market condition. As Bishop notes, it is not always clear that economic productivity is lost just because a market participant has suffered lost profit. Moreover, courts must provide the principles upon which such risk should be transferred. For injuries to person, there are a number of principles to choose from: economic efficiency, corrective justice, and so on. For injuries to property, the same

\(^{247}\) Perry, Protected Interests, supra note 80, at 266.  
\(^{248}\) Id.
reasons may govern. We also add that, viewed through a broader prism of political economy, person and property are factors of production, and thus there is a normative preference for their protection.\textsuperscript{249} Market mechanisms such as insurance exist to protect them. With respect to outcomes, every rational person engages in enterprise with the expectation of profit. Yet no one has figured out a way to assure the expectation of profit.\textsuperscript{250}

A rule of recovery is tantamount to publicly mandated, privately subsidized insurance against a specific form of business risk, the contingency or covered loss being defined as a stranger’s “fault.” In this regard, both Rizzo’s and Bishop’s ideas are relevant. Rizzo suggests that the administrative cost of this de facto public–private insurance would be high. The cost of litigation is generally much higher than the cost of insurance.\textsuperscript{251} An extrapolation of Bishop’s theory implies that such insurance would subsidize economic activity because loss and gain net to zero in a transfer payment. In other words, there is no social cost in the aggregate and a liability payment would constitute rent from the legal entitlement provided by tort law. As noted by Knight, “life is mostly made up of uncertainties, and the conditions under which an error or loss in one case may be compensated by other cases are bafflingly complex.”\textsuperscript{252} For tort law to work across society in the large, we should have a reasonable sense of how the netting of gains and losses really works.\textsuperscript{253} This inquiry is empirically unverifiable,\textsuperscript{254} but the most reasonable assumption is that the repeated transactions of the market diversify the uncertainty such that the mathematical expectation of profit or loss associated with fortuitous events is zero for a market actor. If so, the subsidization of outcome loss is heavy, and is really a wealth transfer scheme executed at great administrative cost in the midst of private economic activity. Simply put, there is no principled basis to impose liability other than a visceral, ill-conceived view that, as Holmes put it in \textit{Robins}, “a tort to the person or property of one man [should] make the tortfeasor liable to another.”\textsuperscript{255}

The pure economic loss rule is a market abstention doctrine. Courts do not interfere with market outcomes by redistributing wealth upon adverse outcome causally traced to a specific form of business risk. Because these are market transactions, moral culpability is not an issue. For instance, we

\textsuperscript{249} This comment should not be construed as a complete explanation for why tort law provides compensation for physical losses. That inquiry is beyond the scope of this Article. The point is simply that the most obvious factors of production are property and human capital.

\textsuperscript{250} An element of insurability is the absence or mitigation of a moral hazard.

\textsuperscript{251} Rhee, \textit{supra} note 25, at 159 n.159, 164–65; \textit{see also} Barber Lines A/S v. M/V Donau Maru, 764 F.2d 50, 54 (1st Cir. 1985) (Breyer, J.).

\textsuperscript{252} \textit{Knight, supra} note 28, at 235.

\textsuperscript{253} \textit{See} Atiyah, \textit{supra} note 4, at 271–73 (discussing the problem of large scale wealth transfers if the law eliminates the rule of no recovery for pure economic loss).

\textsuperscript{254} \textit{See Barber Lines}, 764 F.2d at 55 (noting “inaccessibility of the empirical information needed to confirm or invalidate” the policy considerations).

\textsuperscript{255} \textit{Robins Dry Dock & Repair Co. v. Flint}, 275 U.S. 303, 309 (1927).
cannot normatively distinguish the volatility of oil prices arising from political instability in the Middle East, the Federal Reserve’s decision to raise interest rates, a Wall Street executive’s decision to bet the firm’s capital on the housing market, a competitor’s new innovation, and a dry dock’s negligent destruction of a propeller. These events are just a part of the innumerable factors of outcome. Therefore, we expect greater market abstention in political societies characterized by greater commitment to market economics.256

2. The Liability Rule Concerning Factors of Production: Consequential Economic Loss.—We now turn to the first proposition of the production theory: the protection of the factors of production, which is the basis for the consequential economic loss rule. The apparent conflict between the pure and consequential economic loss rules has prompted Ronen Perry to conclude that the common law, subliminally at least, protects the capitalist class.257 This explanation is off. If courts do protect economic assets, it is not because these assets belong to the wealthy, but rather because these assets are the means of production. As Knight explained, the owners of businesses put at risk their property or wealth, which substantially secures payments to contractual claimants such as employees and creditors.258 Thus, it may be true that the pure economic loss rule has the effect of benefitting the owners of the factors of production, but the purpose of the rule is founded on a separate policy.

