ARTICLES

An Information-Production Theory of Liability Rules

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The negligence-versus-strict liability debate is over in tort law, and negligence has clearly won. Yet the fact that our accident-compensation system is fault based continues to attract much opposition in popular sentiment and academic circles. Standard economic analysis views strict liability as preferable to negligence because it is easier to administer and leads to better risk reduction: strict liability induces injurers not only to optimally invest in precaution but also to optimally adjust their activity levels. Standard analysis thus views the prevalence of negligence as unjustifiable on efficiency grounds. This Article challenges the conventional wisdom and clarifies an efficiency rationale for negligence by spotlighting the information-production function of tort law. Tort litigation affects behavior not just directly through imposing sanctions but also indirectly through producing information on how the disputants behaved. Third parties can then use information from litigation to decide whether to avoid the defendant or not. And the choice of liability rules dictates the magnitude and scope of these informational effects: negligence produces more valuable information on the behavior of market actors than strict liability does.

Litigation under negligence produces granular information on whether the defendant could have reasonably avoided the harm, how she fares relative to others in her profession, and so on. Such information, to the extent it becomes public, allows outside observers to infer whether the past accident is indicative of the defendant's future behavior or not, which in turn affects their willingness to do business with her going forward. A physician found negligent may lose future patients, a seller failing the consumer-expectations test in products liability may lose future consumers, and so on. Litigation under strict liability produces much coarser information—namely, that a harm occurred as a result of the defendant's activity. It rarely provides outside observers with information on the competence or integrity of the defendant vis-à-vis her peers. The efficiency rationale for negligence thus stems from facilitating more robust market discipline. In contrast to what influential accounts in economic analysis suggest, negligence does affect the activity levels of potential injurers, albeit from the demand side: by warning third parties, it reduces market demand for the services of risky actors.

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This Article explains how information from litigation translates to reputation, identifies the circumstances under which these reputational effects are more (or less) pronounced, and uses the reputational perspective to reevaluate timely debates such as the desirability of secret settlements or how to set the liability standard for autonomous-vehicle accidents.

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INTRODUCTION

During the 1990s, various countries considered reforming their medical malpractice laws. Mounting criticisms of ambulance-chasing attorneys and excessive damage awards had led policymakers to establish committees and solicit feedback from affected parties on how to mend what seemed like a broken system of litigation. Then, a surprising pattern emerged: physician organizations were lobbying policymakers to change the liability rule for medical malpractice from negligence to strict liability. Why would physicians, who are the defendants in medical malpractice claims, advocate for a stricter liability regime? Why would they seemingly make it easier on plaintiffs to win cases against them? Searching for answers to this puzzle leads us to two important yet understudied aspects of tort law.

First, tort law shapes behavior not just directly through imposing legal sanctions but also indirectly through facilitating non-legal (reputational) sanctions. Physicians have indicated that they fear the emotional and reputational damages from going through discovery and depositions just as much as the prospect of being ordered to pay damages.² While the legal sanction is insurable and physicians rarely pay it out of pocket,³ the nonlegal costs of litigation are not: if litigation digs out damning information on the defendant-physician, she may lose her good name among her peers and potential employers, as well as lose future patients.⁴

Second, we learn that the choice of liability rule dictates the scope of tort litigation's reputational impact. In general, negligence generates more pronounced reputational effects than strict liability. Litigation under negligence revolves around questions such as whether the harm was avoidable or how the defendants perform relative to others in their industry (common practice). A

¹ See, e.g., Am. Coll. of Physicians, Beyond MICRA: New Ideas for Liability Reform, 122 Annals Internal Med. 466, 468–69 (1995) (documenting U.S. physicians' support for testing strict liability systems); DIN VEHESHBON HAVAADA LEBDIKAT HAACHRAYUT BETIPUL REFUEY [DVHLHBR] (יין הוועדה לבדיקת האחריות בטיפול רפוא) (documenting the same for English physicians and demonstrating the belief of some physicians that strict liability takes away the stigma of attributing negligence to physicians)

² See David Sclar & Michael Housman, Medical Malpractice and Physician Liability: Examining Alternatives to Defensive Medicine, 4 HARV. HEALTH POLY REV. 75, 76–77 (2003) (describing doctors' fears of reputational harm from malpractice suits); Robert Quinn, Medical Malpractice Insurance: The Reputation Effect and Defensive Medicine, 65 J. RISK & INS. 467, 471 (1998) (claiming that physicians avoid risky business practices that may lead to a loss of reputation).

³ See, e.g., Michael Frakes & Anupam B. Jena, Does Medical Malpractice Law Improve Health Care Quality?, 143 J. Pub. Econ. 142, 145 (2016) (noting that "physicians generally face limited immediate financial risk").

⁴ See David M. Studdert, Michelle M. Mello & Troyen A. Brennan, Defensive Medicine and Tort Reform: A Wide View, 25 J. GEN. INTERNAL MED. 380, 381 (2010) (stating that damage caps may "limit the economic consequences of being sued, but do not necessarily reduce . . . the unpleasant aspects of the adversarial litigation process"). Other non-legal costs of litigation include time spent and psychic costs. Quinn, supra note 2, at 468.

finding of negligence therefore effectively tells the outside world that the medical care provider in question practices below industry standards. Future patients may find out about this determination and decide to take their business elsewhere. The aggregate of diminished future business opportunities constitutes the reputational sanction that comes with litigation. Litigation under strict liability, by contrast, revolves around much simpler questions—namely, whether the defendant's activity caused the plaintiff's harm. It does not involve a determination of incompetence or recklessness, so outside observers cannot discern from the litigation whether it is better to avoid being treated by the defendant or not. Strict liability is therefore not likely to affect the defendant's reputation as much as negligence.

We now have an answer to the question of why some physicians prefer strict liability. All it required us to do is to account for the *non*legal costs of litigation: while negligence may decrease the expected legal sanction relative to strict liability, it increases the expected nonlegal (reputational) sanction. If physicians fear the nonlegal costs of litigation more than they fear the legal costs, it makes sense for them to prefer strict liability to negligence.

This Article generalizes the point about the reputational effects of liability rules to various contexts beyond medical malpractice. By applying the reputational perspective, we shed light on time-honored puzzles, such as why damage-cap reforms rarely work in practice, and reevaluate current debates, such as how to set the liability standard for autonomous-vehicle accidents.

The Article is based on the overarching point that the choice of liability rules affects not just the parties to the dispute but also outside observers. Standard economic analysis evaluates liability rules based on how they affect the levels of precautionary measures that injurers and victims take or the levels of activity that they engage in. This Article, by contrast, focuses on how the choice of liability rules affects market-discipline (reputational) mechanisms. A negligence regime produces more granular information on the behavior of potential injurers. Third-party observers can then use the information to decide with whom they want to keep doing business and with whom they do not. To recast our medical malpractice example: There exist many online databases containing information from litigation, and potential patients search those databases before choosing the surgeon that will operate on them.⁵ That way, litigation under negligence produces a

⁵ See infra text accompanying notes 43–45.

positive externality in the form of valuable information, which in turn creates demand-side (reputational) pressures on medical care providers, sellers, and manufacturers to reduce the risk of accidents.

Our information-production theory thus clarifies an efficiency rationale for the dominance of negligence over strict liability. Both conventional economic analysis and moral intuition favor expanding strict liability. Yet on-the-ground tort law clearly favors negligence. Tort law scholars have historically justified the dominance of negligence on nonefficiency grounds such as fairness, arguing that it is morally wrong to require someone to pay for a harm she caused accidently or innocently. This Article adds another, nonexclusive benefit of negligence: it injects quality information into the market, thereby facilitating better market (reputational) discipline. A conventional critique of negligence is that it requires more information and is therefore more expensive to administer; we counter by suggesting that such information is, in a sense, a public good, so fostering private incentives to produce it can be socially desirable.

The Article proceeds in four parts. Part I sets the background by providing a primer on how reputation works and how litigation affects reputation in general. Part II applies the general reputation-through-litigation theory to tort law, explaining how different liability standards and defenses shape the quantity and

⁶ See Saul Levmore, Richard Posner, the Decline of the Common Law, and the Negligence Principle, 86 U. CHI. L. REV. 1137, 1142–43 (2019) (explaining that the "conventional view" favors strict liability because it is thought to better account for activity-level effects when compared to negligence).

⁷ See id. at 1141 (noting that "[n]egligence . . . remains the fundamental rule of the system"); see also ROBERT COOTER & THOMAS ULEN, LAW AND ECONOMICS 248 (6th ed. 2016) (describing the preference for comparative negligence over contributory negligence in current tort law). There are, of course, pockets of no-fault compensation in our tort law systems, such as when an activity is both dangerous and uncommon. See RESTATEMENT (THIRD) OF TORTS: PHYSICAL & EMOTIONAL HARM § 20 (AM. L. INST. 2010). A classic example is blasting (the use of explosives). Id. at § 20(e).

⁸ See Steven Shavell, The Mistaken Restriction of Strict Liability to Uncommon Activities, 10 J. Legal Analysis 1, 37 n.111 (2018) [hereinafter Mistaken Restriction] (compiling references to early accounts). An influential historical account posits that strict liability used to be the law of the land until the nineteenth century, when negligence started taking over. The shift is attributed, in this influential account, to policymakers' desire to subsidize young, developing industries by limiting the instances in which they would be ordered to compensate victims. E.g., MORTON J. HORWITZ, THE TRANSFORMATION OF AMERICAN LAW, 1780–1860, at 85–101 (1977); Charles O. Gregory, Trespass to Negligence to Absolute Liability, 37 VA. L. REV. 359, 382 (1951) (concluding that negligence developed to "tax enterprise with the cost of only those damages avoidably caused"). But see, e.g., Robert L. Rabin, The Historical Development of the Fault Principle: A Reinterpretation, 15 GA. L. REV. 925 (1981) (challenging the historical assertions).

quality of information that is produced in the courtroom. The main takeaway is that fault-based inquiries are often a good source for follow-up media coverage and searchable online databases, which diffuse the information from the courtroom and allow it to reverberate in the court of public opinion.

Part III introduces nuance, deciphering areas in tort law where the reputational impact is more (or less) pronounced. This Part shows how information from the courtroom affects not only potential consumers but also regulators and employees, and how litigation's reputational impact often spills over and affects the defendant's peers. Part III also deals with potential limitations of our theory.

Part IV derives two sets of policy implications. First, recognizing that litigation under negligence produces a positive externality in the form of quality information carries important implications for the openness-versus-secrecy debate. We detail how judges should consider the informational benefits when weighing whether to grant protective orders or enforce secret settlements and what mechanism legislators should design to ensure proper flow of information. Second, recognizing the information-production advantage of negligence over strict liability also calls for rethinking the conventional wisdom that dangerous and new technologies should be governed by strict liability. Under certain circumstances, such as those surrounding autonomous vehicles, it may be best to switch to fault-based compensation in order to facilitate better reputational discipline. We then conclude with a few big-picture observations about how our reputational account corresponds with other recent academic contributions under the "law and social norms" moniker, which emphasizes the relationship between legal and nonlegal systems.

I. REPUTATION THROUGH LITIGATION: A PRIMER

Before delving into how the choice of liability rules affects reputations, we need to understand how reputation works. Specifically, we need to explore the dynamics of reputational sanctions, the process by which stakeholders who hear about an adverse action by a company decide to stop doing business with it. This Part highlights two key insights from the burgeoning reputation literature. The first insight is that damning information

⁹ For a synthesis of the multidisciplinary reputation literature on this topic, see ROY SHAPIRA, LAW AND REPUTATION: HOW THE LEGAL SYSTEM SHAPES BEHAVIOR BY PRODUCING INFORMATION 19–34 (2020).

about the company does not automatically translate to reputational damage. Not all bad news is created equal: some bad news leads to stakeholders taking their business elsewhere, while other bad news is ignored. Part I.A focuses on four stages that determine whether damning information will translate to meaningful reputational sanctions: revelation, diffusion, certification, and attribution of information.

The second key insight is that the legal system affects each of these four conduits to reputation: breaking new information that market players were not privy to (revelation), dictating the scope and tone of media coverage of the issue (diffusion), being perceived as a credible source (certification), and framing the issue in a certain manner that affects stakeholders' interpretation of how things happened (attribution). Part I.B elaborates.

A. How Reputation Works

Let us define a company's reputation as the set of beliefs that stakeholders hold regarding the company's quality. ¹⁰ Stakeholders do not have the ability to directly observe the company's abilities and intentions, so they rely on the company's past observable actions as cues to evaluate how the company is likely to behave in the future.

When stakeholders hear bad news about the company, they may subsequently update their beliefs and lower their expectations. Upon hearing the bad news, stakeholders may infer that the company's "type" is worse than they previously thought; for example, they may infer that the company does not invest enough in the quality or safety of its products. As a result, stakeholders reduce their willingness to interact with the company going forward. Customers hearing about a product recall may purchase fewer products, potential employees hearing about worker safety issues may demand higher wages, and so on. In other words, bad news about the company may lead to diminished future business opportunities. And the aggregate of diminished future business opportunities constitutes the reputational sanction for violating market norms.

¹⁰ See Cynthia E. Devers, Todd Dewett, Yuri Mishina & Carrie A. Belsito, A General Theory of Organizational Stigma, 20 Org. Sci. 154, 156 (2009). We focus in this Part on corporate reputation for ease of exposition. Yet many of the underlying principles apply to individual-level reputation as well. Indeed, in subsequent parts of this Article, we discuss how litigation affects the reputation of an individual plastic surgeon or of an individual bungee-jump operator.

The question is, what determines the size of the reputational sanction? How many business opportunities, exactly, will the company lose? We know from everyday experience that not all bad news is created equal. Similar adverse actions cause different reputational outcomes. One company weathers a product recall relatively unscathed while another goes bankrupt. Yet in the legal literature, such variation in market reaction to bad news is usually assumed away. 11 Legal scholars who invoke the concept of reputation (or market discipline) tend to focus on only one condition: whether information is available or not. 12 That is, in the conventional analysis, if information about corporate misbehavior becomes publicly available, then the company will suffer meaningful reputational sanctions; market players will immediately and accurately update their willingness to interact with the company going forward. Yet a growing reputation literature reveals that information is hardly a sufficient condition for meaningful reputational sanctions to occur.13

Information does not automatically translate to reputation. Several other conditions have to hold, such as diffusion, certification, and attribution.

Damning information has to be widely diffused so that it reaches a critical mass of stakeholders in order for the reputational sanction to be meaningful. When it comes to corporate reputation, meaningful diffusion usually happens via massmedia coverage and, in some cases, via social networks. Some of the variation in market reaction therefore stems from the fact that certain types of victims, harms, or injurers are more salient and attract more media attention than others.

 $^{^{11}\,}$ Shapira, supra note 9, at 20; Eric Talley, Disclosure~Norms,~149 U. Pa. L. Rev. 1955, 1960 n.15 (2001).

¹² Shapira, supra note 9, at 20.

¹³ Id. at 19–34. For several examples in the legal literature, see generally Yonathan A. Arbel, Reputation Failure: The Limits of Market Discipline in Consumer Markets, 54 WAKE FOREST L. REV. 1239 (2019); Kishanthi Parella, Reputational Regulation, 67 DUKE L.J. 907 (2018); Shmuel I. Becher & Tal Z. Zarsky, E-Contract Doctrine 2.0: Standard Form Contracting in the Age of Online User Participation, 14 MICH. TELECOMM. TECH. L. REV. 303 (2008).

Julian F. Kölbel, Timo Busch & Leonhardt M. Jancso, How Media Coverage of Corporate Social Irresponsibility Increases Financial Risk, 38 STRATEGIC MGMT. J. 2266, 2278, 2280 (2017).

See David L. Deephouse, Media Reputation as a Strategic Resource: An Integration of Mass Communication and Resource-Based Theories, 26 J. MGMT. 1091, 1096 (2000).

One could claim that such dynamics lead to "reputational economies of scale": the media is less likely to report on problems with small, less newsworthy producers. Daniel Klerman & Miguel F.P. de Figueiredo, *Reputational Economies of Scale*, 65 INT'L REV. L. ECON., 2021, at 4.

Information that is widely diffused has to be certified as credible for the company's stakeholders to consider it seriously. ¹⁷ After all, stakeholders are less likely to change what they think about the company based on pieces of information spread by a fly-bynight rumor propagator. For stakeholders to update their beliefs and stop purchasing from a company, they have to perceive the source of damning information as credible. ¹⁸

And even information that is diffused and certified has to be attributed to deep-seated flaws that are likely to reoccur in order for the company's stakeholders to update their beliefs and act on them. This point requires further elaboration, as it has thus far largely escaped the legal literature. When stakeholders hear bad news about a company, they usually ask themselves, How is it relevant to me? That is, stakeholders try to infer whether the problem that led to the company's past failings is likely to resurface in the future in their own interactions with the company. Some pieces of bad news are deemed more relevant and indicative than others.

The most important determinant of reputational sanctions is the degree to which past actions are perceived to be indicative of future behavior. When stakeholders attribute the bad news to a one-off mistake, such as a rogue low-level employee who was subsequently fired, the mistake is minimally indicative of future behavior. And so the reputational sanction is likely to be small. By contrast, when stakeholders attribute the bad news to a deepseated flaw, such as a total breakdown of internal checks and balances throughout the corporate hierarchy, such conduct is highly indicative of future behavior. And so the reputational sanction is likely to be large. After all, no one wants to work for, buy from, or invest in companies with deep-rooted problems that will likely resurface.

Without forecasting too much, this is where the choice of liability rule affects reputational sanctions the most: under fault-based liability, litigation probes issues such as whether the misbehavior in question was intentional and controllable, which are

¹⁷ See Stefano Della Vigna & Matthew Gentzkow, Persuasion: Empirical Evidence, 2 ANN. REV. ECON. 643, 659 (2010) (detailing the impact of credibility certifiers on consumer persuasion).