Tort law protects factors of production because society has a normative preference for production. Economic production is a good thing, and a richer, more productive society is better than a poorer, less progressive society.259 One must remember that the protection of factors of production does not have a distributive aspect; without production, there is nothing to distribute. Rather, the distributive principle is found in the rule concerning

256 Although it is not within the scope of this Article to engage in comparative analyses of economies and rules of law, we can speculate, consistent with the thesis here, that societies with weaker commitment to private arrangement of the economic organization would show a greater tendency to recognize pure economic loss as a viable cause of action. In this regard, the observation that civil law jurisdictions such as France may be more accommodating of these claims than Anglo-American jurisdictions is consistent with this speculation. See Perry, Economic Bias, supra note 3, at 1617–20; see also Perry, Relational Economic Loss, supra note 10, at 729 (“It would be fair to say that the prospects of liability for relational loss are higher in France than in England.”).

257 Perry, Economic Bias, supra note 3, at 1607–09.

258 KNIGHT, supra note 28, at 299.

259 The suggestion is not that wealth is a superior value to some other value such as welfare. The author punts this complex discourse to philosophers and economists. Compare Ronald M. Dworkin, Is Wealth a Value?, 9 J. LEGAL STUD. 191 (1980) (arguing wealth maximization fails as a normative theory of social good), and Anthony T. Kronman, Wealth Maximization as a Normative Principle, 9 J. LEGAL. STUD. 227 (1980) (arguing wealth maximization combines the problems of both utilitarianism and Pareto superiority), with Richard A. Posner, The Value of Wealth: A Comment on Dworkin and Kronman, 9 J. LEGAL STUD. 243 (1980) (defending the normative usefulness of wealth maximization).
factors of outcome. This normative preference for production dominates the policy.\textsuperscript{260} Production requires economic assets and human capital.

We first consider assets. Assets are typically, but not always, property or any "factor in the value of that piece of property."\textsuperscript{261} Knight analyzed the role of property in economic production:

In the existing system of things the ultimate responsibility centers almost altogether in the ownership of the property "at risk" in the business. . . . The lower grades of labor take practically no risk and exercise correspondingly little control, and the same is only less true of the higher grades and of borrowed capital. . . . But the greater part of the uncertainty and power are centered in the ownership of certain property which is placed in the position of guaranteeing the contractual income of the other property and that of the labor used in the business.\textsuperscript{262}

The bias in favor of economic production is seen in the fishermen exception. The strong protection of fishermen is inconsistent with a thesis that the law favors wealthy capitalists.\textsuperscript{263} Fishermen, who engage in one of the most dangerous occupations, are not a part of the privileged class, nor are they owners of tangible capital assets such as boats. But the law provides recovery on the grounds that their factor of production—the boat or the sea—has been harmed. This exception can only be seen in the context of a legal framework that protects economic production.

We now consider human capital as a factor of production. It goes without saying that human capital is a substantial asset of the firm and input of production, if not the most important factor for most enterprises. This recognition raises the obvious question of whether the law should protect this interest and to whom that protection runs. The evolution of the common law on these points is telling. In old common law, an employer could recover for economic loss associated with a physical harm to an employee or apprentice.\textsuperscript{264} Also, the husband of a seduced wife and the parent of an injured child or seduced daughter could recover for economic loss.\textsuperscript{265} These actions were based in an era when "it was proper to regard the interests of

\textsuperscript{260} Consider for example the following passage from a public nuisance case involving fishermen’s right to recover lost profit:

We do not think this is merely to prevent the common shame of the extinction of an interesting type of river fauna in our time, or for the sole benefit of the owners of exclusive fisheries. In fact, perhaps the largest beneficiaries of these laws are those engaged in the business of fishing in common fisheries. The great fisheries on the Columbia River and of Alaska so conducted are so extensive that their products are found at one time or another on every table in the country.


\textsuperscript{261} KNIGHT, supra note 28, at 307.

\textsuperscript{262} Id. at 350.

\textsuperscript{263} Perry concedes that this exception is "inconsistent with my hypothesis." Perry, Economic Bias, supra note 3, at 1616. But he also argues that the exception is "theoretically irrelevant." Id.


the master and parent as property interests for which the action of trespass was proper. With the demise of slavery, serfdom, and servitude, common law courts began to reject property-like claims for another person's economic value and the vile premise of human ownership upon which the claim rested. The property interest in human capital became inalienable to the person, and contract became the sole basis of the bond. Although employers have continued to challenge the pure economic loss rule well into the modern era, courts have denied the claims. Like rented property, human capital belongs to the employee and is not considered a factor of production for the employer who merely rents it from the employee. As discussed earlier, contractual rental arrangements are not factors of production. Employment is a contractual relationship, and thus it is not a factor of production for the renter. We see again that the law does not favor the wealthy class of employers so much as it is biased toward protecting one's factor of production.

The protection of factors of production enhances economic production and activity, including the important distributive function of paying rent to others who choose not to take the risk of the entrepreneur but instead choose a fixed wage. The benefits of production are widely distributed. Production increases the wealth for all market participants—in order for the owner to claim the residual profit, all factors of agency and inputs must be paid first out of the income and assets of the enterprise.

This theoretical account explains why the doctrinal paths of the rules on emotional distress and economic loss diverged so radically, despite the fact that courts began to recognize the problems posed by these harms around the same time and the doctrinal fields share the same instrumental problems. The superficial similarities in problems of doctrine mask deep differences in underlying policy and governing dynamics. Emotional distress claims are not connected to an essential policy of the broader political economy. The theoretical gravity of the law of emotional distress is a basic

268 Seavey, supra note 266, at 310 ("It is equally clear that a servant no longer regards himself as his master's man, but as an independent person who can bargain effectually. . . . [T]he bond is primarily contractual with rights and duties in many cases spelled out in great detail.").
269 See Mattingly, 743 P.2d at 362 (Alaska 1987); Phoenix Prof'l Hockey Club, Inc. v. Hirmer, 502 P.2d 164, 164–65 (Ariz. 1972); Snow v. West, 440 P.2d 864, 865 (Or. 1968); Atiyah, supra note 4, at 271–73 (analyzing reasons why employer should not recover economic loss resulting from an employee's injury); Seavey, supra note 266, at 311 ("The modern authority [permitting recovery], however, is so slight as to be almost non-existent.").
270 See supra Part III.A.
271 See KNIGHT, supra note 28, at 301–02 ("[T]he wages of labor are in fact generally a fair approximation to a guaranteed contractual return.").
understanding that human sentiment and mental tranquility should be subject to some legal protection.\textsuperscript{272} On the other hand, the pure economic loss rule concerns the allocation of profit and loss in an uncertain world.

From a theoretical perspective, it is wrong to draw the line between consequential and pure economic loss based on whether a claimant suffered a physical loss. This conventional view of the distinction between the two rules is an approximation. In most accidents that result in economic loss, this view provides a good approximation because the vast majority of cases fall into two patterns: the loss of a factor of production is property damage or personal injury, thus invoking the consequential economic loss rule without controversy; or there is no loss of a factor of production, thus invoking the pure economic loss rule equally without controversy. This conventional view breaks down in the grey area between these two venerable rules, and ultimately the current explanatory framework cannot explain anomalies such as the fishermen exception in any principled way.

\textbf{B. Fishermen, Entrepreneurs, and Beyond}

The production theory explains the fishermen exception and contextualizes it within the construct of a broader theoretical framework of economic loss. The cases are seen as an exception to the pure economic loss rule because the fishermen did not own the boat or the sea. These legal niceties are irrelevant, and indeed get in the way of a proper analysis. The touchstone of the analysis is not ownership of property; instead, the economic reality of the circumstance governs. A close reading of the caselaw reveals the governing dynamics. The cases share three vital elements: the existence of a joint economic enterprise, ownership of the enterprise, and incapacitation of a factor of production.

\textit{1. Existence of a Joint Economic Enterprise.}—Foremost, the precise nature of the enterprise must be understood. The activity of commercial fishing can be conducted in a number of ways. An entrepreneur can purchase or lease a ship and hire fishermen on a wage. Here, the entrepreneur assumes the business risk, but also enjoys the bounty of the residual income once all contract payments are made. Another way to engage in the activity is to share the risk of the enterprise. This is the essential feature of the fishermen cases. Courts have noted that the fishermen and the shipowner are owners of a "commercial enterprise,"\textsuperscript{273} and that the fishermen "invest in a voyage" and "were engaged in a kind of joint venture."\textsuperscript{274} In another case, the fishermen "had been working since the summer to prepare for the fishing voyage" without fixed compensation.\textsuperscript{275} The judicial language is highly

\begin{footnotesize}
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\item \textsuperscript{272} See generally Rhee, \textit{supra} note 88 (proposing a principled basis of liability for negligent infliction of emotional distress).
\item \textsuperscript{273} Union Oil Co. v. Oppen, 501 F.2d 558, 570 (9th Cir. 1974).
\item \textsuperscript{274} Yarmouth Sea Prods. Ltd. v. Scully, 131 F.3d 389, 398 (4th Cir. 1997).
\item \textsuperscript{275} Miller Indus. v. Caterpillar Tractor Co., 733 F.2d 813, 820 (11th Cir. 1984).
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suggestive of a particular form of economic organization. The hallmark of ownership in an enterprise is the contribution of capital and a claim to profit, and in this case the capital was unsalaried labor.276

2. Ownership of the Enterprise.—The existence of a joint enterprise is consistent with the view that the fishermen are not employees or independent contractors, but are in essence owners. Some scholars and courts have viewed fishermen as wage earners,277 the lowly “working hand,” so to speak. This view misperceives economic reality. The quintessential attribute of ownership of an enterprise is a claim to residual profit.278 Case-law makes clear that salaried employees in admiralty (whether fishermen or sailors) do not enjoy the benefit of an exception.279 Indeed, English common law has independently arrived at the same conclusion that fishermen are not mere hired hands but are “share-fishing joint adventure[rs] . . . partners [who] contributed their services as crew.”280 Employees bear less of business risk because they have a prior, contractually fixed claim on income. An owner, on the other hand, only has a residual claim on profits after all expenses and claims are paid out. Fishermen work on a “lay” agreement, which is a claim to profit.281 The caselaw clearly distinguishes this point. Fishermen are distinguished from sailors on the basis that they work for a “percentage of the profit” instead of on “the basis of a fixed wage scale.”282 The lost catch “was not merely prospective compensa-