¹⁸ See Roy Shapira, Reputation Through Litigation: How the Legal System Shapes Behavior by Producing Information, 91 WASH. L. REV. 1193, 1213–19, 1232 (2016) (detailing such "source-credibility" effects of the legal system and judges' opinions).

¹⁹ See Thomas Noe, A Survey of the Economic Theory of Reputation: Its Logic and Limits, in The Oxford Handbook of Corporate Reputation 114, 117 (Timothy G. Pollock & Michael L. Barnett eds., 2012).

issues that significantly affect attribution. We refer to such determinations as "reputation relevant" to denote how these pieces of information can easily sway reputational judgments. The more that stakeholders perceive the misbehavior as intentional and controllable, the more they will adjust their evaluation of the company downward—resulting in a bigger reputational sanction.²⁰

To illustrate with a concrete example, consider Professors Mark Mitchell and Michael Maloney's empirical study of stock market reactions to airplane crashes.²¹ The study finds that not all news of crashes is created equal. The market reacts differently based on how the media covers the crash. When the Wall Street Journal attributes the crash to internal causes, such as maintenance problems, stock prices decline at a statistically significant rate.²² By contrast, when the *Journal* reports that the crash was caused by external factors, such as unanticipated weather conditions or a mistake by the ground crew at the airport, the market does not react negatively.²³ The reason is simple: In the former scenario, customers decide that it is probably better to stop flying with airline company X, which has internal safety issues, even if it means paying a bit more or traveling a bit longer with a different airline company. In the latter scenario, customers have no reason to switch to a different company (and pay more or travel longer), because the same outside circumstances that led to the crash could have happened to other companies as well. In other words, stakeholders will think that company X simply suffered a stroke of bad luck and that the event is not correlated with its future behavior. Stakeholders will not "punish" this company by taking their business elsewhere, because then they would be punishing themselves (by unnecessarily limiting their choices).

To be sure, other determinants of reputational sanctions exist besides the four we have focused on thus far. For example, the size of the reputational sanction is also a function of stakeholders' willingness to act on the information that was revealed, diffused,

See W. Timothy Coombs, Situational Theory of Crisis: Situational Crisis Communication Theory and Corporate Reputation, in The Handbook of Communication And Corporate Reputation, in The Handbook of Communication And Corporate Reputation 268, 272 (Craig E. Carroll ed., 2013); A. Rebecca Reuber & Eileen Fischer, Organizations Behaving Badly: When Are Discreditable Actions Likely to Damage Organizational Reputation?, 93 J. Bus. Ethics 39, 42–43 (2010); Batia M. Wiesenfeld, Kurt A. Wurthmann & Donald C. Hambrick, The Stigmatization and Devaluation of Elites Associated with Corporate Failures: A Process Model, 33 ACAD. MGMT. Rev. 231, 235 (2008); Kölbel et al., supra note 14, at 2270–71.

²¹ Mark L. Mitchell & Michael T. Maloney, Crisis in the Cockpit? The Role of Market Forces in Promoting Air Travel Safety, 32 J.L. & ECON. 329 (1989).

²² Id. at 340–42.

 $^{^{23}}$ Id. at 342–45.

certified, and attributed.²⁴ Stakeholders may perfectly understand that something is wrong with the company yet not switch to a competitor for various reasons. Sometimes there is no competitor to switch to; in a market where there is only one seller and demand is inelastic, stakeholders cannot really punish a misbehaving seller by taking their business elsewhere.²⁵ Sometimes there are many sellers in the market and all of them are accused of the same misbehavior, thereby rendering reputational deterrence meaningless: stakeholders will not take their business elsewhere, because elsewhere is just as bad. 26 Further, stakeholders' willingness to punish misbehaving companies by taking their business elsewhere depends on the alleged misbehavior. For example, event studies of stock market responses to bad news show a marked difference between how the market reacts to misbehavior toward contractual parties (strong negative reaction) and how it reacts to misbehavior toward unspecified third parties (mild negative reaction).27 For example, if companies are caught cooking the books and lying to their investors or customers, the stock market punishes them severely; but if companies are caught polluting the environment or bribing officials in developing countries, there is little reputational harm.²⁸

An immediate takeaway from this bird's-eye view of the reputation literature is that the process of translating bad news into reputational assessments is hardly automatic. Reputational sanctions rest not just on objective facts about what happened (whether someone was injured) but also on subjective interpretations and judgments of how things happened (how and why he was injured). The facts are often open to multiple interpretations, and market players may get the interpretation wrong. Unlike in the airplane-crash scenario, where it is relatively easy to attribute the right cause to the problem, in other contexts there is no black box. Stakeholders may therefore interpret an isolated mistake as a deep-seated flaw and vice versa. They may continue doing business with rotten companies or stop doing business with perfectly fine companies that simply suffered an unlucky break.

 $^{^{24}\,}$ Michael L. Barnett, Why Stakeholders Ignore Firm Misconduct: A Cognitive View, 40 J. MGMT. 676, 694 (2014).

 $^{^{25}}$ On the link between market concentration and reputation, see generally Johannes Hörner, $Reputation\ and\ Competition,\ 92$ AM. ECON. REV. 644 (2002).

²⁶ SHAPIRA, *supra* note 9, at 111.

For a concise overview, see Jonathan M. Karpoff, *Does Reputation Work to Discipline Corporate Misconduct?*, in The Oxford Handbook of Corporate Reputation 361, 372–73 (Timothy G. Pollock & Michael L. Barnett eds., 2012).

²⁸ *Id*.

B. How Litigation Affects Reputation

Litigation can affect the process of reputational sanctioning during each of the abovementioned stages.29 First and foremost, litigation helps market players by uncovering new pieces of information on the misconduct in question (the revelation stage). The legal system vests fact-finding powers in private litigants to probe and demand relevant information from their rivals. In the process of trying to win the legal case, litigants produce as a byproduct quality information on how their counterparties behaved—information to which market players could not have privy. Consider. for example. internal communications that are exposed during the discovery stage or an admission in depositions that the company engaged in a coverup.30

Second, litigation helps not only by revealing new information but also by processing existing information (the attribution stage). Judicial opinions are good at highlighting patterns of misbehavior, organizing large chunks of information. and making it all less complex for outside observers.³¹ In particular, judicial opinions often make it easier for market players to assess how intentional the actions in question were an important determinant of reputational sanctions. To be sure, it is not just the (rare) disputes culminating in a judicial verdict that affect reputations. Even disputes that are decided by jury or those that settle relatively early may generate documentation during pleading, discovery, or trial. Documents exposed during discovery can help not just by drawing outside observers' attention to a misbehavior that they were not aware of (revelation) but also by adding details and analysis of how things happened (attribution).

Third, information from litigation is often considered by market players to be credible (the certification stage). A welldeveloped psychology literature tells us that not all sources of information are created equal. Stakeholders are more likely to update their beliefs and act on information when they perceive

²⁹ For a summary in a different context (shareholder litigation), see Roy Shapira, *Mandatory Arbitration and the Market for Reputation*, 99 B.U. L. REV. 873, 898–900 (2019)

³⁰ A separate question, to which we return in Part IV, is the extent to which such information becomes publicly available (as opposed to being sealed or made confidential). See infra Part IV.A; see also Diego Zambrano, Discovery as Regulation, 119 MICH. L. REV. 71, 124–25 (2020).

³¹ Shapira, supra note 9, at 40.

the source as credible. ³² Judicial opinions are normally considered disinterested and fair. Depositions and testimonies are given under oath. Documents are produced under the threat of perjury. Indeed, in a separate project one of us interviewed thirty journalists about how they use information from the courtroom, and a journalist noted that "[t]he mere phrase 'according to court documents' is a rhetorical device to increase your story's credibility."³³ That is, a journalist may have all the information she needs from another source, but she would still find it valuable to search for corroboration in court documents to increase the chance that her story reverberates.³⁴

Finally, litigation affects reputation by shaping the frequency and tenor of media coverage (the diffusion stage). Litigation feeds the media with what communication scientists call "information subsidies."³⁵ Court documents reduce the costs to journalists of covering the story.³⁶ They often provide information that is well-documented and detailed and that contains good quotes from internal company documents. Importantly, information from court documents is invaluable for investigative reporters because it is practically libel-proof; as long as the media reports accurately from court documents, it is shielded from defamation liability.³⁷

It is thus clear that information coming from the courtroom can leak out and affect the court of public opinion. But for such observations to have real-world implications—that is, for us to be able to design legal institutions based on their reputation-shaping effects—more is needed. We cannot stop at the "in general" phase of our theory ("in general, litigation has the potential to affect reputation"). Instead, we need to drill down to a cross-sectional variation: What are the conditions under which the reputational effect of litigation is large or small? In the rest of this Article, we focus on one key determinant of litigation's reputational impact—the liability rule in place. The next Part shows that negligence affects reputations much differently than strict

 $^{^{32}}$ $\,$ See, e.g., Della Vigna & Gentzkow, supra note 17, at 655–56 (describing investors' responses to recommendations that they know to be biased).

³³ Roy Shapira, Law as Source: How the Legal System Facilitates Investigative Journalism, 37 YALE L. & POLY REV. 153, 175 (2018).

³⁴ *Id*.

³⁵ See generally OSCAR H. GANDY, JR., BEYOND AGENDA SETTING: INFORMATION SUBSIDIES AND PUBLIC POLICY (1982) (coining the term).

³⁶ See Shapira, supra note 33, at 180–89 (providing evidence from reporters' tip sheets, interviews with reporters, journalism school syllabi, and communication-science textbooks).

 $^{^{37}}$ Id. at 173–74.

liability and applies this insight to reevaluate the conventional wisdom on which liability regime is preferable.

II. STRICT LIABILITY VERSUS NEGLIGENCE: A REPUTATIONAL PERSPECTIVE

The choice of liability rules dictates not just the likely legal outcome of a dispute but also the likely reputational outcome. Different liability rules lead to the different quality and quantity of information produced during litigation. This Part presents our core argument—namely, that litigation under a fault-based regime produces more granular, reputation-relevant information than litigation under a no-fault regime (Part II.A). This Part then builds on this basic insight to revisit longstanding empirical puzzles and theoretical debates in the tort law literature (Part II.B). For example, we examine why damage-cap reforms in medical malpractice continue to fail and what can explain the prevalence of comparative fault over contributory fault.

A. How Different Liability Rules Affect Reputations Differently

From an information-production perspective, a fundamental difference exists between legal regimes that are based on fault and those that are not. Under a negligence rule, tort litigation revolves around questions such as what defendants knew, when they knew it, whether they could have stopped the problem, and how their conduct compares to that of their peers (the industry benchmark). Under strict liability, by contrast, tort litigation revolves around simpler questions: What damage occurred? And did the defendants' actions cause it? The negligence-related set of questions is much more reputation relevant than the strict liability-related set: it provides outside observers with clues to assess whether the misbehavior in question is indicative of defendants' future behavior.

1. Negligence.

To illustrate the reputational impact of a negligence regime, let us return to our motivating example of medical malpractice. Not all harms that happen during medical treatments give rise to liability; only those that result from behavior that falls short of acceptable standards do.³⁸ But how do courts determine the acceptable standards? In practice, courts rely on what is "customary care": whether the medical-care provider in question operated below or on a par with how other physicians tend to practice.³⁹ A negligence finding is thus effectively a determination that the treatment was below industry standards.⁴⁰ Such an indication is something that future potential patients can consider when deciding whether they want to be hospitalized in a given facility or operated on by a given physician. In fact, even if the case settles before a clear finding of negligence, the earlier stages of medical malpractice litigation (particularly, discovery) tend to produce reputation-relevant information, such as whether the facility is properly maintained, whether the equipment is modern, and whether the physician uses the most up-to-date methods.⁴¹

Had the regime for medical malpractice been strict liability, litigation would have revolved around a much different question—whether the defendant's action caused the harm. Under strict liability, litigation thus focuses on what happened; under negligence, it focuses on how and why it happened. The latter is more reputation relevant than the former. For outside observers, the fact that something happened—that a certain medical procedure caused harm—may be less helpful when deciding whether they want to be treated by the medical care provider in question. After all, the nature of medical care, especially complex procedures, is that something bad may inevitably happen, perhaps due to background risks or inherent risks. The important piece of information that potential patients (or employers) are looking for is not whether harm occurred but rather whether the harm was avoidable. Put differently, the relevant question is whether the

³⁸ See Noam Sher, New Differences Between Negligence and Strict Liability and Their Implications on Medical Malpractice Reform, 16 S. CAL. INTERDISC. L.J. 335, 336 n.5 (2007) (compiling references for the prevalent regime).

³⁹ See, e.g., Gideon Parchomovsky & Alex Stein, Torts and Innovation, 107 MICH. L. REV. 285, 291 (2008). On the centrality of "accepted practice" in medical malpractice in other countries, see MARC STAUCH, THE LAW OF MEDICAL NEGLIGENCE IN ENGLAND AND GERMANY 39–46 (2008).

⁴⁰ Similar principles of common practice apply to regular negligence and products liability: the defendant's failure to comply with relevant industry standards often leads to a conclusion that she did not take enough precautions or that her product was defectively designed. Parchomovsky & Stein, *supra* note 39, at 290–91, 290 n.16 (compiling references).

⁴¹ Sher, *supra* note 38, at 359–60.

medical-care provider weighed the risks properly or not.⁴² Litigation under negligence tends to provide answers to this question, while litigation under strict liability does not.

Indeed, there are strong indications that potential patients and employers use information from medical malpractice litigation to choose among different facilities and physicians. Consider, for example, the various searchable databases that contain information from litigation.⁴³ One such database is DocInfo, which is accessible to the public online and facilitates patient avoidance of physicians who were found negligent.⁴⁴ Another example is the "National Practitioner Data Bank" (NPDB), which is not open to the public but is rather meant as a "confidential information clearinghouse . . . seeking to prevent health care providers and other entities from moving from state to state without disclosure of previous damaging or incompetent performance."⁴⁵ In other words, the NPDB uses findings of negligence to help employers (hospitals) make better hiring decisions and regulators make better licensing decisions.

It should be noted from the outset that litigation under a negligence rule does not always generate significant reputational effects. 46 The magnitude of the reputational effect depends, among other things, on the type of activity in question: the reputational impact is more pronounced in contexts where there is a strong correlation between past and future behavior, and vice versa. In some scenarios, one's behavior in one instance is likely to resurface in other instances as well. Suppose, for example, that during a complex operation a surgeon accidently impairs one of her patient's organs, leaving the patient with a disability. The patient sues, and during litigation we find out that this surgeon's physical abilities have deteriorated—say, her hands are now shaky. Problems of this kind—that is, diminished physical or cognitive capacity that is hard to modify—are likely to affect the probability of harm in future procedures as well. In other words, they correlate with the riskiness of the actors.⁴⁷ In such scenarios, a negligence

⁴² Id. at 356.

⁴³ See Tsachi Keren-Paz, Liability Regimes, Reputation Loss, and Defensive Medicine, 18 Med. L. Rev. 363, 365 & n.7 (2010).

⁴⁴ See Information for Consumers, FED'N OF STATE MED. BDS., https://perma.cc/TX8H-9KDU.

 $^{^{45}}$ National Practitioner Data Bank (NPDB), NAT'L COUNCIL OF STATE BDS. OF Nursing, https://perma.cc/6TYK-23RX.

⁴⁶ We return to this point when discussing potential limitations in Part III.D.

⁴⁷ See Omri Ben-Shahar & Ariel Porat, Personalizing Negligence Law, 91 N.Y.U. L. REV. 627, 637–41 (2016). For a more recent, book-length account considering how different

regime is likely to have an outsized impact on the defendant's reputation. Potential patients would try to avoid her, and potential employers would be reluctant to hire her.

In other scenarios, the defendant's past behavior is less indicative of her future behavior. Suppose we learn from litigation that the harm resulted from the fact that the surgeon's eyesight had slightly deteriorated, but that the surgeon has since started using eyeglasses or had a LASIK surgery and is now boasting twenty-twenty vision. Or suppose litigation reveals that the harm resulted from a problematic protocol that the facility used to follow, but that it has since jettisoned in favor of a better protocol. In such cases, the reputational impact is relatively limited.

There is a broader point at issue here about a fundamental difference between legal and reputational outcomes: What happened in the past matters for the legal outcome of the case, but it matters less for the reputational outcome. The reputational outcome is instead determined by our judgments of what will happen from now on.⁴⁸ Legal outcomes are backward-looking, while reputational outcomes are forward-looking.

To reiterate, the reputational effects of a negligence regime are not limited to cases with a clear finding of negligence nestled in a judicial opinion. The underlying liability regime affects reputation from the outset, even at the earlier stages of litigation: pleadings, discovery, and trial. This is because the underlying liability regime dictates the scope and focus of discovery and deposition. A negligence regime incentivizes plaintiffs to extract reputation-relevant information about the defendants. And a negligence regime also makes it much harder for defendants to object and withhold information on the basis of relevance compared to a no-fault regime.

A classic illustration of the reputational impact of the earlier stages of litigation comes from the 2008 Pulitzer Prize-winning

legal rules might be applied according to individual characteristics, see generally OMRI BEN-SHAHAR & ARIEL PORAT, PERSONALIZED LAW (2021).

⁴⁸ Noe, *supra* note 19, at 117.

 $^{^{49}~}$ See Paul R. Sugarman & Marc G. Perlin, Proposed Changes to Discovery Rules in Aid of Tort Reform: Has the Case Been Made?, 42 Am. U. L. REV. 1465, 1497–1501 (1993) (discussing the role of discovery in the context of products liability litigation).

⁵⁰ *Cf.* Keren-Paz, *supra* note 43, at 373 (noting that—in the context of medical malpractice—"under strict liability there is less chance that evidence aimed to prove the physician's fault will be collected by the claimant or relied on by the court").