276 For example, a partner is not entitled to compensation for services performed for the partnership. UNIFORM PARTNERSHIP ACT § 401(h) (1997). A mere interest in profit does not, however, create an ownership interest in an enterprise. See Bradley T. Borden, Partnership Tax Allocations and the Internalization of Tax-Item Transactions, 59 S.C. L. REV. 297, 313 (2008) (“The payment from the property owner to the service provider will be compensation for services regardless of the mode of determining the amount of the compensation.”); Sanford J. Grossman & Oliver D. Hart, The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration, 94 J. POL. ECON. 691, 694 (1986) (“A firm may pay another firm or person by the piece or a fixed amount (salary), irrespective of the ownership of the machines.”).

277 See Borich v. Ancich, 191 F.2d 392, 393 (9th Cir. 1951) (noting action as “for wages and maintenance”), overruled by Carbone v. Ursich, 209 F.2d 178 (9th Cir. 1953); Goldberg, Recovery for Pure Economic Loss in Tort, supra note 6, at 274 (“[T]he fishermen's share is primarily compensation for labor not yet performed—that is, it is a substitute for future wages.”).

278 See HENRY HANSMANN, THE OWNERSHIP OF ENTERPRISE 11 (1996) (“A firm's 'owners' . . . are those persons who share two formal rights: the right to control the firm and the right to appropriate the firm's profits, or residual earnings . . . .”); KNIGHT, supra note 28, at 280 (“That is, in a sense, the entrepreneur's income is not 'determined' at all; it is 'what is left' after the others are 'determined.'”).


281 Carbone, 209 F.2d at 179.

tion.... [T]heir compensation for this work was to come solely out of their shares of the catch. In some cases, the fishermen’s claim to profit is larger than that of the shipowner. Fishermen working on a lay have a residual claim that is pari passu with that of the ship owner. Thus, they are not waged employees or independent contractors, but are adventurers in the enterprise.

3. Incapacitation as a Factor of Production.—Viewing the fishing voyage as a distinct enterprise lifts the fog of legalism that clouds proper analysis. The legal status of property harmed (the boat or the sea) leads one to conclude mistakenly that, but for an exception, the fishermen could not recover for lost profit. The problem caused by this concept of property is manifest, and courts have had to explain away this issue. The Ninth Circuit’s reasoning in Carbone is illustrative: “If we were to assume for the moment that the owner of the vessel held the fishermen’s cause of action in trust for them, so that he would ordinarily be the proper person to sue, yet the right of the fishermen to require him to sue is plain enough.”

The trust analogy is derived from old admiralty cases. The Ninth Circuit cited, among others, Taber v. Jenny. There, the whalers were permitted to recover lost profit against the shipowner for a whale catch on the theory that the shipowner did not prevent a third party from unlawfully taking the catch. The whalers had no property claim on the whale because the lay agreement provided for payment out of net proceeds upon sale. The court ruled that the shipowner held the whalers’ economic claim in trust: “Otherwise, the seamen could not get redress; they have no title to the property, and could maintain no action for it.” Thus, the conventional viewpoint of property law obscured the plain reality that the whalers had just as much of an economic claim to the whale as did the shipowner, and the court simply brushed aside the legal nicety by deploying the legal fiction of the shipowner as trustee.

However useful a legal fiction may be, it is still fiction. In truth, the fishermen exception corrects a defect in doctrine and outcome, and better aligns tort law with economic reality. There is a distinct enterprise in the

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283 Miller Indus. v. Caterpillar Tractor Co., 733 F.2d 813, 820 (11th Cir. 1984).
284 For example, in Carbone v. Ursich, the lay agreement gave the fishermen sixty-one percent of proceeds after specified expenses. 209 F.2d at 179.
285 Id. at 182; see also Pruitt v. Allied Chem. Corp., 523 F. Supp. 975, 978 (E.D. Va. 1981) (“The entitlement given these fishermen presumably arises from what might be called a constructive property interest in the Bay’s harvestable species.”).
286 Carbone, 209 F.2d at 180 & n.3 (citing Taber v. Jenny, 23 F. Cas. 605 (D. Mass. 1856) (No. 13,720)).
287 Taber, 23 F. Cas. at 608–9.
288 Id.
289 Id. at 608 (emphasis added).
290 Subsequently in Robins, Holmes rejected the Second Circuit’s use of a trust analogy to provide the plaintiff remedy against the defendant dry dock. See Robins Dry Dock & Repair Co. v. Flint, 275 U.S. 303, 309 (1927), rev’g The Bjornefjord, 271 F. 682 (2d Cir. 1921).
form of a joint venture, with the boat and special fishing skills constituting the essential capital needed. The boat is a capital asset and a factor of production. Its damage harmed a distinct enterprise. While the liability for the physical harm should flow to the titleholder, the liability for economic loss should flow to the owners of the enterprise. More pointedly, "it would be anomalous to hold in this setting that the shipowners have a right to recover their lost share of the catch as damages, but the crew's wages as a share of that very same lost catch are beyond the scope of recovery." The fishermen exception allows the owners of an enterprise to recover lost profit when the defendant harmed the enterprise's factor of production. To the extent that the consequential economic loss rule does not allow such recovery, the creation of the fishermen exception corrects this defect.

One could argue that the wrinkle in the analysis is Oppen, where the defendant did not damage private property, but instead spilled oil into the sea. Again, legal nicety gives way to economic reality. The absence of private harm to property is irrelevant. A factor of production is an essential asset of the production function and it need not be owned. The sea, albeit a commons, satisfies this definition. Other scholars have observed that the sea is a "means of production" in the "manufacturing" of seafood. Courts have also recognized this distinction. The Ninth Circuit alluded that fishermen "directly make use of a resource of the sea," and that they conduct their enterprise "in, on and under the sea." That the sea is a factor of production distinguishes the claims of fishermen from other victims of fortuitous economic loss.

Although this Article primarily focuses on American tort law, the view that fishermen are owners of an economic venture finds support in the common law of the United Kingdom. Scottish law recognizes the fishermen's right to recovery for prospective catch. For instance, in Main v. Leask, fishermen brought suit for prospective catch. The court's analysis is illuminating:

While undoubtedly care must be taken not to extend liability for fault beyond the circle of persons directly injured by the fault, yet, on the other hand, it by no means follows that the loss of an article of property, be it a building or a

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292 Perry, Relational Economic Loss, supra note 10, at 786. Notwithstanding this observation, Perry argues that fishermen should not be allowed to recover for their loss because "no rational distinction can be made between the interests of fishermen and the interests of other victims (such as fish restaurants, bait shops, tourist guides, hotels, and other businesses in the area)." Id.
293 Union Oil Co. v. Oppen, 501 F.2d 558, 570 (9th Cir. 1974) (emphasis added).
294 Atiyah, supra note 4, at 256 n.26 (citing Parker v. Walker, (1961) S.L.T. 252 (O.H.); Mair v. Wood, (1948) S.C. 83 (1st Div. 1947); Main v. Leask, (1910) S.C. 772 (2d Div.)). Atiyah disapproves of the outcome of these cases because they seem irreconcilable with the time charter cases like Robins. Id. As discussed, however, there is a significant difference between contractual arrangements to rent property, where risk and return are contractually fixed, and arrangements to form a business association, where business risk is allocated through a profit share arrangement among owners. See supra Part III.A.
295 (1910) S.C. at 772.
ship or machinery or anything else, only gives rise to an action at the instance of the owner or proprietor. On the contrary, I think it is the law that if anyone is directly interested in the property of goods, houses, or ships, he may be entitled to sue in respect of damage to such interest, if it is not too remote.

Now, in the present case the fishermen or crew were, along with the owners of the "Gratitude," engaged in what I think may be fairly viewed as a joint adventure in which the owners contributed the vessel and the crew contributed their services, and in some cases fishing gear, towards the prosecution of this adventure, the owners of the boat being entitled to one-third of the profits of the fishing, the owners of the nets to one-third, and the crew to one-third.

In this state of matters it seems to me that the members of the crew each suffered a direct and immediate loss through the sinking of the "Gratitude," that loss being the share of the profits of the joint adventure in which they were engaged, which loss was directly caused by the fault of the defenders.

This passage, from a Scottish case dated 1910, is the clearest judicial articulation of the rationale behind the fishermen exception. Although the language speaks in terms of proximate cause—that is, the references to "directness" and "remoteness"—it strongly hints at the theoretical foundation of the pure and consequential economic loss rules. The court rejected property ownership as the litmus test and instead focused on the ownership of the venture and the residual nature of the fishermen's economic claim. The court did not consider the fishermen as salaried wage earners with a profit share interest, but joint adventurers who are claimants of residual income derived from the capital of their labor.

There is another interesting aspect to the caselaw on fishing. To the extent that the fishermen are contributing special skill as a form of capital, the market cannot provide a means to protect this capital. Physical assets can be insured, but labor and opportunity cost cannot. The court in Oppen hinted at the fishermen's inability to hedge this risk when it observed that the fishermen's "economic or personal affairs were discommoded by the oil spill" in a way that distinguishes their plight from others who may have been adversely affected. The purpose of the insurance market is to protect against such dislocation caused by fortuitous events. It is true that the

296 Id. at 778–79 (Ardwall, L.) (emphasis added). This interpretation of the fishermen exception is also supported by the law of partnership, which provides a more accurate economic account than tort law's property-centric focus. A partnership is an independent economic entity distinct from its partners. UNIFORM PARTNERSHIP ACT § 201(a) (1997). By sharing profit, fishermen are closer to partners in a joint venture than employees, independent contractors, or renters. Id. § 101(6) (defining a partnership as "an association of two or more persons to carry on as co-owners a business for profit"); see also id. § 202(c)(3) ("A person who receives a share of the profits of a business is presumed to be a partner in the business . . . ."). Specifically, they resemble service partners. It is unclear whether the fishermen in these cases were partners for the purpose of partnership law, and the point may be speculative if the theory was not pursued, but the point is that economically the venture is owned by them.