 $^{^{51}}$ For a discussion of the importance of discovery to litigation outcomes, see Sugarman & Perlin, supra note 49, at 1498–1501. We note that in practice plaintiffs may, under certain circumstances, plead for both negligence and strict liability, thereby opening up both avenues for discovery.

investigative project on lax regulation of baby products. There, the *Chicago Tribune* was able to highlight just how defective certain cribs and toddler car seats were by culling depositions and other documents from lawsuits that parents filed against the manufacturers.⁵² These cases settled, but only after damning documentation was produced. And the documentation allowed reporters to hold manufacturers (and regulators) to account.⁵³ The court of public opinion did not need an official finding of negligence: the photos and depositions themselves were enough to make potential consumers render a reputational judgment against the manufacturers in question (by not buying from them going forward).

The baby-products litigation thus illustrates how even cases that settle can still have a substantial impact on the disputants' reputations. It also illustrates that what matters for reputational impact is not the official designation of the liability regime but the types of questions that litigation ends up revolving around. Products liability is usually referred to as "strict." We would have therefore expected products liability litigation to revolve strictly around the product: whether it was defective and caused harm or not. Yet in reality, products liability litigation often resembles litigation under regular negligence in that it implicates the manufacturer's behavior.⁵⁴ To understand why, consider the different analyses that apply to each potential product defect: manufacturing, design, and warning.55 Manufacturing defects are indeed analyzed under a framework that resembles strict liability. But design defects and failures to warn are analyzed in ways that probe manufacturers' fault. Under the risk-utility test, for example, the court examines whether manufacturers properly balanced the costs and benefits of the design, and a finding of liability means that the manufacturer exposed consumers to inordinate risks. 56 Both "the risk-utility' and 'consumer-expectation' tests institute a fault-based negligence regime for imposing

⁵² E.g., Patricia Callahan, When Car-Seat Safety, Commerce Collide, CHI. TRIB. (July 14, 2007), https://perma.cc/2KSU-FFZ5.

⁵³ Shapira, *supra* note 33, at 190–91.

 $^{^{54}}$ Richard A. Posner, A Comment on No-Fault Insurance for All Accidents, 13 OSGOODE HALL L.J. 471, 471–72 (1975).

 $^{^{55}}$ Restatement (Third) of Torts: Products Liability $\S~2$ (Am. L. Inst. 1998).

 $^{^{56}}$ $\,$ Id. at $\$ 2B; Keith N. Hylton, A Positive Theory of Strict Liability, 4 Rev. L. & Econ. 153, 178–79 (2008).

liability for defective products."⁵⁷ The point can be generalized beyond products liability: the distinction between fault-based and no-fault regimes is often murky, and courts frequently retreat from strict-liability analysis to invoke elements of reasonableness and fault. Our argument should thus be read as relative rather than absolute: the more a legal regime incorporates elements of fault, the more it produces information that the market can use to make more accurate reputational judgments.

2. Strict liability.

Strict liability produces less granular information than negligence does, but it may nevertheless affect defendants' reputations through various conduits, such as the mere imposition of liability or the calculation of damages.

Determining that the defendant's activity caused harm in the past may serve as a valuable indication of the likelihood that the defendant will cause harm in the future, even without digging into how such harm occurred (that is, without knowing how much care the defendant took in each past accident). Take for example automobile accidents, which is one pocket of accident law where a showing of fault is not necessarily required. Knowing that person X was involved in ten car accidents may tell us something even without knowing the details of each accident. We would probably infer that person X is more likely to be involved in another car accident in the future relative to person Y who was never involved in a car accident in the past.

The broader point is that litigation, even without investigating fault, creates a record of the number of accidents that each actor is involved in. And if that number is markedly higher than the benchmark—that is, higher than the average number of accidents for others engaging in the same activity—outside observers can assume a pattern that is likely to resurface in future behavior.⁵⁹ In our automobile-accident example, driving is an activity

⁵⁷ Parchomovsky & Stein, *supra* note 39, at 300; *see also* Hylton, *supra* note 56, at 178–79; (compiling references); JOHN C.P. GOLDBERG & BENJAMIN C. ZIPURSKY, RECOGNIZING WRONGS 194 (2020) ("[I]t is widely accepted today . . . that liability for injuries caused by *defectively designed* products, and by *failures to warn*, are wrongs-based." (emphasis in original)).

Not all states impose a no-fault regime on automobile accidents. For a constantly updated, state-by-state summary, see the Insurance Information Institute's dedicated webpage. *Background on: No-Fault Auto Insurance*, INS. INFO. INST. (Nov. 6, 2018), https://perma.cc/E3VN-DDJJ.

 $^{^{59}~}$ See Keren-Paz, supra note 43, at 372 (discussing this idea in the context of medical malpractice).

most of us engage in a lot, so outside observers can assume that mistakes will cancel out over time; sure, even extra cautious drivers may be involved in a serious accident or two, but probably not in five or ten. ⁶⁰ If I observe that someone has been sanctioned ten times for accidents, I may consider him an accident waiting to happen. ⁶¹

However, we should not overstate the reputational impact of a finding of (strict) liability. Such information is often too coarse to achieve effective reputational deterrence. For one thing, any reputational sanction would be severely delayed here. Imposition of (strict) liability starts being truly informative only after we observe a large enough number of accidents because only then can we reasonably infer that the defendant's behavior is substandard. To use the previous example, society would have to suffer through ten accidents before the outside world realizes that there is something wrong with the driver. Under negligence, by contrast, it would be possible to realize that this driver is a menace after the first instance. For example, we may learn that she was watching movies on her mobile phone while driving. 62

Importantly, strict liability creates perverse reputational incentives to avoid certain activities. When your reputation is judged by the number of accidents that you have been involved in, you may opt to avoid certain activities or market actors, even when avoiding them is undesirable from a societal perspective. For example, if the regime for medical malpractice were strict liability, surgeons would anticipate that their reputations would decline with the number of accidents they inflict, regardless of how much care they take and whether the harms are avoidable. This is because, under strict liability, outside observers cannot

Our discussion here has held many variables constant for ease of exposition. One could claim that in a slightly modified scenario, more accidents would not mean worse driving; a driver who spends her entire adult life on the road may be involved in more accidents than someone who drives very little, even if the former is a better and more cautious driver than the latter. Our point here is not that the imposition of liability necessarily produces valuable information but rather that it may produce valuable information under certain circumstances. To modify the scenario further, imagine that you are an owner of a trucking company facing a choice between two experienced driver applicants. In this scenario, you would be able to use the applicants' legal records to compare and choose the one with fewer accidents.

Another scenario where even a single finding of liability may be informative has to do with very safe activities. With very safe activities, the fact that harm occurred may itself be an indication that something is wrong with the defendant's competence or prudence. We return to this point in Part IV.B.

 $^{^{62}}$ For a real-world example with a similar fact pattern, see infra note 207 and accompanying text.

tell the difference between physicians found liable for unavoidable harms and physicians who were actually negligent.⁶³ Anticipating that, the most reputable surgeons may opt to avoid treating the most vulnerable patients: operating on vulnerable patients may lead to harm even under the hands of the perfect surgeon, and the reputable surgeon has too much to lose from having an entry in the accident column.⁶⁴

In other words, strict liability may lead to bad assortative matching of patients and medical-care providers. The most vulnerable patients would be treated by the worst surgeons, who do not have much reputational cachet to lose. A negligence regime avoids such bad sorting effects: the competent and careful surgeons know that the chances of being sued (not to mention being found liable) are lower, even if harm occurred.⁶⁵

Still, litigation under strict liability may nevertheless produce valuable information and affect reputation through a different channel—namely, the damages phase. Even when liability is not fault based, a plaintiff may hunt for evidence of a defendant's mental state because such evidence could entitle plaintiffs to larger damage awards. Such is the case with punitive damages. While the conditions for awarding punitive damages differ across legal areas and jurisdictions, most variations contain reference to a defendant's state of awareness, intent, and the degree of controllability—the types of information that are highly reputation relevant.

With products liability, for example, different state-law definitions tend to converge on the same concepts of conscious disregard for or reckless indifference to consumer safety. 66 Plaintiffs looking for punitive damages in products liability cases therefore attempt to find indications that the defendants were aware of the danger in real time yet failed to change their design, failed to

⁶³ See Sher, supra note 38, at 360.

⁶⁴ For empirical evidence consistent with this argument, see generally J. Shahar Dillbary, Griffin Edwards & Fredrick E. Vars, *Why Exempting Negligent Doctors May Reduce Suicide: An Empirical Analysis*, 93 IND. L.J. 457 (2018) (documenting how expanded liability may result in a reduction in activity levels, such that worse psychiatrists may end up treating more vulnerable patients).

Further, litigation under negligence can actually help a high-quality doctor repair damage that a disgruntled patient causes to her reputation prior to litigation. A disgruntled patient can spread negative information about a doctor online. But the doctor can use a clear finding in her favor in litigation to credibly vindicate herself in the court of public opinion.

⁶⁶ See Frederick M. Meyers & Tracy R. Barrus, Punitive Damages in Products Liability Cases: A Survey, 51 INS. COUNS. J. 212, 213–16 (1984) (surveying the requirements in all states).

warn consumers, or engaged in an elaborate cover-up.⁶⁷ For potential buyers, information that manufacturer X puts quick profit over product safety is a clear sign to stop purchasing from X and switch to her competitors.

Another example comes from copyright litigation, where plaintiffs who manage to show that defendants willfully infringed their rights are entitled to enhanced statutory damages. As a practical matter, courts allow the plaintiff in copyright cases more latitude to marshal evidence on the defendant's prior conduct to indicate that he is a willful, serial infringer. As a result, copyright litigation tends to produce details that may attract media follow-ups. Such was the case, for example, with several lawsuits involving Urban Outfitters, which the media framed as evidence that the fashion company was perhaps not as creative as previously thought. Similar dynamics are at play in patent litigation, where the prospect of enhanced damages incentivizes plaintiffs to bring forth evidence that helps separate accidental, one-off infringers from perpetual infringers.

⁶⁷ See Nadine E. Roddy, Note, Punitive Damages in Strict Products Liability Litigation, 23 WM. & MARY L. REV. 333, 347 & nn.91–92, 360 (1981) (compiling references for finding awareness); see also Thorndike v. DaimlerChrysler Corp., No. Civ. 00-198-B, 2003 WL 21145623, at *2 (D. Me. May 15, 2003) (finding an elaborate cover-up), aff'd, 288 F. Supp. 2d 50 (D. Me. Oct. 27, 2003).

^{68 17} U.S.C. § 504(c)(2); see also Wildlife Express Corp. v. Carol Wright Sales, Inc., 18 F.3d 502, 511–13 (7th Cir. 1994) (discussing willfulness's impact on statutory damages); N.A.S. Imp., Corp. v. Chenson Enters., 968 F.2d 250, 252–53 (2d Cir. 1992) (same).

⁶⁹ See generally Nicholas J. Boyle & Richard A. Olderman, The Uses of Prior Conduct in Copyright Cases; The Lessons of History, 23 INTELL. PROP. STRATEGIST, no. 12, Sept. 17, 2017.

⁷⁰ See generally, e.g., Unicolors, Inc. v. Urban Outfitters, Inc., 853 F.3d 980 (9th Cir. 2017). For follow-up media coverage, see Casey C. Sullivan, Urban Outfitters Burned for Stealing Fabric Company's Design, FINDLAW (Apr. 5, 2017), https://perma.cc/4NMA-SGFG ("Urban Outfitters... has a bit of a reputation for ripping off others' designs."); Kali Hays, Appeals Court to Urban Outfitters: Pay \$530,000 after "Reckless Disregard" of Fabric Copyright, L.A. TIMES (Apr. 5, 2017), https://perma.cc/B8R2-U9EG ("Urban is no stranger to infringement litigation."); Evan Ross Katz, Urban Outfitters Just Pulled This Illegal T-Shirt After Being Sued for Using a Major Company's Logo, BUS. INSIDER (May 11, 2017), https://perma.cc/23RA-BFWF (connecting the different lawsuits against the company).

⁷¹ For the legal standard, see Christopher B. Seaman, Willful Patent Infringement and Enhanced Damages After In Re Seagate: An Empirical Study, 97 IOWA L. REV. 417, 428–31 (2012) (describing the current willfulness standard in patent litigation). See also Halo Elecs., Inc. v. Pulse Elecs., Inc., 579 U.S. 93, 110 (2016) (articulating the enhanced damages standard after Seagate's abrogation). For a recent example of media coverage that emphasizes the serial-infringer criticism, see Allison Levitsky, Cisco Hit with \$1.9B Judgment for 'Willful and Egregious' Patent Infringement, SILICON VALLEY BUS. J. (Oct. 5, 2020), https://perma.cc/P27N-7E6B.

Defenses.

We have focused thus far on information that implicates the injurer's behavior: either more granular information under negligence or coarser information under strict liability. But tort litigation often implicates not just questions of whether the injurer's behavior met the standard for liability but also questions of whether the injurer is entitled to certain defenses, such as contributory or comparative fault. When the liability rule is accompanied by defenses, litigation revolves not only around plaintiffs extracting information on defendants' negligence but also around defendants extracting information on plaintiffs' negligence.

Pertinently, information on how the victim behaved often affects the defendants' reputation. To understand why, let us recast our discussion of the attribution stage in reputational sanctioning. The reputation literature identifies "affected party complicity" as a key determinant of attribution. 72 In lay terms, affected party complicity means the role that the victim played (or did not play) in the harmful event. When outside observers think that the victim had full information and could have avoided the possible harmful effects of the defendant's action yet did not, they attribute less blame to the violator. 73 As a result, the reputational sanction that the violator suffers is relatively small. The size of the reputational sanction hinges on how stakeholders answer the guestion, Is it relevant to me?⁷⁴ If stakeholders learn that the victim's recklessness contributed to the harm, they may suppose, "What happened there is not relevant to my own interactions with the defendant—because I, unlike the victim, would never be this reckless."

To illustrate how the affected-party-complicity effect plays out in practice, let us turn to the common fact pattern in accidents that occur during extreme sports and thrilling recreational activities. It is not a stretch to assume that potential future bungee jumpers or skydivers are interested in information about past bungee or skydiving accidents. Suppose I consider jumping next Tuesday, search online for nearby operators, and learn that an accident occurred at bungee operator X's facility. If I then learn that the accident was the fault of the operator who did not hook

⁷² Donald Lange & Nathan T. Washburn, *Understanding Attributions of Corporate Social Irresponsibility*, 37 ACAD. MGMT. REV. 300, 307 (2012).

 $^{^{73}}$ Id. at 306–07. See also generally Kelly G. Shaver, The Attribution of Blame (1985) (providing a classic account of attribution theory).

⁷⁴ SHAPIRA, *supra* note 9, at 22 (synthesizing the reputation literature on this point).

the harness properly or did not weigh the jumper properly,⁷⁵ chances are that I would not patronize bungee operator X. If, by contrast, I learn that the accident at bungee operator X's facility was due to the fault of the jumper who was intoxicated and did not follow instructions, I may still consider patronizing bungee operator X, reasoning that as long as I behave normally, I will be safe. Put differently, a fault-based determination of liability helps those who are intent on participating in extreme sports and recreational activities to distinguish between high- and low-quality operators.⁷⁶ Yes, these potential customers seek thrills, but they are still interested in learning which operators increase the risk of harm beyond that which is inherent in the activity.⁷⁷

Defenses may thus increase the quality of reputational judgments. They help outside observers make a more informed choice between different interpretations of what and how things went wrong: If I realize that past accidents occurred due to bad maintenance or incompetence on the part of the operator, I am likely to switch to another operator. If I realize that past accidents occurred due to recklessness on the part of the customer, I may still patronize the same operator. And if I realize that past accidents occurred due to an unforeseeable event where neither the operator nor the customer was at fault, I may decide to forego the risky activity altogether, deeming it not worth it. That way, defenses provide another layer of reputation-relevant information that helps third parties make sense of past events.

B. Fit with Evidence and Standard Economic Analysis

The previous Section explained how to view tort litigation through an information-production lens. This Section examines how looking through that lens can help us make sense of existing empirical and theoretical puzzles. Part II.B.1 applies the reputational perspective to shed light on certain on-the-ground evidence

⁷⁵ For the real-world cases from which we borrowed these scenarios, see Thomas H. Ehrhardt, What Price Human Flight? Bungee Jumping Accidents Indicate Need for More Expeditious Regulation of Potentially Hazardous Activities, 25 RUTGERS L.J. 853, 857 & n.12 (1994); Knight v. Jewett, 3 Cal.4th 296, 300–03 (1992).

Granted, some accidents may lead to deaths, which in turn could result in the government criminally prosecuting the operator and ordering the operator to completely refrain from engaging in the activity going forward. See Carolyn B. Ramsey, Homicide on Holiday: Prosecutorial Discretion, Popular Culture, and the Boundaries of the Criminal Law, 54 HASTINGS L.J. 1641, 1674 (2002). In such cases, the reputational outcome stops being relevant—it is the legal sanction that makes the market actor lose all future business opportunities.

⁷⁷ Cf. Knight, 834 P.2d at 697.

of the effects of tort law, such as why damage-cap reforms often fail. Part II.B.2 applies the reputational perspective to reevaluate certain longstanding theoretical debates in tort law literature, such as the prevalence of negligence over strict liability and of comparative over contributory negligence.

1. Fit with evidence.

Our information-production theory of liability rules does a better job than extant theories in explaining several real-world patterns of tort litigation. Consider the following four examples.

First, we already mentioned the indications that some physicians around the world revealed a preference for strict liability over negligence. Existing accounts have a hard time showing why defendants prefer a liability rule that increases the expected legal sanction. Our account emphasizes the fact that litigation generates nonlegal sanctions too, and that a negligence rule increases this nonlegal, reputational risk to defendants. In areas where reputation matters greatly, minimizing the reputational risk becomes more important than minimizing the legal risk.