297 Main, (1910) S.C. at 778–79.

298 Oppen, 501 F.2d at 570.
fishermen could have insured their lives or livelihoods through life, unemployment, or disability insurance, but such insurance is personal and poorly hedges against the type of economic risk at issue. The fortuitous outcome of the venture cannot be insured. On the other hand, the capital of the shipowner can be readily insured along with business interruption coverage based on the covered loss of the ship. This disparity can be seen as a market failure because the fishermen cannot protect the expected return from the capital of their labor while the shipowner can protect his capital and expected return from it per both insurance and tort law. For reasons discussed, private insurance is practically infeasible. The parties themselves cannot gin up an insurance solution as well. Insurance underwritten by the shipowner and provided to the fishermen (per contractual allocation of the risks of the venture) would be difficult because the shipowner, being risk averse, would want to mitigate risk and not assume more risk, explaining why he would purchase insurance on the boat in the first place and why he would enter into a lay agreement as opposed to an employment agreement with the fishermen. The fishermen exception can be seen as a market corrective rule that places the shipowner and the fishermen—joint venturers of a common enterprise—on economic and legal parity per the rule of law.

The fishermen cases are currently considered an exception to the general rule of no recovery. This is the conventional way to view the rule since they suffered no physical loss. However, the better view is that the fishermen rule is a special variant of the consequential economic loss rule. Contrary to conventional wisdom, these are not pure economic loss cases at all. It is true that the fishermen do not have a claim for property loss, but only when the concept of loss is viewed from the traditional perspective of property and personal injury. When loss encompasses a factor of production, it is clear that the fisherman entrepreneur lost an indispensible asset integrated into the production function.

The fishermen exception is based on a philosophical commitment to entrepreneurial enterprise, viz. ownership interests in businesses. Such ownership is the most risky economic endeavor, and the owner’s risk is protected to the extent that a factor of production has been harmed. This risk explains why fishermen can only recover when they are claimants to the residual income, and why they and other seafarers cannot recover when they are fixed contractual claimants such as salaried workers. The law of public nuisance is even more explicit about the need to protect entrepreneurs and

299 Such disparity of economic outcome during a common venture has long been recognized by common law judges:
The owner [of the ship] would at least get compensation to the extent of the value of his ship, with interest at 5 per cent from the date when she was lost; but the fishermen whom he employed on the footing that they were to share the profits of the fishing would not participate in that compensation, and would, if the defenders’ contention were well founded, get nothing at all except compensation for the loss of their personal effects.
Main v. Leask, (1910) S.C. at 777 (Salvesen, L.).
their factors of production. Courts have allowed recovery "where the plain-
tiff has an established business making a commercial use of the public
right." Of particular concern are the destruction of economic livelihood and
the preservation of both commercial purpose and the value of an essential
business asset.

The fishermen exception is not esoteric or irrelevant as suggested by
tort scholars but instead illuminates the governing dynamic of the theory of
economic loss. Contrary to the suggestion of economists, recovery is not
based on a social loss for which fishermen serve the public function of de-
terring inefficient activity, but rather on private loss for which they enforce
their right to compensation. Keeping in tune with the necessities of com-
merce, tort law protects factors of production, but the protection does not go
so far as to intervene in the market forces that sort out outcomes amidst
competition, risk-taking, pursuit of innovation, and selection of labor func-
tion by market participants. This latent protectionism is the unifying prin-
ciple of the consequential and the pure economic loss rules. Because the
loss of a boat or resources of the sea fits within this principle, irrespective
of the fishermen's property interest in the boat or the commons that were
harmed by negligence, they were allowed to recover while other parties
who were equally affected in terms of private loss could not.

Beyond the provision of a theoretical explanation, the production
theory has several important implications and applications. As discussed,
one essential factor of production is human capital. Such capital can be
rented per employment for a fixed wage, but the fishermen cases show that
 labor can be capital contributed to an enterprise if the person chooses to en-
gage in a riskier level of investment. One has the option to select the spe-
cialized labor of ownership or a contractual relationship based on fixed
wage. The question arises whether owners can recover for economic loss
arising from a loss of the enterprise's human capital. This is a different in-
quiry than whether an employer can recover for economic loss associated
with an injury to an employee (that question has been correctly settled in
the negative). If labor constitutes capital contribution, as would be the
case for an economic owner, there is no reason why the owner of the tangi-
ble capital asset cannot recover economic loss on the ground that the defen-
dant's negligence incapacitated human capital essential to the production
function of the enterprise. Such cases would be limited to those involving
the loss of labor capital in a joint production and unaccompanied by physi-
cal loss of the enterprise's capital.