Second, there exist indications of a robust market for information from litigation, such as the abovementioned searchable databases containing information from litigation that potential patients, employers, and regulators use to evaluate physicians. As Professor Robert Quinn has noted, "[C]onsumer groups are paying close attention to lawsuit-prone doctors." He gives examples from Washington, D.C., and Florida; in Florida, public demand for lists of lawsuit-prone physicians is "tremendous." Examples from other states abound. And online health portals routinely advise their readers on how to choose doctors thusly: "Place quotation marks around the healthcare provider's name to keep the phrase intact (such as 'Dr. John Smith') and follow this

⁷⁸ See supra note 1.

This pattern of trading higher legal sanctions for lower reputational sanctions is not unique to tort law. We observe it in other areas as well, such as in securities regulation: publicly traded companies often prefer to settle quickly and for hefty amounts with the Securities and Exchange Commission (SEC) in exchange for limiting the damning information that the SEC will release about them. See Roy Shapira, A Reputational Theory of Corporate Law, 26 STAN, L. & POLY REV. 1, 42–43 (2015).

 $^{^{80}}$ See supra note 43 and accompanying text.

 $^{^{81}}$ Quinn, supra note 2, at 469.

⁸² *Id*.

with such keywords as 'malpractice,' 'lawsuit,' 'sanction,' [or] 'complaint."⁸⁴ The mere existence of such apparent market demand is indication enough that litigation shapes reputations.

A third fact that is consistent with our informationproduction theory but not with conventional accounts comes from the real-life consequences of past medical malpractice reforms. Past reforms focused mostly on limiting the total amount and types of damages plaintiffs can receive. 85 Yet empirical studies reveal that these reforms often fail to reduce the costs of defensive medicine.86 This presents a puzzle for conventional theories: Why would reducing the expected legal sanction not affect physicians' behavior? Viewed from our perspective, the documented failure of damage-cap reforms is hardly surprising. Such reforms reduce the expected legal sanction from litigation, but they do not alter the expected reputational sanction.⁸⁷ The expected reputational sanction is not a function of the amount of damages that will be awarded at the end of litigation but rather the kind of information that will come out during litigation. Doctors fear the process of litigation and the information that it produces more than they fear its financial consequences—if only because damages are paid by insurance companies, while reputational damages are not insurable.88

One immediate, counterintuitive policy implication is that those who seek to reduce defensive medicine should therefore target the liability rule rather than the damages amounts.⁸⁹ Instead of capping awards, they should consider switching to a no-fault rule.

⁸⁴ Trisha Torrey, *How to Check Out a Doctor for Medical Malpractice*, VERYWELL HEALTH (Sept. 2, 2021), https://perma.cc/9JXT-6CRS.

⁸⁵ See Michael D. Frakes, Matthew B. Frank & Seth A. Seabury, The Effect of Malpractice Law on Physician Supply: Evidence from Negligence-Standard Reforms, 70 J. HEALTH ECON. 1, 1, 3 (2020) (describing how past reforms focused on damage caps).

See generally Myungho Paik, Bernard Black & David A. Hyman, Damage Caps and Defensive Medicine, Revisited, 51 J. HEALTH ECON. 84 (2017) (providing an extensive empirical study). To be precise, it is not that the caps had zero influence. Some reforms did have a marked impact on certain parameters of medical malpractice litigation. See generally, e.g., Ronen Avraham, An Empirical Study of the Impact of Tort Reforms on Medical Malpractice Settlement Payments, 36 J. LEGAL STUD. 183 (2007). It is just that these reforms did not have the intended effect of lowering the costs of defensive medicine or medical malpractice.

⁸⁷ See supra note 4 and accompanying text.

See supra note 2.

See Frakes et al., supra note 85, at 14 (suggesting that "[t]ort reform . . . need not focus exclusively on changing the remedies available in the event of liability. Reforms may also target the underpinning of the tort system itself—i.e., the negligence standard"); Studdert et al., supra note 4, at 381.

The fourth set of empirical findings comes from studies of settlements. One study conducted in Israel in preparation for a medical malpractice reform found that the sums paid in medical malpractice settlements exceed the sums paid in final verdicts for the same accidents.90 Why would defendants systematically pay much more to settle than what they would have had to pay in the worst-case scenario if they had not settled? One potential interpretation of the results is that defendants overestimate the expected legal sanction—they pay more in settlements simply by mistake. Yet such an interpretation makes less sense when one considers that those who pay settlements in medical malpractice claims are sophisticated, repeat players. Our information-production theory provides a better explanation: Defendants are willing to a pay a premium to settle because settlements limit the reputational sanction that may emanate from a finding of negligence after a full trial. Plaintiffs know that, and they use defendants' fear of the expected reputational sanction as a bargaining chip to extract bigger payments.

Yet another example comes from a recent comprehensive study of settlement rates around the world. 92 The study finds that common-law-origin systems have the highest settlement rates while French-law-origin systems have the lowest settlement rates. Moreover, in common-law countries, tort law disputes have the highest settlement rates. 93 Our reputational theory provides an explanation that fits both these stylized facts: The bigger reputational risk that comes with tort litigation explains the higher propensity to settle in tort cases, relative to, say, contract disputes (contractual liability is usually strict). Disputants have more (reputation) to lose from trial, so they settle more and settle quickly to make sure that damning information about them does

⁹⁰ DOCH HAVAADA HABEIN-MISRADIT LEBHINAT HADRACHIM LEHAKTANAT HAHOTSAA HATSIBURIT BEGIN TVIOT RASHLANUT REFUIT (ביסודית לבחינת הדרכים) דוח הוועדה הבין-משרדית לבחינת הדרכים [DHHLHLHHBTRR] 114, tbl.5.4 (2005).

granted, economic analyses of litigation suggest that defendants may settle the higher-value cases and litigate the weaker ones. See generally Daniel Klerman & Yoon-Ho Alex Lee, Inferences from Litigated Cases, 43 J. LEGAL STUD. 209 (2014). Yet these (valid) theories do not explain the fact pattern here because the abovementioned study compared matching cases—cases with the same attributes where one is litigated and the other is settled.

⁹² See generally Yun-chien Chang & Daniel Klerman, Settlement Around the World: Settlement Rates in the Largest Economies (Univ. of S. Cal. Center for L. & Soc. Sci. Rsch. Paper No. CLASS21-8, Legal Stud. Paper No. 21-8, 2021), https://perma.cc/7YZX-B2R6.

⁹³ *Id.* at 16.

not leak out to the court of public opinion.⁹⁴ And the stark differences in settlement rates between common-law systems and French-law systems can be explained by the prevalent liability rule: in common-law countries negligence is the law of the land, while in French-law countries the legal system relies more heavily on elements of strict liability.⁹⁵ In other words, the reputational effects of disputes in common-law systems are much more pronounced than the reputational effects of disputes in the French-law systems, and so disputants in the former want to settle more than disputants in the latter.

These stylized facts can be added to several empirical studies that directly tested the reputational impact of negligence and found patterns consistent with our theory. For example, when Professors David Dranove, Subramaniam Ramaparayanan, and Yasutora Watanabe examined how lawsuits affect demand for obstetricians, they found that a negligence finding alters the type of patients a doctor gets. Highly reputable obstetricians are in sufficiently high demand so that they can afford restricting access to Medicaid patients and opting to accept only private patients (who pay more). Yet once a physician is found negligent, her mix of patients changes dramatically: fewer private and more government-paid patients. The economic effects of such demand-side changes can be significant. 97

2. Revisiting the standard economic analysis.

Looking at tort law through an information-production lens allows us to challenge two of the better-known results of economic analysis of tort law. In standard economic analyses, the prevalence of negligence over strict liability as the dominant liability standard cannot be justified on efficiency grounds. Nor can the prevalence of comparative fault over contributory fault as the dominant defense standard. Yet once we update the model to include reputational effects, both results can change.

⁹⁴ Professors Yun-chien Chang and Daniel Klerman theorize that higher settlement rates in tort law disputes may be due to the higher uncertainty regarding the amount of (monetary) damages that will be awarded in trial. *Id.* at 31. Their explanation and ours are not mutually exclusive.

⁹⁵ See Mistaken Restriction, supra note 8, at 8.

⁹⁶ David Dranove, Subramaniam Ramanarayanan & Yasutora Watanabe, Delivering Bad News: Market Responses to Negligence, 55 J.L. & ECON. 1, 21 (2012).

⁹⁷ Id. at 22.

⁹⁸ See infra note 103.

⁹⁹ Christopher J. Robinette & Paul G. Sherland, Contributory or Comparative: Which Is the Optimal Negligence Rule?, 24 N. ILL. U. L. REV. 41, 51–59 (2003).

a) Negligence over strict liability. In standard economic analvsis, strict liability enjoys several distinct advantages over negligence. Strict liability comes with lower administrative and error costs because there are fewer parameters for the decisionmakers to evaluate. 100 And, importantly, strict liability creates better incentives for injurers to avoid harm, as it makes them internalize all the costs of accidents. 101 Under strict liability, actors will not only take proper precautions but will also moderate their participation in activities in ways that appropriately reflect the risks that these activities create. 102 Under negligence, by contrast, the actors' level of activity is likely to be socially excessive because they do not bear the harm that their activity causes as long as they took reasonable precaution. 103 Against this background, the fact that on-the-ground tort law clearly favors negligence seemed to law-and-economics scholars to be a mistake of policy, as it supposedly impedes the proper reduction of the costs of evidence.¹⁰⁴

¹⁰⁰ See COOTER & ULEN, supra note 7, at 223–24. See generally Steven Shavell, Strict Liability Versus Negligence, 9 J. LEGAL STUD. 1 (1980) [hereinafter Strict Liability Versus Negligence]. Professor Steven Shavell further clarifies that the increased evidentiary problems in administering negligence translate to perverse incentives: Under negligence, injurers may not choose care measures that the court cannot evaluate. Under strict liability, by contrast, all the courts need to know to render judgment is the magnitude of the harm that has occurred. As a result, actors are incentivized to take all care measures that are cost justified. STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW 181–82 (2004) [hereinafter FOUNDATIONS]. Throughout this Part, we use this stripped-down version of economic analysis for expository purposes. We acknowledge the existence of various other versions, such as the one noting that strict liability may actually increase administrative costs, because it leads to a higher number of cases being brought, and the costs of calculating damages in these cases may be significant. See Levmore, supra note 6, at 1147.

¹⁰¹ FOUNDATIONS, supra note 100, at 181–82.

 $^{^{102}}$ Strict Liability Versus Negligence, supra note 100, at 19; Cooter & Ulen, supra note 100, at 212.

¹⁰³ Strict Liability Versus Negligence, supra note 100, at 19. The argument rests on the plausible assumption that there will still be an appreciable risk of harm even when due care was taken. Mistaken Restriction, supra note 8, at 15.

¹⁰⁴ See, e.g., Simon Rottenberg, Liability in Law and Economics, 55 AM. ECON. REV. 107, 107–10 (1965) (noting that strict liability is "[t]he [r]ule of [e]conomics," while negligence is "[t]he [r]ule in [l]aw"). Standard economic analysis does acknowledge other advantages of negligence, such as inducing victims to take precautions and curb the levels of activity that exposes them to risk. The choice between liability rules therefore comes down to the tradeoff between better control of injurer behavior under strict liability and better control of victim behavior under negligence, with evidence and logic suggesting that the former is usually more important than the latter. Strict Liability Versus Negligence, supra note 100, at 17–20. The important point here is that at minimum, society should choose which rule to employ based on the context, rather than simply employ negligence across all contexts. Mistaken Restriction, supra note 8, at 18–19. Other economic analyses highlight negligence's potential advantages in influencing injurer behavior. For example, attaching strict liability to one player may encourage more activity by another player,

Yet the clear efficiency advantage for strict liability over negligence becomes less clear once we factor in reputational effects. One key point of the reputational perspective is that negligence affects injurers' activity levels too. Negligence produces information that helps potential victims avoid certain market actors who are more prone to cause harm. ¹⁰⁵ It therefore affects market demand for injurers' services, reducing the demand for the services of riskier actors, which in turn reduces their levels of activity.

b) Comparative over contributory fault. Introducing defenses increases the administrative costs and error costs of litigation, as it adds more parameters for the courts to evaluate and requires more witnesses and more discovery. Standard economic analysis justifies these costs by pointing to how defenses come with the benefit of inducing potential *victims* to take optimal precaution. For example, in the context of accidents between automobiles and bicyclists, the latter can anticipate that if they ride recklessly or do not use reflective tape when riding at night, they may be barred from compensation even if harm occurs to them. Defenses therefore make bicyclists invest optimally in care.

Our reputational perspective adds a separate, nonexclusive efficiency justification for defenses: they affect potential injurers' behavior too, albeit through their effects on third parties (demand-side pressures). Introducing defenses injects valuable information into the market on the role that the victim's behavior played in the adverse outcome. The information on how victims behaved allows outside observers to better assess whether there is a systematic problem with the injurer that is likely to surface in their own interactions with him. For example, if outside observers learn that the accident resulted from the victim's reckless use of a product, they are less likely to stop purchasing from the defendant. In this scenario, defenses mitigate the risk of market overreaction—the risk that outside observers will stop doing business with perfectly fine market actors. Overall, defenses make the prospect of reputational discipline of potential injurers more robust.

thereby negating the purported advantage of strict liability in reducing risky activity levels. William M. Landes & Richard A. Posner, *The Positive Economic Theory of Tort Law*, 15 GA. L. REV. 851, 911 (1981); Levmore, *supra* note 6, at 1144, 1150.

 $^{^{105}}$ More accurately, negligence findings may reduce third-party observers' willingness to pay for the defendant's services. That is, third parties may not avoid purchasing from the defendant altogether, but they will demand a lower price or certain contractual stipulations.

¹⁰⁶ RICHARD A. EPSTEIN, TORTS 210 (1999).

A more interesting question is which defense to choose. Here, our reputational perspective sheds light on the prevalence of comparative over contributory negligence. Contributory negligence was the law of the land throughout much of the nineteenth and twentieth centuries. 107 But by the mid-1980s, comparative negligence had taken over and has since remained the prevalent standard. 108 In standard economic analysis, the complete dominance of comparative negligence presents a puzzle. Contributory negligence induces victims to take precautionary measures just as well as comparative, and because it requires a simple, binary decision of whether the plaintiff was somewhat at fault or not, it also saves administrative and error costs. 109 The prevalence of comparative negligence is thus thought to be justified strictly on nonefficiency grounds, such as fairness. 110

Our reputational account challenges this conventional wisdom by adding an efficiency justification for comparative over contributory negligence. Comparative negligence produces more valuable information than contributory negligence, thereby facilitating more robust market discipline. Recall that contributory negligence bars further investigation into the injurer's conduct whenever the victim was somewhat at fault. Only blameless plaintiffs can probe the defendant's behavior. Comparative negligence, by contrast, always probes the relative fault of both sides. For outside observers trying to discern whether the past accident is indicative of their own future interactions with the defendant, comparative negligence is thus more informative than contributory negligence.

¹⁰⁷ See, e.g., Witt v. Jackson, 366 P.2d 641, 649 (Cal. 1961).

 $^{^{108}}$ Robinette & Sherland, supra note 99, at 42-43, 53 (2003) (detailing chronologically the shift to comparative negligence in the law and in the law-and-economics literature).

¹⁰⁹ E.g., RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 123–24 (2d ed. 1977); Epstein, supra note 106, at 210. Here as well, we treat "standard economic analysis" as a unitary concept merely for ease of exposition, acknowledging that the literature contains many other iterations. Compare Robert D. Cooter & Thomas S. Ulen, An Economic Case for Comparative Negligence, 61 N.Y.U. L. REV. 1067, 1086–94 (1986) (arguing that comparative negligence is more efficient under conditions of evidentiary uncertainty), with Oren Bar-Gill & Omri Ben-Shahar, The Uneasy Case for Comparative Negligence, 5 Am. L. & ECON. REV. 433, 444–54 (2003) (rejecting Cooter and Ulen's argument).

John G. Fleming, Foreword: Comparative Negligence at Last—By Judicial Choice, 64 CALIF. L. REV. 239, 241–44 (1976) (providing a classic fairness-based justification); Gary T. Schwartz, Contributory and Comparative Negligence: A Reappraisal, 87 YALE L.J. 697, 721–27 (1979) (same); Cooter & Ulen, supra note 109, at 1068 n.6 (compiling references).

The same logic applies to the effects of the "assumption of risk" (AR) doctrine, which nowadays is subsumed in most jurisdictions by comparative negligence. 111 Scholars have noted that AR resembles, functionally, a "no-duty" regime: in both contexts, participants in a risky activity who preferred and chose risk will be denied recovery. 112 Seen through our information-production lens, however, there is a clear distinction between the no-duty and AR approaches, or between expressed or implied primary AR and implied secondary AR¹¹³: Under a no-duty or expressed or implied primary AR approach, litigation is resolved mostly as a matter of law. Under implied secondary AR, by contrast, litigation entails a rich factual examination of whether the defendant increased the risk that is inherent in the activity.¹¹⁴ Such information can help outside observers make a more informed decision on which skiing/parachuting/bungee jumping operators to avoid and which to continue patronizing. 115 Put differently, a no-duty approach tells us that a certain activity is risky, period (a wholesale-level determination). The implied, secondary AR doctrine, by contrast, provides information on whether the specific participant and operator in question contributed to making the activity riskier (a retail-level determination). The AR approach is therefore more relevant to retail consumers who have already decided that they want to engage in the activity (skiing/bungee jumping) and now need to decide from whom to purchase. 116

 $^{^{111}\,}$ Restatement (Third) of Torts: Apportionment of Liability § 2 cmt. F (Am. L. Inst. 2000); Knight, 834 P.2d at 707–08.

¹¹² Kenneth W. Simons, *Reflections on Assumption of Risk*, 50 UCLA L. REV. 481, 503 (2002) (noting the similarities between assumption of risk and no-duty approaches).

 $^{^{113}}$ For the distinction between primary and secondary AR, see $\mathit{Knight},~834$ P.2d at 707–08.

¹¹⁴ See Simons, supra note 112, at 486 n.17.

A related issue that raises similar applications is courts' responses to exculpatory clauses, or contractual assumption of risk: one could argue that when considering the public-importance factor of whether to allow waivers or not, courts should also consider the public good that comes from ex post facto probing into what and how things happened.

¹¹⁶ We emphasize that, throughout this Article, our reputational argument should be read as putting a thumb on the scale in favor of a certain rule (here, AR over no-duty) rather than casting the decisive vote. This is because there are clearly other costs and benefits besides those pertaining to information production. For example, a "no-duty approach is often more tractable. This quality helps further both predictability of the law generally and fairer notice to defendants of their potential liability." Simons, *supra* note 112, at 502.

III. REFINING THE BASIC STORY: EXTENSIONS AND LIMITATIONS

The previous Part has kept the story neat for expository purposes: litigation under a fault-based regime produces granular information on the intentions and competence of the defendant, which in turn helps outside observers decide whether they want to keep doing business with the defendant. This Part introduces more nuance and context to enrich our reputational theory and make it more realistic and applicable along the following four dimensions.

Part III.A asks, Reputation to whom? In the basic story, information from litigation affects the defendant's customers, such as patients avoiding being treated by a negligent physician. Here we explore the circumstances under which tort litigation shapes the perceptions of other stakeholder groups, such as regulators, competitors, and employees. Part III.B asks, Whose reputation? In the basic story, information from litigation affects only the defendant's reputation. Here we also factor the well-documented phenomenon of reputational spillovers (when litigation against one company affects its peers' reputation). Part III.C analyzes the political economy of why and how interest groups lobby for one liability regime instead of another. For example, why do we observe physician organizations lobby for strict liability? The answer has to do with how litigation affects different subgroups within the same industry differently.

We then move from extensions to potential limitations of our reputational argument. Part III.D highlights circumstances under which tort litigation produces zero reputational effects or produces reputational effects that make the disputants behave worse ("bad reputation effects"). 117 Identifying the conditions under which our information-production theory does *not* apply will prove useful in the subsequent Part IV, where we aim to translate our theory to concrete policy implications.

A. Reputation for What? To Whom?

Thus far we have treated defendants' reputations as a unitary, simple concept. Yet in reality reputation is multifaceted. When considering reputational effects, one has to ask, Reputation

¹¹⁷ The term "bad reputation effects" is invoked by information economists to denote instances where market actors choose not the behavior that is optimal but rather the behavior that looks better. In other words, these are circumstances where the more reputation-sensitive a market actor is, the worse she behaves. *See generally* Jeffrey C. Ely & Juuso Välimäki, *Bad Reputation*, 118 Q.J. ECON. 785 (2003).

for what? To whom?¹¹⁸ Different stakeholders look for different attributes in the company. Some look mostly at the company's reputation for product quality, others focus on the company's financial soundness or its quality of corporate governance, and still others care deeply about how the company treats its employees and the environment. Reputation consultants and scholars have long recognized that a company can have a fantastic reputation along one of these dimensions yet a poor reputation along the other dimensions. Walmart, for example, may have a stellar reputation for supply-chain efficiency yet a less-than-stellar reputation for labor conditions. In the rest of this Section, we examine how the reputational effects of litigation vary across four different stakeholder groups: the defendant's customers, regulators, competitors, and employees.

1. Customers.

There are two categories of tort cases. One involves two parties to a transaction. The other involves strangers. Our information-production theory applies most straightforwardly in the former category, specifically in contexts where buyers can avoid sellers who are found negligent in trial. Thus, when discussing medical malpractice, we assumed a level of patient avoidance, where patients engage in comparison shopping and avoid physicians they deem incompetent. Some medical procedures lend themselves more easily to patient avoidance than others. For example, cosmetic surgery patients can shop for a specific surgeon and use information from litigation to inform their comparisons. But if a patient is rushed into the emergency room with a developing situation, she is less likely to search online databases with information from litigation to decide where to be hospitalized or who will operate on her, and so our argument does not apply.

To clarify, the reputational effects are not limited to business-to-consumer contexts. Rather, they exist in business-to-business contexts as well. That is, litigation may produce information that helps not only end users of the product (consumers) decide whether they want to keep purchasing from the retailer but also businesses along a supply chain reassess their willingness to work with a certain supplier. Consider a company that supplies car brake systems to car manufacturers. That company does not

¹¹⁸ See, e.g., CHARLES J. FOMBRUN, REPUTATION 395–96 (1996) (recognizing that companies may have different reputations among various groups and for various qualities).

interact directly with end users (car drivers). Its buyers are rather other businesses—the car manufacturers that sell cars to individuals. Now assume that a driver crashes her car into a tree and sues the car manufacturer, arguing that there was a failure of the brake system. The car manufacturer in turn can sue the brake-system supplier. And the litigation between the two businesses is bound to produce information on the brake system supplier's competence and integrity. Other car manufacturers would then be able to use such information to reevaluate whether to keep buying brake systems from that specific supplier. Indeed, it is common practice in business-to-business contractual relations to examine the legal record of your potential partners.¹¹⁹

Still, many other types of tort litigation involve accidents among strangers. In such noncontractual scenarios, it is much less likely that potential victims would be able to glean information from litigation and take their business elsewhere simply because they were not doing business with the injurer to begin with. For example, nonpassenger victims of railroad accidents can do very little to avoid riskier railroad operators. Yet even litigation of accidents between strangers may still carry important reputational ramifications, albeit toward other stakeholder groups besides customers. We now turn to these other groups.

2. Regulators.

Tort litigation can produce information that changes how regulators treat the defendant company or the industry as a whole. To illustrate, consider individuals bringing lawsuits against neighboring plants for emitting toxic chemicals. We can envision such lawsuits producing internal company documents to which the regulator was not privy, which would in turn push the regulator to institute new emission limits or ramp up enforcement efforts. The DuPont C8 story, recently depicted in the popular film *Dark Waters*, is a concrete case in point. ¹²⁰ In the process of producing Teflon, chemical giant DuPont emitted an opaque toxic chemical dubbed C8 into the air for decades without notifying the public or regulators. It took a private nuisance lawsuit, filed by a farmer living next to DuPont's plant in West Virginia, to produce

¹¹⁹ See, e.g., G. Richard Shell, Opportunism and Trust in the Negotiation of Commercial Contracts: Toward a New Cause of Action, 44 VAND. L. REV. 221, 271 n.223 (1991).

¹²⁰ The details are based on Roy Shapira & Luigi Zingales, *Is Pollution Value-Maximizing? The DuPont Case* (Nat'l Bureau of Econ. Rsch., Working Paper No. 23866, 2017), https://perma.cc/4J3D-3QUR. For a detailed book-length account, see generally ROBERT BILOTT, EXPOSURE (2019).

internal documentation that flushed out the existence and dangers of C8.¹²¹ The information from litigation, along with the media scrutiny it attracted, ¹²² eventually pushed the EPA into becoming involved and regulating this highly toxic yet hitherto-unregulated chemical.

Information from tort litigation can thus help regulators better assess the behavior of the regulated companies and tailor regulatory rulemaking and enforcement accordingly. After all, regulators are not omniscient; they, too, suffer from information asymmetries. Normally, the regulated industry can use its superior access to information and expertise, as well as other influence tactics, to keep crucial information away from regulators. 123 To recast the DuPont example, C8 is a company-made chemical. With such chemicals, the companies making them know much more about them than does the outside world, including regulators. Tort litigation disrupts these dynamics: when regulated companies face resourceful plaintiff lawyers armed with discovery powers and court injunctions, they reluctantly provide inside information. Pertinently, the more fault-based the liability regime is, the more these plaintiff lawyers are incentivized to unlock what Professor Wendy Wagner called "stubborn information" namely, information from inside the regulated company that regulators normally have a hard time extracting on their own. 124

In that sense, our reputational theory of tort litigation provides a twist on the regulation-through-litigation literature. The extant literature emphasizes the fact that litigation is not only about settling past disputes but also about bringing sweeping changes (structural reforms) to defendants' future behavior. We agree with this premise but emphasize a different mechanism of change. In the extant literature, judges use litigation to act as de facto regulators; they are the ones bringing sweeping changes. In our account, by contrast, the process of litigation propels regulators to act on their own because it provides them with valuable information on the regulated industry to which

¹²¹ Shapira & Zingales, supra note 120, at 6-7.

 $^{^{122}}$ E.g., Nathaniel Rich, The Lawyer Who Became DuPont's Worst Nightmare, N.Y. TIMES (Jan. 6, 2016), https://perma.cc/2JLQ-E4UT.

¹²³ See Wendy Wagner, When All Else Fails: Regulating Risky Products Through Tort Litigation, 95 GEO. L.J. 693, 696–706 (2007).

 $^{^{124}}$ Wendy Wagner, Stubborn Information Problems & the Regulatory Benefits of Gun Litigation, in SUING THE GUN INDUSTRY 271, 274–76 (Timothy D. Lytton ed., 2006).

¹²⁵ Daniel P. Kessler, *Introduction*, in REGULATION VERSUS LITIGATION 1, 3 (Daniel P. Kessler ed., 2011).

¹²⁶ See id.

they were not privy.¹²⁷ In other words, instead of judges doing the regulators' job, the process of litigation helps regulators do a better job on their own. Beyond providing regulators with new information, litigation also makes available information more salient, thereby facilitating more intense media scrutiny of the regulator, which in turn propels regulators into action. For a concrete example, consider GM's faulty-ignition-switch scandal. GM's ignition problems were known for years, and the automobile industry is heavily regulated; nevertheless, it took several tort lawsuits by victims' families to make the information about GM's scandal clear and salient enough to propel regulatory intervention.¹²⁸

3. Competitors.

One group that has the incentive and ability to proactively track, highlight, and disseminate information from the courtroom is the defendant's competitors. Consumers (and to some extent regulators) do not read court opinions. They are therefore dependent on information intermediaries, such as mass-media or consumer organizations, to process and package information from tort litigation for them. 129 Competitors, by contrast, know that a verified finding of negligence may cause business to move away from the defendant and fall into their lap. They are therefore incentivized to search for and highlight information from litigation that deflates the defendant competitor's reputation. For concreteness, imagine an eye surgeon who has a reputation among the public of being the top expert, even when his colleagues know that his stellar reputation is unjustified and was built on public relations and schmoozing rather than on actual performance and diligence. The surgeon's peers could disseminate information about that surgeon's legal record and unflattering findings in negligence

¹²⁷ See Wagner, supra note 123, at 717–20; see also SHAPIRA, supra note 9, at 175–78 (focusing on how litigation can propel regulators to act not simply by producing information but rather by affecting regulators' reputation).

 $^{^{128}}$ Nora Freeman Engstrom, When Cars Crash: The Automobile's Tort Law Legacy, 53 WAKE FOREST L. Rev. 293, 328–35 (2018).

¹²⁹ Most of the examples that we have used thus far concern diffusion of information by media outlets. For concrete examples of diffusion of information by consumer advocacy organizations, see *Arizona Judge Rules that Goodyear Cannot Keep Court Documents on Possible Deadly Defect Secret*, CTR. FOR AUTO SAFETY (Apr. 4, 2018), https://perma.cc/LGW9-A7CU; *Statement on Epic Games v. Apple Federal Court Decision Regarding App Store Practices*, CONSUMER REPS. (Sept. 10, 2021), https://perma.cc/KXF5-7WCJ.

cases in ways that would burst his reputational bubble, thereby directing future patients away from his clinic and into theirs. 130

There is a broader point here about the reputation-correcting function of tort law. When lawyers think about reputation correcting and the law, we usually have in mind defamation lawsuits, where plaintiffs go to court to try and stop others from unjustifiably deflating their reputations. What we highlight here is another, understudied aspect of reputation correcting: when certain actors unjustifiably inflate their own reputations, they effectively hurt their competitors' relative reputational standing. Tort litigation can help these competitors who were "wronged" to correct the misjudgment of their reputations and achieve the standing they "deserve." 132

One factor that limits the reputation-through-competitors conduit is reputational spillovers. Reputational spillovers refer to instances where consumers cannot fully distinguish between different firms in the same industry and, as a result, bad news about one firm may tarnish its peers' reputation. The industries where spillovers are large, competitors will be reluctant to point to damning information about the defendant for fear that it will hurt their own reputation. A classic example is the airline industry. Airline companies refrain from flaunting their own airline safety record even when it is superior to that of their peers. They realize that their customers do not want to hear about crashes, period. An ad saying, "We get into far fewer crashes than our competitors!" would prime the issue of potential crashes, thereby deterring some consumers from booking a flight altogether. The issue of potential crashes, thereby deterring some consumers from booking a flight altogether.

¹³⁰ There are at least two conduits for reputation here: the physician's reputation among her peers, which eventually would also affect future business opportunities (as in through fewer referrals) and the physician's reputation among future patients. See Sage, supra note 3, at 165.

¹³¹ See Yonathan A. Arbel, A Status Theory of Defamation Law (2020) (working paper) (on file with authors).

¹³² Our argument here has focused on competitors monitoring and diffusing information from tort actions brought by others; but there are also areas where the law grants competitors standing to initiate tort actions with the purpose of diffusing damning information on the defendant. Such as is the case, for example, with the Lanham Act, which provides competitors standing to sue for false advertising. See Lillian R. BeVier, Competitor Suits for False Advertising Under Section 43(a) of the Lanham Act: A Puzzle in the Law of Deception, 78 VA. L. REV. 1, 22–23 (1992).

¹³³ We elaborate on reputational spillovers in Part III.B.

 $^{^{134}}$ Jack Linshi, Why Airlines Don't Talk About Safety in Their Ads, TIME (Jan. 20, 2015), https://perma.cc/L3SU-U8QQ.

¹³⁵ *Id*.

4. Employees.

The final reputational conduit to consider is how information from the courtroom affects the defendant company's reputation among current or future employees. A classic example here is onthe-job accidents. A firm's reputation for workplace safety is an important determinant of current and potential employees' willingness to work for the firm (it also affects to some extent the firm's reputation among regulators and some consumers). ¹³⁶ Yet it is not always easy to assess the commitment to workplace safety in a given firm. Accurate, standardized information on injury rates is hard to come by, making it difficult to compare one firm's safety to another. ¹³⁷ Here as well, litigation can provide valuable information, which could be picked up by unions, journalists, and advocacy groups to induce firms to invest more in worker safety.

Three factors determine the magnitude of the reputation-toemployees effect of litigation. The first is the preexisting information environment. One could claim that employees, unlike consumers and regulators, are insiders, and so they do not need documents from discovery or judicial opinions to assess their own company's commitment to safety. Yet this perfect-information argument has been rebutted by empirical studies, showing that workers, too, suffer from information asymmetries about workplace hazards. 138 To illustrate, one recent study by Professor Matthew S. Johnson looked at the impact of the regulator—the Occupational Safety and Health Administration (OSHA) issuing press releases of its enforcement actions. 139 The study found that publicizing the enforcement actions led the sanctioned company, as well as other companies in the region, to invest more into compliance with worker safety standards out of fear of losing reputation among current and future employees. 140

A second factor that determines the reputational impact of litigation is workers' bargaining power. The abovementioned

 $^{^{136}}$ See Dara O'Rourke, Outsourcing Regulation: Analyzing Nongovernmental Systems of Labor Standards and Monitoring, 31 POL'Y STUD. J. 1, 5 (2003).

¹³⁷ See Cynthia Estlund, Just the Facts: The Case for Workplace Transparency, 63 STAN. L. REV. 351, 355 (2011) (arguing that mandatory employment disclosures, including of workplace hazards, "improve the operation of labor markets . . . by supplying the information workers need to choose among employers").

¹³⁸ E.g., Matthew S. Johnson, Regulation by Shaming: Deterrence Effects of Publicizing Violations of Workplace Safety and Health Laws, 110 Am. Econ. Rev. 1866, 1870, 1895–99, 1902 (2020).

¹³⁹ *Id*.

 $^{^{140}}$ Id. at 1895–99.

study of the reputational effects of OSHA enforcement found that the effects were more pronounced in areas where workers have more bargaining power as a function of the degree of unionization. When workers have little bargaining power, information from the courtroom does not generate much reputational deterrence; when workers have strong bargaining power, they are able to utilize damning information from the courtroom to increase the costs to the company of not investing in worker safety. 142

Finally and pertinently, the reputation-to-employees conduit depends on the liability regime in place. How informative is worker-safety litigation, given the questions it typically revolves around? At first glance, the answer seems to be "very little": workplace accidents are one pocket of accident law that is not ruled by negligence but rather by no-fault worker-compensation schemes. 143 That is, a worker who was hurt on the job is entitled to compensation without investigation into how her injury happened and who was to blame. However, a deeper look reveals some counterintuitive information-production dynamics. Information production here stems from the fact that worker compensation schemes are rarely the end of the story. Even after a worker has picked up her compensation check, both she and her employer (and the employer's insurance carrier) can sue a third party whose fault played a role in the industrial injury.¹⁴⁴ Followup subrogation litigation is governed by comparative negligence: the third-party defendant often attempts to produce evidence showing that the employer and/or employee behaved negligently. 145 As a result, workplace safety accidents are not infrequently litigated, and such litigation not infrequently produces relevant information on employers' commitment to safety. 146

¹⁴¹ *Id*.

¹⁴² Id. at 1899.

 $^{^{143}\,}$ Gregory, supra note 8, at 385 (documenting the historical shift to the no-fault approach to on-the-job accidents).

¹⁴⁴ E.g., Buell v. CBS, Inc., 136 Cal. App.3d 823, 825–26 (1982). Workers sue even after they have received compensation from the scheme because these schemes chronically undercompensate. See Estlund, supra note 137, at 374.

¹⁴⁵ See Debra Hurst Neill, Comment, Employer Subrogation: The Effect of Injured Employee Negligence in Workers' Compensation/Third Party Actions, 18 SAN DIEGO L. REV. 301, 317–21 (1981) (detailing the operational implications of comparative negligence in subrogation claims). See also generally, e.g., Li v. Yellow Cab Co., 13 Cal.3d 804 (1975) (demonstrating the shift from a contributory to a comparative negligence standard).