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301 See id.; Columbia River Fishermen's Protective Union v. City of St. Helens, 87 P.2d 195, 197–
98 (Or. 1939).
302 See Masonite Corp. v. Steede, 23 So. 2d 756, 758 (Miss. 1945); Hampton v. N.C. Pulp Co.,
27 S.E. 538, 546 (N.C. 1914).
303 See supra note 269.
We can discuss this scenario in more concrete terms. Suppose the entire fishing crew of a boat is incapacitated by salmonella in the food served by the defendant restaurant, and the harm cannot be mitigated because the opportunity is inelastic. Specialized labor capital has been impaired, and the venture suffers lost profit. We can consider the harm as isolated to the physical injury and provide consequential economic loss recovery to just the fishermen. This result would conflict with the fishermen cases. It would be the odd result if fishermen recovered profit arising from a physical harm to the boat, but the shipowner cannot recover for the same loss arising from the impaired human capital necessary for the venture. Such recovery would not be based on employment, but rather on ownership of an enterprise.

We do not see this type of an action because the loss of an entire fishing crew, unaccompanied by a loss of the ship or some other accident, would be rare. Of course the fishermen would have tort claims against the restaurant. As for the shipowner, he can probably replace the loss of members of a crew from the labor market at a cheaper cost than were he to seek judicial remedy for lost profit. Nevertheless, the principle of liability is an important one because the case where labor capital is lost may arise in other contexts. Suppose, for example, a concert tour is planned where one partner provides the capital and the other provides the special performance labor. The capitalist and the performer agree to share the risk and the profit. If the performer is injured, both venturers should recover profit. Recovery must be based on the loss of labor capital. If the partnership lost property, it can sue on its own behalf for loss of property and consequential loss.

However, it should be cautioned that the same analysis does not apply to a corporate venture. A corporation cannot recover economic loss resulting from the accidental death of its chief executive officer. It goes without saying that a personal injury can lead to a claim for consequential economic loss by the injured employee, but the common law has long rejected the view that an employer can state a claim for economic loss arising from harm to an employee. However important, an officer is still an employee, and the corporation employer cannot recover for economic loss. This applies to fishermen as well. We saw that salaried fishermen or sailors vis-à-vis fishermen working on a “lay” do not recover for economic loss. Conversely, corporate employees cannot recover for economic loss from harm.

304 See Main, (1910) S.C. at 777 (Salvesen, L.) (“The ordinary crew of a trading vessel may have no difficulty in obtaining employment in other ships when the one in which they were engaged is sunk in a collision . . . ”).
306 However, a business can protect itself through a key-person life insurance, and thus there are some ways in which this risk can be reduced.
to the corporation.\textsuperscript{307} Also, it is an axiom of corporate law that shareholders cannot claim personal damages for harms done to the corporation.\textsuperscript{308} By virtue of its business organization, which is said to be a nexus of contracts,\textsuperscript{309} the corporation does not own human capital, but instead rents the labor of agents and employees. Those factors of production belong to the person who rents her labor. This is consistent with the legal fiction of the corporate person,\textsuperscript{310} which eliminates ownership of the business enterprise inuring to a natural person.\textsuperscript{311} Moreover, an essential role in organizational law, such as corporate law, is the partitioning of assets with respect to various participants of the enterprise.\textsuperscript{312} With respect to economic loss rules of tort law, the assets of the shareholders and tortfeasors and tort victims are partitioned so that tort law does not interconnect them in ways that do mischief. If shareholders could reach tortfeasors for economic loss arising from harm to employees, the question must be why shouldn’t tort victims injured by the corporation’s activity be able to reach shareholders? Accordingly, even in the corporate context, we neither expect nor see employers recovering economic loss caused by negligent harm to an employee.\textsuperscript{313}

Lastly, the production theory advanced here is not limited to the narrow class of fishermen exception and public nuisance cases involving natural resources. It has broader, but highly defined, application. Consider the realm of the Internet commons. The business model of Google is predicated on the existence of an Internet commons, and the company’s essential activity, much like that of fishermen or miners for their products, is the extraction and arrangement of information found in the Internet commons. This model is unique and distinguishable from other companies that do business on the Internet. For many firms, the Internet may be a part of the core business strategy, without which the business may even fail. But,

\textsuperscript{307} For example, in 532 Madison Avenue, the employees of the deli could not claim for economic loss against the negligent construction company because they may have been laid off. 750 N.E.2d 1097 (N.Y. 2001).

\textsuperscript{308} Cf. MODEL BUS. CORP. ACT § 10.01(b) (2003) (providing that a shareholder “does not have a vested property right resulting from any provision in the articles of incorporation”); Grimes v. Donald, 673 A.2d 1207, 1213 (Del. 1996) (shareholders permitted to bring direct claims).