¹⁴⁶ To be sure, the reputational impact does not have to be negative for the employer: the company could instead cleanse its reputation by showing that the accident resulted from third-party negligence.

B. Whose Reputation? Reputational Spillover Effects

Bad news about company X may affect its competitors in two distinct ways. In some cases, the bad news may affect competitors positively because company X's customers will now switch to them. In other cases, the bad news may affect competitors negatively due to the abovementioned reputational-spillover effect: stakeholders will assume that the problem applies not only to company X but also to its competitors. It Economists and organization scientists have long tried to decipher what conditions make one effect—switching or spillovers—dominate the other. Here we offer one important determinant that has gone unrecognized—namely, the legal liability regime.

The choice of liability rules affects the magnitude and direction of reputational spillovers. All else being equal, litigation under negligence fosters a switching effect, whereas litigation under strict liability fosters a spillover effect. To understand why, recall that litigation under negligence often entails a comparison between the defendant and her peers. In medical malpractice, for example, negligence hinges on the customary-care test—that is, whether the defendant provided a treatment that was below industry standards. A negligence finding thus tells us that the defendant's peers are, on average, better than the defendant. Outside observers can infer that if they take their business to one of the defendant's competitors, they are likely to receive better treatment. Instead of forgoing the treatment altogether, they are getting it from someone else: a switching effect.

Litigation under strict liability, by contrast, does not revolve around comparing the defendant's conduct to that of her peers. It does not tell us much about industry best practices and whether the defendant is adhering to them. What outside observers glean

¹⁴⁷ See generally Michael L. Barnett, Tarred and Untarred by the Same Brush: Exploring Interdependence in the Volatility of Stock Returns, 10 CORP. REPUTATION REV. 3 (2007) (delineating the conditions that lead to each of the effects that we detail in this Part).

¹⁴⁸ E.g., Seth Freedman, Melissa Kearney & Mara Lederman, Product Recalls, Imperfect Information, and Spillover Effects: Lessons from the Consumer Response to the 2007 Toy Recalls, 94 REV. ECON. STAT. 499, 512 (2012) (finding that when a certain manufacturer announces toy recalls, other manufacturers of similar toys suffer a decrease in sales).

¹⁴⁹ E.g., Amar Gande & Craig M. Lewis, Shareholder-Initiated Class Action Lawsuits: Shareholder Wealth Effects and Industry Spillovers, 44 J. FIN. & QUANT. ANALYSIS 823, 830–33 (2009) (finding a spillover effect); David W. Prince & Paul H. Rubin, The Effects of Product Liability Litigation on the Value of Firms, 4 AM. L. & ECON. REV. 44, 60–61, 68 (2002) (finding a spillover effect in the automobile industry but a switching effect in the pharmaceutical industry).

from litigation under strict liability is therefore not a differentiation between actors in the industry but rather information that harm has occurred as a result of the product or service that the industry provides. Such information is not the type that would help outside observers switch from one firm to another. Rather, it is the type of information that might make them avoid the industry altogether. Strict liability thus fosters, in general, a spillover effect. ¹⁵⁰

To use a concrete real-world example, let us look at medical malpractice cases in LASIK eye surgery. Going over judicial opinions in LASIK cases, one quickly identifies a recurring pattern: The court notes that such surgery is generally very safe but that it can be dangerous for specific patients who have preexisting corneal conditions. The opinion then focuses on whether the doctor or clinic in question had properly screened the plaintiff before surgery. In cases where the court finds negligence, the opinion usually explicitly highlights how the defendant doctor or clinic was too overworked or too complacent or too incompetent to screen properly. Such opinions likely facilitate a switching rather than a spillover effect: those thinking about getting laser eye surgery learn that the procedure in itself is very safe but that they should probably go to a different doctor or clinic—one that puts more emphasis on proper prescreening. 153

The broader point is that the more liability is fault based, the more the reputational impact of litigation is pinpointed and the less it spills over to competitors. Litigation under negligence provides information that can help future consumers distinguish between a dangerous activity and a safe activity that went wrong in the hands of a negligent operator. It therefore induces consumers not to forego the activity altogether but rather switch to different

 $^{^{150}}$ That is, unless the (rare) conditions that we detailed in Part II.A.2 apply, and consumers can infer something about the quality of manufacturer X based on the mere number of suits being brought against him relative to his peers.

¹⁵¹ For an overview of LASIK malpractice laws, see LASIK Malpractice, MED. MALPRACTICE CTR., https://perma.cc/W5DJ-HHEZ. For a specific case, see *Smethers v. Campion*, 108 P.3d 946, 952 (Ariz. Ct. App. 2005). For an empirical study on the determinants of LASIK medical malpractice, see generally Richard L. Abbott, *Medical Malpractice Predictors and Risk Factors for Ophthalmologists Performing LASIK and PRK Surgery*, 101 TRANSACTIONS AM. OPHTHALMOLOGY SOC'Y 239 (2003).

¹⁵² Cf. Abbott, supra note 151, at 258.

 $^{^{153}}$ For an example of media coverage of LASIK malpractice cases, see $\it New Jersey Man Gets $2.1 Million in LASIK Lawsuit Settlement, LASERFOCUSWORLD (July 10, 2008), https://perma.cc/ABN5-ZPMN.$

operators or insist on safer techniques.¹⁵⁴ To rephrase our point about activity levels: strict liability affects the level of activity mostly at the industry level, while negligence affects the level of activity mostly at the individual-defendant level. From a normative perspective, if the activity in question entails social benefits, the latter is preferable to the former: we would rather see people switch to better operators than forego the activity altogether.

C. Who Wants Information Production?

Thus far we have assumed that potential injurers take liability rules as given. But in reality, industry actors may attempt to influence which liability regime governs their activity. Indeed, we opened the Article with a real-world example of physicians' organizations trying to lobby for strict liability in lieu of negligence. 155 Now that we have a better grasp of what is at stake—that is, how the choice of liability rules affects parties' reputations—we can circle back and ask: Why would physicians prefer strict liability, given that strict liability creates problematic reputational incentives? Recall that strict liability creates a pooling equilibrium where even the best surgeons who take great care may be found liable, and outside observers would not be able to distinguish between them and lower-quality surgeons who were found liable after causing avoidable harms. 156 One would think that physicians, as a group, would prefer negligence because it leads to a separating equilibrium where those who took great care are not punished in the court of public opinion and those who were negligent are. Granted, for a given physician facing litigation

 $^{^{154}}$ There are several important nuances that make the reputational spillover effects of litigation vary between professional malpractice, regular negligence, and products liability. In medical malpractice, the common-practice investigation usually begins and ends the analysis: courts tend to heavily rely on evidence about accepted industry practices when determining the reasonableness of the defendant's behavior. See Parchomovsky & Stein, supra note 39, at 291. But see Helling v. Carey, 519 P.2d 981, 982-83 (Wash. Ct. App. 1974) (finding the accepted industry practice wanting). In cases of regular negligence or product design defects, by contrast, courts are more willing to find the common practice wanting. See Kenneth S. Abraham, Custom, Noncustomary Practice, and Negligence, 109 COLUM. L. REV. 1784, 1797, 1811-12 (2009). That is, we occasionally get opinions confirming that the defendant behaved according to industry practices, while at the same time criticizing these practices as unreasonable and finding the defendant negligent. DAN B. DOBBS, PAUL T. HAYDEN & ELLEN M. BUBLICK, THE LAW OF TORTS 598 (2d ed. vol. 1, 2000) (compiling cases). Such opinions reduce the reputational sanction at the individual defendant level but increase the sanction at the industry level: outside observers infer that there is no reason to switch to competitors because others in the industry practice the same negligent techniques.

¹⁵⁵ See Am. Coll. Of Physicians, supra note 1, at 472; DVHLHBR, supra note 1, at 66.

 $^{^{156}\} See\ supra$ Part II.A.

ex post, strict liability is preferable as it mitigates the reputational risk for her. But for physicians as a group, the increased availability of quality information means that the cream would rise to the top: low-quality physicians would have worse reputations and higher-quality ones would have better reputations (which would, in turn, reduce the need for physicians to invest in wasteful reputation management).¹⁵⁷

Why, then, do physicians prefer strict liability? The key to answer this question is to introduce political economy considerations. Industry organizations may lobby for a certain liability rule not necessarily because it is best for the industry but because it is best for certain subgroups within the industry. The reputational effects of litigation are not distributed equally across all industry actors. Usually, in each industry the well-established incumbents are the ones with more reputation to lose relative to the upcoming insurgents. As a result, incumbents may prefer strict liability precisely because it creates a pooling equilibrium, which does not move the reputation needle. Under a negligence regime, incumbents are at constant risk of losing a substantial amount of their reputation. To illustrate, recall our previous example of a reputable surgeon whose physical capacities start to slightly deteriorate. It would be better for this reputable surgeon that any harm will be automatically compensated by the insurance company without much fault-based probing into her physical condition. In other words, negligence comes with the risk of constantly injected new information, updating and reshuffling the reputational rankings within the industry. Strict liability, by contrast, leaves the reputational rankings roughly intact. 158 In that respect, reputation acts as an entry barrier within the ranks of physicians. and a negligence regime can remove those barriers. And because strong incumbents are likely to be the ones manning the top positions in industry organizations, the industry lobby may reflect their narrow interest in a liability regime that does not rock the boat of reputational rankings.

Another, more benign explanation for why physicians (or other professions) prefer strict liability is risk aversion. Strict liability pools the reputational losses: we know that something bad

¹⁵⁷ Further, we saw in the previous Section that strict liability implicates the entire industry's reputation, creating spillovers that may reduce the activity levels for all actors.

¹⁵⁸ Note that usually the argument works backward: since reputations are hard to establish, they benefit incumbents, and it is usually the new entrants who want pooling. Yet here we focus on the context of litigation as bringing change to the reputation status quo—so incumbents would want to minimize change and insurgents would want to maximize it.

happened, but we do not know whether the defendant physician is worse, the same, or better than her peers. Negligence, by contrast, comes with the risk of a big reputational loss to individual physicians. Strict liability therefore has the advantage of spreading the reputational risk of litigation. If you are a surgeon, you may think that you are great at your job. You may nevertheless fear the possibility that a stupid mistake will occur, say, due to a momentary lapse of attention, and that the ensuing litigation will cause you to lose all your hard-earned reputation. Even though you may reason that over time your peers are at least as likely to be implicated in such litigation (so that over time you will still have a good relative ranking), you may not want to run the risk of a big reputational loss. Does this "reputation-risk insurance" function of strict liability make it overall more desirable than negligence? To answer this question, we need to examine vectors such as the costs of defensive medicine or the underlying information asymmetries in any given context. In the next Section we delve into such context-specific inquiries to delineate the limits of our argument.

D. Potential Limitations

We have focused thus far on scenarios where tort litigation generates reputation-relevant information, which in turn leads to better market discipline, thereby reducing the costs of accidents. But we should be careful not to overstate our claim; in reality there are also many scenarios where tort litigation does not produce any reputational effects or where tort litigation's reputational effects actually make the disputants behave worse. We dedicate this Section to spotlighting the limitations of our information-production theory so that we can better delineate its contours before moving in the next Part to propose policy implications based on it.

We highlight three important limitations. First, in certain types of tort law disputes, litigation may indeed produce information, yet no one in the outside world would care to read and use it. Consider for example tort disputes that are between two individuals and that do not receive any attention from media outlets or consumer organizations. In such cases, the reputational impact is zero and we need not take it into account when designing legal institutions. Second, in other types of tort disputes, the information coming from litigation may be inaccurate, perhaps because courts tend to err in assessing the defendant's conduct.

The prospect of court errors dilutes the effectiveness of reputational deterrence. Outside observers may not trust information coming from the courtroom or may trust it too much and make bad reputational judgments based on errant adjudicatory determinations. Finally, even in cases where information from the courtroom does, indeed, affect how third parties view the parties to the dispute, such reputational effects may only make the disputants behave worse.

1. The public does not use information from litigation.

Our information-production theory rests on the assumption that outside observers will be interested in information on how the disputants behaved. But in reality, many tort disputes attract zero interest from outsiders. Tort litigation between two individuals, for example, is less likely to interest the media and is less likely to appear in searchable online databases. Our theory therefore applies more strongly in the subset of tort cases that involve institutions and individuals with a public imprint, such as manufacturers who sell to many buyers, physicians who treat many patients, bungee operators who host many jumpers, and so on. ¹⁵⁹ In these cases, information about how the defendant treated a specific consumer (or patient or bungee jumper) may be relevant to other consumers who are deciding whether to do business with the defendant going forward.

A related potential limitation is that even in disputes that involve defendants with a public imprint, the reputational effects may be limited because consumers or patients or jumpers do not read judicial opinions and do not search for information from litigation. We have already explained why this criticism should not be overstated. Our theory does not rest on individual consumers constantly monitoring Westlaw or LEXIS for court opinions; all our theory requires is that information intermediaries such as consumer organizations or journalists search, screen, and feed individual consumers with relevant pieces of information from litigation. Further, litigation's reputational impact is not limited to changing consumer behavior. It can also change how regulators, employees, or competitors treat the disputants going forward. All these non-consumer-stakeholder groups are better positioned to proactively track and use information from litigation. And when

¹⁵⁹ This is yet another argument for reputational economies of scale. *See generally* Klerman & de Figueiredo, *supra* note 16.

 $^{^{160}}$ See Keren-Paz, supra note 43, at 369.

the information coming from tort litigation is actually favorable to the defendants, they will be the ones making sure that their stakeholders get the information. A nice illustration comes from the Exxon Valdez Spill case: parts of the judicial opinion in the spill-damage litigation actually commended Exxon, and the company's spokespersons were quick to refer to them when they fought off accusations in the court of public opinion. For example, when an Alaskan politician brought up the Exxon failure in 2004, the company issued a press release quoting the judicial opinion, suggesting that no one can claim that they are the bad guys anymore. 162

Yet another criticism along similar lines accepts the premise that fault-based regimes produce better information but challenges the notion that third parties actually need this information. According to this potential criticism, market actors can easily get information on the quality of manufacturers or physicians from other sources besides litigation. The strength of this criticism—and the extent to which it limits our argument hinges on what the preexisting information environment is. For example, if you live in a tight-knit community, where everybody knows everything about everyone, you would indeed not need information from the courtroom. You would not need litigation to tell you that John the local barber has significantly deteriorated in his physical capacities, and so it is best to stop patronizing him—the local gossip networks would have already told you that. Our theory about litigation's reputational impact is therefore limited to the (quite common) scenarios where information is not readily available or is available but is much less verifiable and much more complex. Sure, if you want to learn whether restaurant X serves bigger portions of pad that than restaurant Y, then all you need to do is visit Yelp; but if you want to understand whether the harm that occurred in a certain medical procedure was avoidable or not, word-of-mouth mechanisms are less effective, and information from the courtroom would undoubtedly help.

A more potent version of the same criticism points to other legal sources of quality information, such as regulatory investigations. Public enforcement, in this version of the criticism, substitutes for the informational benefits that come with costly private

¹⁶¹ EXXONMOBIL, ExxonMobil Sets Valdez Record Straight, BUS. WIRE (Oct. 6, 2004), https://perma.cc/LW66-CWDM?type=image; see also SHAPIRA, supra note 9, at 68.

¹⁶² EXXONMOBIL, *ExxonMobil Sets Valdez Record Straight*, BUS. WIRE (Oct. 6, 2004), https://perma.cc/LW66-CWDM?type=image.

litigation. We acknowledge that in some areas private litigation indeed is not likely to add much valuable information because it merely piggybacks on public enforcement of the same issue. For example, in the context of flight safety, litigation may not add much to the mix of available information on how a crash occurred because airplane crashes are swiftly investigated by the Federal Aviation Administration (FAA), which produces a detailed public report. 163 Still, we should not overstate the argument that reputation-through-regulation renders litigation superfluous. For one thing, regulators have limited resources and are known to chronically underenforce. 164 As a result, in many areas regulatory investigations into accidents are not frequent, timely, and thorough enough to make information coming from litigation redundant. There is also the risk that agency capture may influence the regulatory investigation report. 165 To use an example that we will return to later: after Tesla's autonomous vehicle suffered its first fatal crash, the National Highway Traffic Safety Administration (NHTSA) launched an investigation, which eventually cleared Tesla and shifted the blame to the human driver. 166 Several commentators suggested that the report was too favorable to Tesla and pointed to the revolving door between the company and former NHTSA regulators as further indication that the regulator's exoneration of Tesla could not be taken at face value. 167

2. Information from litigation is low quality.

Another potential limitation of our information-production theory is that it does not sufficiently account for the possibility of adjudicative errors. Court errors dilute the effectiveness of reputational deterrence, as they cause the market to under- or over-react. When judges err on the side of finding negligence, for

¹⁶³ Cf. Andrew Lambert, Contributing to Crashes: Applying Tort Principles to Certain FAA Proceedings, 72 ADMIN. L. REV. 1, 20–26 (2020) (suggesting that regulators should rely more on tort principles in their enforcement actions).

¹⁶⁴ Cf. Samuel Issacharoff, Regulating After the Fact, 56 DEPAUL L. REV. 375, 381 (2007) (arguing that private enforcement expands the inherently limited resources of regulatory enforcement); Shapira, supra note 29, at 901–02 (arguing same).

¹⁶⁵ See Issacharoff, supra note 164, at 383.

¹⁶⁶ For more details, see Part IV.B. For the full report, see U.S. DEP'T OF TRANSP., NAT'L HIGHWAY SAFETY ADMIN., ODI RESUME, https://perma.cc/6FTF-PHPK.