\textsuperscript{309} EASTERBROOK & FISCHEL, supra note 112, at 12; see also Coase, supra note 164, at 390–91.

\textsuperscript{310} See DEL. CODE ANN. tit. 8, § 122(2); Bird v. Wilmington Soc’y of Fine Arts, 43 A.2d 476, 484 (Del. 1945) (corporation is distinct from its shareholders).

\textsuperscript{311} See Stephen M. Bainbridge, In Defense of the Shareholder Wealth Maximization Norm: A Reply to Professor Green, 50 WASH. & LEE L. REV. 1423, 1428 (1993) (arguing that the “nexus of contracts” theory of the firm rejects the proposition that a corporation can be owned); Lynn A. Stout, Bad and Not-So-Bad Arguments for Shareholder Primacy, 75 S. CAL. L. REV. 1189, 1191 (2002) (“A lawyer would know that the shareholders do not, in fact, own the corporation.”); see also Margaret M. Blair & Lynn A. Stout, Specific Investment: Explaining Anomalies in Corporate Law, 31 J. CORP. L. 719, 728 (2006) (“The claim that shareholders are ‘principals’ and directors are ‘agents’ contradicts the realities of corporate law.”).

\textsuperscript{312} See generally Henry Hansmann & Reinier Kraakman, The Essential Role of Organizational Law, 110 YALE L.J. 387 (2000).

\textsuperscript{313} See supra notes 266–267 and accompanying text.

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again, importance to outcome is not dispositive. Most other businesses are
not predicated on the existence of the Internet. Auctioneers and booksellers
have long existed before eBay and Amazon, and that certain businesses
choose marketing and delivery models relying on the Internet simply means
that the Internet would be important to business outcomes just the way that
a hotel may have an important interest in clean seas and public beaches and
a parcel delivery firm may have an interest in a well-established transporta-
tion infrastructure.314 Indeed, Bishop’s thesis may nicely apply here. It
bears repeating that the distinction between integration into the production
function and importance to outcome is abstract and may require some de-
gree of line drawing. However, as the fishermen exception and public nuis-
ance cases show, courts do make such distinctions in determining whether
they should abstain from changing market outcomes or whether the cir-
cumstances are such that redistributing profit and loss on the whole pro-
motes production.

CONCLUSION

Although the pure economic loss rule has been remarkably durable in
the common law, it suffers from a theoretical deficit. The rule has not been
properly framed within the broader context of Anglo-American political
economy. This Article proposes a production theory of the pure economic
loss rule, which is rooted in the neoclassical economic understanding of the
relationship between uncertainty and profit. Two conceptions of risk are
important: risk to economic assets indispensable to the production function
(loss of a factor of production), and risk to outcomes (loss of production).
The production theory is simply stated: tort law protects the factors of pro-
duction, but not factors of outcome. This distinction is at the heart of the
theory of the pure and consequential economic loss rules. Under this
theory, harm to one’s property or person is not and should not be the touch-
stone of economic loss recovery. Rather, society has a normative prefe-
rence for production, and tort law protects an asset indispensably integrated
into the production function, irrespective of property ownership. The em-
phasis on the loss of an economic asset departs from the requirement of loss
of one’s property, the traditional basis for recovery of consequential eco-

The production theory resolves a classic, longstanding riddle of the
common law—that is, why consequential economic loss is recoverable
upon a loss of an asset, but pure economic loss is not upon a poor economic
outcome. These rules should not be seen as antitheses of each other. The
pure economic loss rule is a market abstention doctrine. It reflects a bright

314 The loss of the Internet for a significant period may result mostly in a transfer payment for cer-
tain activities such as selling books, which are sold through other distribution channels. However, since
we do not expect the loss of the Internet (vis-à-vis ordinary use limitations) anytime soon, this hypothes-
tical may perhaps be academic.
line judicial policy against corrective legal action when economic loss represents not a market failure in precaution but is instead a necessary condition of the engagement of enterprise under Knightian uncertainty. On the other hand, the consequential economic loss rule is an enterprise protection doctrine. In stating inverse propositions, these two rules express the single proposition that the law abstains from interfering with market outcomes while at the same time protecting the normative goal of economic production.

This balance is a delicate one. In striking it, common law courts have been wisely cautious and have instinctively maintained an apparent logical contradiction, though the precise articulation of the principle may have escaped them. Unless the rules are seen in a broader context of Anglo-American political economy, their apparent contradiction is subject to logical attack based on the reducibility of property damage and economic loss to fungible currency without translational difficulties. A fundamental commitment to principles of market economics means that economic participants must undertake risk. Exposure to various factors of outcome defines the engagement of enterprise. Economic organization allows an actor to choose the level of risk assumed. Ownership of enterprise is a specialized form of risk-taking and is characterized by a claim to residual income. For these participants, profit is only possible because outcomes are uncertain, and riskless arbitrage is not sustainable in a competitive market. Courts have long respected these fundamental principles of a commercial society. This recognition explains why common law courts have universally protected the pure economic loss rule against the evolutionary forces of common law torts.