¹⁶⁷ E.g., In "Midnight Action" NHTSA Ends Probe of Fatal Tesla Florida Crash by Accepting Company's Propaganda; Wrongly Blames Driver, Not 'Autopilot' Technology, Consumer Watchdog Says, CISION PR NEWSWIRE (Jan. 19, 2017), https://perma.cc/3BXY-GCMS. Another current example comes from the failure of the FAA investigation into the Boeing 737 Max debacle. See Tom Burridge, Boeing's 'Culture of Concealment' to Blame for 737 Crashes, BBC NEWS (Sept. 16, 2020), https://perma.cc/M42P-RVHX.

example, the market may stop doing business with a perfectly fine company. 168 We acknowledge the plausibility of adjudicative errors. Yet we do not view it as fatal to our argument, mainly because our argument is a relative rather than an absolute one. That is, we do not argue that litigation always produces perfectly accurate information. Our claim here is rather more modest: litigation may produce information that is relatively more accurate than the information that existed in the market prior to litigation.

We focus on the relative veracity and quantity of information coming from litigation and how it can lead to better reputational judgments than the ones market actors make when left on their own. A burgeoning reputation literature tells us that the market is prone to under- and overreactions. Underreactions can happen, for example, because market actors ignore important information simply because it is not vivid and salient enough. Overreaction can happen—for example, when bad news breaks—because market actors tend to pile on criticism and falsely attribute bad outcomes to bad intentions. Information that comes from the courtroom, however imperfect, tends to be more nuanced and thorough.

Granted, in some areas market actors find it easy to gauge the intentionality and controllability of an adverse event on their own. Consider, for example, battery or conversion. When a person punches someone, knowing what happened is in itself a good indicator of intent: a person rarely punches someone without meaning to.¹⁷¹ But in other areas, such as defective product design or securities fraud, outside observers with no access to inside information frequently err in judging intent and controllability. Accoordingly, the fact that courts may err in judging what and how things happened does not mean that information from litigation would not improve the overall information environment. Sure, it is hard for courts to judge intent and controllability in defective product design or securities fraud, but it is even harder for market actors to do so. After all, market actors do not enjoy the factgenerating powers of the litigation process or the experience and expertise of judges in evaluating intent. Litigation in such cases

 $^{^{168}}$ In fact, the mere perception of a high rate of court errors, even if unjustified, may whittle away much of the informational value of litigation, as the public would ignore this information.

¹⁶⁹ SHAPIRA, supra note 9, at 25.

¹⁷⁰ See Wiesenfeld et al., supra note 20, at 240–42.

 $^{^{171}}$ Paul G. Mahoney, Precaution Costs and the Law of Fraud in Impersonal Markets, 78 Va. L. Rev. 623, 649 (1992).

is therefore likely to improve the preexisting information environment and reputational judgments, even when they are not error free. 172

3. Information from litigation generates bad reputational effects.

Our argument thus far has elaborated on the hitherto unrecognized ways in which tort litigation affects reputation, while implicitly assuming that these reputational effects are socially desirable. It is now time to revisit this assumption. Negligence can affect reputations in ways that make primary behavior worse. Consider, for example, defensive medicine: one could claim that physicians who fear the uninsurable reputational fallout of litigation under a negligence regime would engage in more defensive medicine than they would have done under a no-fault regime. The added societal costs of defensive medicine may outweigh any benefit from increased reputational discipline, thereby making the reputational effects of negligence a net negative.¹⁷³

This criticism is valid, but it should not be overstated. Yes, it is plausible that negligence creates reputational pressures to engage in defensive medicine. But a shift to strict liability may create even more perverse incentives. To understand why, consider the two categories of defensive medicine costs: (1) the costs of doctors overtreating regular-risk patients (assurance behavior), and

¹⁷² The reasoning here echoes a well-known result in information economics: "When multiple imperfect signals are available, [] it is optimal to use all of them to maximize the signal-to-noise ratio." Holger Spamann, *Monetary Liability for Breach of the Duty of Care?*, 8 J. LEGAL ANALYSIS 337, 338 (2016). More generally, for a reputation system to be well functioning, it has to meet four criteria: the system has to produce information in a timely, accessible, accurate, and thorough manner. Ling Liu, Systemic Measurement of Centralized Online Reputation Systems (Apr. 2011) (Ph.D. thesis, Durham University), https://perma.cc/BH8Y-NSCS. We can envision scenarios where the market system does better than the legal system along the timeliness and accessibility dimensions (reacting fast when bad news breaks), while the legal system fares better along the accurateness and thoroughness dimensions (providing nuance and a more complete picture down the road). In that sense, we should not view the legal system's version and the market system's version as competing in a horse race over which is better but rather as complementing each other. Shapira note 9, at 59.

¹⁷³ *Cf.* Keren-Paz, *supra* note 43, at 377 (treating reputation loss from litigation and the attempts to avoid such loss as a pure waste from a societal perspective). We disagree, viewing the efforts to avoid the reputational sanctions from litigation from an ex ante perspective as a largely positive disciplinary force. For example, physicians will try to avoid being found negligent, and those who cannot help themselves and are negligent will lose patients, which is a good thing from a societal perspective.

(2) the costs of doctors avoiding treating high-risk patients (avoidance behavior). The reputational effects of strict liability may actually increase the societal costs of avoidance behavior relative to the reputational effects of negligence. To understand why, recall that strict liability creates reputational pooling: Outside observers learn only that physician X caused damage in a certain number of cases without learning whether the damage was avoidable. Outsiders therefore lose some of the ability to distinguish between the competent, careful doctors and the negligent ones. As a result, under a strict liability regime, the best physicians may end up avoiding the higher-risk patients to avoid a harm that could lead to lawsuits pooling them with others. The worst physicians will end up treating the highest-risk patients simply because these physicians have little to lose from being pooled with others.

Determining whether negligence's positive effects (facilitating a better basis to evaluate and compare doctors, thereby inducing safer behavior) outweigh its negative effects (incentivizing doctors to prescribe extra treatments) is context specific. The optimal tradeoff depends on various factors, such as the degree of patient avoidance or the costs of defensive medicine in a given medical area.¹⁷⁶ To illustrate, consider the case of cosmetic surgery. This is one area of medicine with a high degree of patient avoidance: patients proactively look for reliable information to compare and choose cosmetic surgeons. And the societal costs of defensive medicine in this area are relatively low: a defenseminded cosmetic surgeon may opt not to operate on a patient who has some risky preconditions, which, from a societal perspective, may be the right thing to do for an elective procedure. All else

 $^{^{174}}$ Quinn, supra note 2, at 471-72 (offering a breakdown of the costs of defensive medicine).

¹⁷⁵ See supra Part II.B.

¹⁷⁶ For studies that identify medical practices that are disproportionately subject to medical malpractice claims (and therefore present high costs of defensive medicine), see generally, Brian V. Nahed, Maya A. Babu, Timothy R. Smith & Robert F. Heary, *Malpractice Liability and Defensive Medicine: A National Survey of Neurosurgeons*, 7 PLOS ONE, no. 6, June 2012 (focusing on high-risk specialties, such as neurosurgery); Sandy Martin, *NICA—Florida Birth-Related Neurological Injury Compensation Act: Four Reasons Why This Malpractice Reform Must Be Eliminated*, 26 NOVA L. REV. 609 (2002) (focusing on obgyns).

equal, in such an area the reputational effects of a negligence regime are therefore more likely to be a net positive.¹⁷⁷

More generally, one could claim that courts should take into account the possibility that added reputational sanctions could create overdeterrence and should be prepared to recalibrate the legal doctrine accordingly. That is, in areas where the reputational impact of litigation figures to be meaningful, courts should consider reducing the size of the legal sanction or heightening the standard of review, or so the argument goes. We are wary of making such recommendations. It is virtually impossible for courts to accurately predict what the reputational sanction will be in any given case, and so even if recalibration would be desirable on paper, it is impractical. Still, our information-production perspective does produce some more concrete, workable policy implications, to which we now turn.

IV. IMPLICATIONS

Fault-based investigations come with not only increased administrative costs relative to a no-fault regime but also a positive externality in the form of quality information on market actors. From this simple observation, two categories of potential policy implications emerge. The first category rests on identifying areas where liability is fault based, yet information does not flow to the outside world, perhaps because the disputants agree to keep it confidential. In these areas, we incur the increased administrative costs of fault-based inquiries without enjoying the reputational benefits. Part IV.A provides concrete proposals for judges and legislators that would improve this state of affairs. The second category of potential implications stems from identifying areas that are currently governed by strict liability and where switching to a negligence regime would produce large information-production benefits. Part IV.B illustrates this by focusing on the liability standard that applies when new technologies are introduced—from elevators and airplanes in the past to autonomous vehicles and cybersecurity concerns in today's world.

¹⁷⁷ Contrast cosmetic surgeries with emergency operations, where patient avoidance is low and the costs of defensive medicine are high. That is, patients cannot compare doctors in advance based on information from litigation, and the costs of doctors not wanting to take calculated risks (that are overall conducive to patients' health) are huge.

¹⁷⁸ See generally Robert Cooter & Ariel Porat, Should Courts Deduct Nonlegal Sanctions from Damages?, 30 J. LEGAL STUD. 401 (2001).

A. The Case Against Secrecy

Recognizing the information-production benefits of litigation puts a thumb on the scale against the prevalent practice of secret settlements. ¹⁷⁹ It is by now a truism that most cases settle. ¹⁸⁰ More importantly for our purposes, most cases that settle, settle confidentially, with the parties stipulating to keep to themselves the information that was produced. ¹⁸¹ When the parties settle confidentially, the rest of us lose the information we could have gotten from litigation.

The information-producing and reputation-shaping aspects of litigation are a positive externality, which means that both parties to the dispute do not fully internalize these benefits. Defendants are willing to pay more for a confidentiality provision to spare themselves the risk of adverse publicity. Plaintiffs anticipate defendants' willingness to pay for secrecy and use it as a bargaining chip. A plaintiff who receives a generous offer may not care about the positive externality; that is, she may not care whether relevant information leaks out to third parties. Courts and regulators should be aware of this misalignment between private incentives and public interest and proceed with caution when asked to authorize protective orders, enforce secrecy agreements, and the like. If litigation under a negligence regime produces a public good in the form of quality information that outside observers can use, then settling confidentially is a public bad.

¹⁷⁹ We say a "thumb on the scale" rather than a decisive factor for several reasons. For one, we currently have only suggestive evidence on the reputational benefits of litigation. And there are other costs and benefits to weigh aside from those stemming from information production: either other efficiency considerations working in favor of strict liability or nonefficiency considerations such as corrective justice. Still, the suggestive evidence and the theory we marshal here are enough to caution against automatically approving confidential settlements, granting protective orders, and funneling disputes to behind-closed-doors arbitration without first gaining better evidence and a better understanding of the positive (informational) externalities of litigation.

¹⁸⁰ J.J. Prescott & Kathryn E. Spier, *A Comprehensive Theory of Civil Settlement*, 91 N.Y.U. L. REV. 59, 61 n.2 (2016). *But see* Chang & Klerman, *supra* note 92, at 10 (challenging the conventional wisdom about the overwhelming settlement rate in the United States but still estimating that most cases settle).

¹⁸¹ See Jon Bauer, Buying Witness Silence: Evidence-Suppressing Settlements and Lawyers' Ethics, 87 Or. L. REV. 481, 491–92 nn.16–19 (2008) (compiling references).

 $^{^{182}}$ Recall the findings of a settlement premium in medical malpractice claims: defendants paid more to settle than they would have paid had the case ended in a verdict against them. See FINAL REPORT, supra note 90, at 114, tbl.5.4.

¹⁸³ See Steven Shavell, The Fundamental Divergence Between the Private and the Social Motive to Use the Legal System, 26 J. LEGAL STUD. 575, 584–85 (1997).

¹⁸⁴ Another potential upshot of recognizing the divergence between the disputants' incentives and the public interest is to reconsider the case for third-party litigation: that is, extend the power to sue to those who are not the victim. See generally Ehud Guttel,

In that sense, we add to the academic debate by emphasizing a different kind of positive externality stemming from litigation. To the extent that the existing literature discusses positive externalities associated with litigation, it emphasizes legal externalities—namely, how litigation produces legal precedents and dynamic legal guidance. We highlight a different, informational positive externality—namely, warning outside observers of less competent or less diligent market actors. 186

How can we translate this general insight into concrete policy recommendations? First let us be clear on what we *cannot* infer from the reputation-through-litigation argument. The fact that tort litigation can serve as a valuable source of information does not mean that we should outright ban secret settlements or make all discovery materials public. Discovery is so far-reaching in scope, and settlements are so prevalent, that they both beg discretion to allow confidentiality under certain conditions. In fact, banning confidentiality may end up reducing the overall quality and quantity of available information, as it may push parties to settle earlier and out of court. Still, there are at least three specific dimensions where recognizing the information-production

Alon Harel & Shay Lavie, Torts for Nonvictims: The Case for Third-Party Litigation, 2018 U. ILL. L. REV. 1049 (2018).

185 See, e.g., Elizabeth Chamblee Burch, Securities Class Actions as Pragmatic Ex Post Regulation, 43 GA. L. REV. 63, 117–18 (2008). There exist other accounts that are closer to ours in the sense that they emphasize informational externalities, albeit of a different type. One such account focuses on how a filing of a lawsuit by an earlier injured party provides information to later injured parties on the strength of their legal claims. See generally Andrew F. Daughety & Jennifer F. Reinganum, Informational Externalities in Settlement Bargaining: Confidentiality and Correlated Culpability, 33 RAND J. ECON 587 (2002). Another account focuses on how determining fault in a given case provides information to potential injurers on how (not) to behave—a verdict against one seller informs other sellers in the industry on what ought to be industry best practices. See J. Shahar Dillbary, The Case Against Collective Liability, 62 B.C. L. REV. 391, 440–42 (2021). These accounts differ from ours in that they focus on information through litigation rather than on reputation through litigation. That is, they emphasize the effects that such information would have on the expected legal sanction rather than on the expected market sanction.

¹⁸⁶ Two accounts come closer to our reputation-affecting theory of litigation. See generally, e.g., Murat C. Mungan & Claude Fluet, The Signal-Tuning Function of Liability Regimes GEO. MASON UNIV. L. & ECON. RSCH. PAPER SERIES No. 17-37 (2017) (offering a formal model of how liability regimes can affect nonlegal sanctions); Elizabeth Chamblee Burch & Alexandra D. Lahav, Information for the Common Good in Mass Torts, 70 DEPAUL L. REV. 345 (2020) (offering many concrete real-world examples of the truth-revealing function of courts).

¹⁸⁷ See generally Scott A. Moss, Illuminating Secrecy: A New Economic Analysis of Confidential Settlements, 105 MICH. L. REV. 867 (2007) (arguing that there is a lot of uncertainty regarding the consequences of tinkering with secret settlements).

aspects of litigation leads to concrete implications for judges and policymakers.

First, our reputational perspective provides concrete guidance for courts attempting to balance the costs and benefits of allowing parties to keep information confidential in any given case. For example, our analysis highlights the conditions under which granting a protective order or approving a secret settlement (in class actions) is more problematic. The societal costs of secrecy are lower when the confidentiality agreement between the parties happens in the shadow of a strict liability legal regime than when it happens in the shadow of a fault-based regime. This is because we have less to lose when sealing documents or settling confidentially under strict liability. The type of information that has been collected up until the point of settlement, or the type of information that would have been produced had the case not been settled, is less helpful (less reputation relevant) compared to litigation under a fault-based regime. ¹⁸⁸

Second, the reputational perspective allows policymakers and judges to distinguish between the different aspects of secrecy that are currently unjustifiably intertwined 189: secret settlements, protective orders, mandatory arbitration agreements that take the dispute away from the public eye, and so on. To generalize, secret settlements are preferable to protective orders, and both are preferable to mandatory arbitration provisions with class action waivers. The reason behind our rough ranking is the quality of the public record left with each of these options. In a previous one of us interviewed Pulitzer Prize-winning investigative reporters to decipher how and when they use information from the courtroom. The reporters pointed to a common practice among journalists of what they call "pattern identifying" (i.e., searching legal databases to discover how many claims were filed with respect to the issue or entity they are investigating). 190 If someone approaches a reporter with a tip

¹⁸⁸ To be sure, there is still some informational value even in secret settlements, but in most instances it is very limited. All that the public learns is that the defendant may have made a single mistake, which, in itself, does not tell outside observers much about the danger that they are facing in their own future interactions with the defendant. *Cf.* Jack H. Friedenthal, *Secrecy in Civil Litigation: Discovery and Party Agreements*, 9 J.L. & POLY 67, 88 (2000) (providing an example of a confidentiality order covering medical malpractice that did not seem to pose future dangers to the health of the public).

¹⁸⁹ See Laurie Kratky Doré, Secrecy by Consent: The Use and Limits of Confidentiality in the Pursuit of Settlement, 74 NOTRE DAME L. REV. 283, 317–18 (1999) (describing how courts unjustifiably comingle the different types of secrecy orders).

¹⁹⁰ Shapira, supra note 33, at 210. One could claim that for such pattern-identifying purposes, strict liability could be just as good as negligence or even better: more claims

about a harassing doctor or a defective product, the reporter culls legal databases or physical court records to check whether an unusual number of claims were filed against this doctor or manufacturer to provide a quick check on whether there is a story worth pursuing. Identifying such patterns have spurred many successful investigative reports. Back to our point: disputes that settle after the complaint was already filed and discovery was already conducted may still produce valuable information that journalists would be able to use to piece the puzzle together. 191 By contrast, when disputes are funneled from the outset to private arbitration or diffused altogether, we lose the pattern-identifying aspect, thereby also losing some of the expected reputational sanction for misbehaving. This creates a clear takeaway for policymakers: every move to mandatory arbitration should at minimum be accompanied by ensuring the creation of a publicly available database of complaints and arbitrators' verdicts. 192

Finally, we can apply the reputational perspective to design a mechanism that removes the secrecy of court documents under certain conditions. "Think of it as analogous to an informational escrow/safety valve: a mechanism that is in charge of releasing information that should not remain private." Say a toddler carseat manufacturer is being sued for product defects. The victims and the manufacturer then reach a secret settlement and keep information about the dispute private. Then, a second family sues the manufacturer over the same issue, then a third, and so on.

will be filed and more quantitative evidence of harms will be amassed. But as the reporters note, the pattern-identifying stage is just the first one toward flushing out misbehavior and holding the powerful to account. The other steps are searching for documentation of what and how things happened exactly, which is the type of information you get more readily from litigation under a negligence rule.

191 See, e.g., Emily Steel & Michael S. Schmidt, Fox News Settled Sexual Harassment Allegations Against Bill O'Reilly, Documents Show, N.Y. TIMES (Jan. 10, 2017), https://perma.cc/AX9D-MT4Y. Note also that in class actions in particular, the settlement requires approval by the court; this, in turn, tends to attract the attention of information intermediaries. See, e.g., Jonathan Stempel, Zoom Reaches \$85 Mln Settlement over User Privacy, 'Zoombombing', REUTERS (Aug. 2, 2021), https://www.reuters.com/technology/zoom-reaches-85-mln-settlement-lawsuit-over-user-privacy-zoombombing-2021-08-01/.

192 Note that companies have now started installing gag clauses to go along with mandatory-arbitration and class-action-waiver provisions, meaning that wronged individuals cannot even tell others that they aired their grievances in individual arbitration. See Judith Resnik, Stephanie Garlock & Annie J. Wang, Collective Preclusion and Inaccessible Arbitration: Data, Non-Disclosure, and Public Knowledge, 24 LEWIS & CLARK L. REV. 611, 614–22 (2020).

¹⁹³ SHAPIRA, *supra* note 9, at 199; *cf. generally* Ian Ayres & Cait Unkovic, *Information Escrows*, 111 MICH. L. REV. 145 (2012) (discussing the benefits and costs of allowing only trusted intermediaries, like courts, to receive socially valuable private information).

Under existing laws, these families would likely be unaware of each other's lawsuits, and a journalist digging into the issue would be unable to grasp the scope and details of the misbehavior simply because information from each separate lawsuit remains hidden. One way to mitigate the existing failure-to-warn problem¹⁹⁴ without overburdening courts would be to prespecify criteria under which the filing of additional disputes would trigger a mechanism that makes information about previous disputes publicly available. For the sake of illustration, say that when the fifth family files a complaint over the same issue, it triggers a release of the basic details of the previous four legal disputes involving the same defendant manufacturer over the same alleged product defect. Without getting into specific design details, we suggest that the criteria for releasing information should be specified according to industry benchmarks: how many lawsuits are being filed on average against a physician in a given practice, how many lawsuits are usually filed against a manufacturer of a given product, and so on. 195 This way, reporters, consumer watchdog organizations, or future victims would be able to search for and expose a pattern of recurring misbehavior. 196 And the increased threat of being exposed as a low-quality manufacturer would incentivize manufacturers to invest in the safety of their products ex ante.

B. The Case for Negligence in New Technologies

A clear exception to the dominance of negligence comes from abnormally dangerous activities, which are usually governed by strict liability.¹⁹⁷ On the face of it, applying strict liability here seems intuitive: the more dangerous an activity is, the higher the risk of harm and so the stricter we would want tort liability to be. The same logic has been applied to new technologies such as airplanes.¹⁹⁸ Yet factoring in litigation's reputational effects may change the equation; sometimes, fault-based compensation is

 $^{^{194}\,}$ ALEXANDRA LAHAV, IN PRAISE OF LITIGATION 75–78 (2017) (spotlighting the failure-to-warn problem).

¹⁹⁵ For relevant data, see generally, for example, Anupam B. Jena, Seth Seabury, Darius Lakdawalla & Amitabh Chandra, *Malpractice Risk According to Physician Specialty*, 365 NEW ENG. J. MED. 629 (2011).

¹⁹⁶ As Professors Ian Ayres and Cait Unkovich note, a somewhat similar mechanism is already in place in criminal law—a "commitment escrow" of sorts—whereby criminal records remain under seal unless the defendant recidivates within a given period. Ayres & Unkovich, *supra* note 193, at 151–53.

¹⁹⁷ E.g., RESTATEMENT (SECOND) OF TORTS § 519–20 (AM. L. INST. 1977).

¹⁹⁸ See RESTATEMENT (SECOND) OF TORTS § 520A cmt. C (AM. L. INST. 1977); Adam Rosenberg, Strict Liability: Imagining A Legal Framework for Autonomous Vehicles, 20 Tul. J. Tech. & Intell. Prop. 205, 218–20 (2017).

most appropriate for nascent technologies. We illustrate this counterintuitive point by examining one of the timeliest policy issues in tort law today—how to govern autonomous-vehicle accidents.

How should we assess liability when autonomous vehicles are involved in accidents? Should we hold manufacturers liable whenever their autonomous vehicle caused harm, or should we hold them liable only when it is shown that they have not taken costjustified precautions?

Many commentators have suggested that "negligence is not a high enough standard" for this exciting yet nascent technology. 199 The logic is that in such an early stage, where autonomous vehicles are only entering the market and the technology has not stabilized, it is better not to require victims to prove fault, but rather to shift the onus of compensation to manufacturers. To clarify, the point is not that autonomous vehicles are an inherently dangertechnology; in fact, most commentators acknowledge that autonomous-vehicle driving may be safer than human driving. Their point is rather that the technology is still developing, so it would be best to treat it differently with a stricter liability standard. Knowing that they are liable for each accident would induce manufacturers to invest in safer designs, or so the conventional argument goes.²⁰⁰ Down the road, after we accumulate experience with the technology, we could consider relaxing the liability standard. In other words, the conventional wisdom advocates installing strict liability now to make sure that autonomous vehicles are safe from the outset.

Yet this seemingly intuitive argument misses the role that reputational incentives play. The level of investment in the quality and safety of autonomous vehicles is not just a function of legal sanctions but also—and very much so—a function of reputational rewards and sanctions. Each autonomous-vehicle manufacturer cares deeply about establishing a reputation for a safer product, or more accurately, avoiding a reputation for a riskier product compared to the alternatives. Such a reputation could make or break one's position in the nascent market. The risk of losing one's reputation is decidedly bigger than the risk of losing a legal dispute over one accident or another.

¹⁹⁹ Rosenberg, supra note 198, at 206; see also Steven Shavell, On the Redesign of Accident Liability for the World of Autonomous Vehicles, 49 J. LEGAL STUD. 243, 249 (2020) (compiling references for how many commentators advocate strict manufacturer liability).

 $^{^{200}\,}$ For the conventional argument and its limitations, see $supra\,$ note 103 and accompanying text.

Policymakers who weigh how to regulate autonomous vehicles should factor in these supercharged reputational incentives and think about how best to harness them. As this Article has shown, one way to harness reputational concerns is through the choice of liability rules. When reputational incentives play an important role and potential consumers suffer from asymmetric information, there is a high demand for quality information on how accidents occurred. The legal system can meet this demand by probing into accidents, thereby significantly improving the effectiveness of reputational disciplining. With autonomous vehicles, the market would benefit from investigations into whether the risk that materialized was avoidable with a different technology, how the design and warnings by this specific manufacturer fare relative to others in the industry, and so on. In other words, a fault-based inquiry would provide granular information on who was to blame: the technology, the driver, external conditions, and so on. Such information could be used by prospective buyers when choosing one autonomous-vehicle brand over another. Anticipating the risk of losing reputation due to the fault-based inquiry, autonomous-vehicle manufacturers would be incentivized to invest in quality and safety ex ante.

Counterintuitively, then, negligence may be preferable to strict liability for governing autonomous-vehicle accidents in this early stage of developing the technology. To illustrate, consider the first case of a fatal autonomous-vehicle accident. In May 2016, a Tesla car using its autopilot feature fatally crashed into a tractor trailer, killing the human driver. The media was all over the incident, covering it extensively and with a tone that was very unfavorable to Tesla. Most outlets attributed the accident to "a blind spot" in Tesla's autopilot system, 201 which was simply not "sophisticated enough to overcome blindness from bright or lowcontrast light."202 That is, the initial media coverage alleged an autopilot malfunction: the sky was too bright and the tractor was too white for Tesla's system to recognize the danger. To add insult to injury, analysts noted that other autonomous-vehicle technologies, such as Google's or Apple's, would have avoided the accident. Tesla's system was predicated on cameras while the others relied on lasers, thereby making them less susceptible to being

²⁰¹ All Things Considered: Tesla 'Autopilot' Crash Raises Concerns About Self-Driving Cars (July 1, 2016), https://perma.cc/2G6B-GQX4.

 $^{^{202}}$ Joan Lowy & Tom Krisher, Tesla Driver Killed in Crash While Using Car's 'Autopilot', AP News (June 30, 2016), https://apnews.com/article/ee71bd075fb948308727b4bbff7b3ad8.

blinded by the light.²⁰³ Many media reports explicitly noted a significant drop in Tesla's stock prices (3%) on the day the news broke.²⁰⁴ And analysts opined that the accident would surely hurt Tesla's reputation "as a leader in both passenger safety and advanced technology."²⁰⁵ Overall, the market's initial reaction was swift and decidedly negative, creating a big reputational risk for Tesla's autonomous-vehicle project.

But the story did not end there. Immediately after the accident, the NHTSA launched a thorough investigation into how it happened. Seven months later, the regulator released a detailed report, which basically determined that the accident was not caused by any defects in Tesla's collision avoidance system. The regulatory report attributed the accident not to Tesla's autopilot system but to the human driver, who was repeatedly warned that he should take control of the car but never did. Following the release of the regulatory investigation report, the media was back to cover the accident extensively but this time with a different tone and framing that were much more favorable to Tesla. The media reported that Tesla's system "has been cleared" and "declared by NHTSA to have no problems what so ever [sic]."206 The media especially emphasized the details of the human story: how the driver was a daredevil who was apparently watching a *Harry* Potter movie during the drive and ignored several warnings by Tesla's system.²⁰⁷ The media reports noted that the regulatory report boded well for Tesla's reputation, whose stock rose on the day the report was released.²⁰⁸

²⁰³ Anjali Singhvi & Karl Russell, *Inside the Self-Driving Tesla Fatal Accident*, N.Y. TIMES (July 12, 2016), https://perma.cc/2JSX-UESA.

²⁰⁴ E.g., Adam Samson, US Opens Tesla Probe After Fatal Crash, FIN. TIMES (June 30, 2016), https://www.ft.com/content/11389af8-ec36-3739-853f-0c5446a6d88d.

 $^{^{205}}$ Jacob Bogage, $Tesla\ Driver\ Using\ Autopilot\ Killed\ in\ Crash,\ WASH.\ POST\ (June\ 30,\ 2016),\ https://perma.cc/NB5X-MT4Z.$

 $^{^{206}}$ M. Affan, NHTSA Clears Tesla Autopilot System in Fatal Crash, I4U NEWS (Jan. 21, 2017), LEXIS https://plus.lexis.com/api/permalink/c343895d-1b6e-41c9-9204-2bb7f9336dfa/?context=1530671.

²⁰⁷ See Ryan Grenoble, Tesla's Triple Gift from NHTSA: No Blame in Crash, No Recall, Great Safety Results, HUFFINGTON POST (Jan. 20, 2017), https://www.huffpost.com/entry/tesla-autopilot-40-percent-less

⁻crash_n_5881312ae4b096b4a230b59b?tjxsdtyvf4a6skyb9=; Sam Levin & Nicky Woolf, Tesla Driver Killed While Using Autopilot Was Watching Harry Potter, Witness Says, THE GUARDIAN (July 1, 2016), https://perma.cc/58Z3-NK59.

 $^{^{208}}$ Michelle Jones, Tesla Short Interest Rips to a New High Following Morgan Stanley's Upgrade, VALUEWALK (Jan. 19, 2017), https://www.valuewalk.com/2017/01/tesla-short-interest-high/.

Our content analysis of media coverage of the Tesla accident illustrates that a thorough fault-based inquiry can completely alter the market perception of the main actors. Ex post investigations into who's at fault in autonomous-vehicle accidents help the market reevaluate the risk of driving this specific autonomous vehicle going forward. The key determinant of the reputational fallout from each accident is how stakeholders perceive the effectiveness of the collision-avoidance system in place. Such a perception is prone to media slant and hindsight bias, and it could therefore benefit from a certified source of information in the form of legal investigations either through public or private enforcement (under a negligence rule). 209 Going forward, we could benefit from similar, fault-based investigations into future accidents that will undoubtedly happen.²¹⁰ And the best way to achieve this would be to stay away from strict liability at the early stages of the technology, which is exactly the opposite of what many commentators advocate these days.211

* * *

There is a broader point at play here that goes beyond the specific context of autonomous-vehicle accidents. The conventional wisdom in tort law literature is that the more dangerous an activity is, the less preferable a negligence regime becomes. Strict liability is viewed as superior to negligence in risk reduction, 212 and we prioritize it when an activity comes with a lot of

²⁰⁹ Cf. Gary E. Marchant & Rachel A. Lindor, The Coming Collision Between Autonomous Vehicles and the Liability System, 52 SANTA CLARA L. REV. 1321, 1333–34 (2012).

²¹⁰ Autonomous car liability would probably hinge on the design-defect prong of products liability, which de facto means examining whether the harm could have been reduced by adopting a reasonable alternative design. *Id.* at 1323–24. Such a test focuses courts on the design of the car and, in the process, facilitates comparison between manufacturers over whose design we can trust more.

²¹¹ One could argue that the Tesla episode illustrates how we can get the same informational benefits we extol here without fault-based litigation simply by having the regulator investigate accidents and release a public report. While this may sound like an ideal scenario in theory, we already discussed in Part III.D.1 why it is less likely to occur in real life. Regulatory enforcement notoriously suffers from limited resources, and regulators tend to maximize along the yardsticks that they are measured on (number of cases brought and amount in fines collected) rather than information production. With more autonomous vehicles bound to enter the roads and cause accidents, we cannot put all our information-production eggs into the basket of regulatory investigations. Private litigation (under a fault-based regime) will be needed to complement public enforcement, at least as far as digging out relevant information is concerned.

²¹² "Risk reduction" here denotes both care levels and activity levels; even those who believe that negligence and strict liability induce the same (optimal) investment in care tend to agree that strict liability induces better adjustment of activity levels on the part of

risk. The flip side is that when an activity is not dangerous, there is little room for the legal rule to further reduce the risk, so strict liability's purported advantage does not matter much.²¹³ But once we factor in information production and actors' reputational incentives, we realize that the opposite may be true.

With the least dangerous activities, the mere occurrence of harm is enough to warn outside observers that something may be wrong. With the most dangerous activities, by contrast, occurrence of harm is, in a sense, expected. The more valuable piece of information about these activities is rather whether the harm was avoidable, which is the type of information that we can glean only under a negligence regime. For some types of dangerous and new technologies, the reputational incentives are so strong that negligence's advantages in producing information and facilitating reputational sanctions may outweigh strict liability's purported efficiency advantage. Autonomous-vehicle accidents are one example. Extreme sports may be another (recall our earlier example of bungee-jumping accidents).²¹⁴

Yet another timely example concerns harms from cybersecurity breaches. The fact that a cyberattack happened is hardly news these days—consumers anticipate that every company was, is, or will be attacked.²¹⁵ The more important piece of information is whether the attacked company has the right protocols to minimize harms—information that we can glean from litigation under negligence but not from litigation under strict liability.

To reiterate, we do not make a sweeping argument in favor of negligence across all types of accidents. In fact, we can think of at least three quite common scenarios where negligence's advantages in producing information apply less forcefully. First, there will be areas where the activity is so common that the mere finding that harm occurred will be informative enough, and so litigation does not have an information-production advantage over strict liability. Recall our example of the two drivers, where one

injurers. See Strict Liability Versus Negligence, supra note 100, at 19; Mistaken Restriction, supra note 8, at 15.

²¹³ Mistaken Restriction, supra note 8, at 19.

Another way to look at it is that with less dangerous activities, lapses on the part of the sellers, operators, and manufacturers are less harmful. With more dangerous activities, by contrast, lapses may result in serious harms, so it would be valuable to have information on who among the different market actors is more likely to have lapses.

²¹⁵ On the pervasiveness of cybersecurity harms and for a call to govern them with strict liability, see generally Justin (Gus) Hurwitz, *Cyberensuring Security*, 49 CONN. L. REV. 1495 (2017).

is involved in many more accidents than the other. Another example could be two firms engaging in rail transport of dangerous materials. Because of the scale of the activity, we can assume that idiosyncrasies will cancel out over time; thus, we can infer that the firm with decidedly more accidents is, in fact, riskier to work with (or for) than the firm with fewer accidents. In other words, we do not need litigation under a negligence regime to tell us who is the riskier actor.

Second, there will be areas where potential victims cannot and do not use information from litigation to choose or avoid potential injurers. In these areas, even if litigation under a negligence rule produces quality information, that information would not translate to reputational incentives, and so the efficiency rationale for negligence would not apply. One example is hunting accidents. Sure, litigation may provide information as to whether a given hunter is reckless and an accident waiting to happen. But it is hard to imagine hikers searching for that information and opting to avoid trails in which reckless hunter *X* is known to hunt.

Finally, and more generally, even in areas where negligence does produce reputational effects, these effects should be viewed as putting a thumb on the scale in favor of negligence but not necessarily as a decisive vote. After all, the added benefits of reputational discipline are just one factor among many to consider, such as administrative costs, direct (nonreputational) effects on behavior, court errors, and so on (not to mention nonefficiency, corrective rationales for torts). All else being equal, the reputational factor plays a more pronounced role (and therefore should be taken into account by policymakers) in areas where there are large information asymmetries and where reputational incentives play an important role. One example is professional malpractice, such as by physicians, lawyers, or engineers;²¹⁶ another is defective designs of products, such as the effectiveness of collision-avoidance systems in autonomous vehicles.

CONCLUSION

The negligence versus strict liability debate is over, and negligence has clearly won. In the face of academic opposition and popular sentiment that demands stricter liability standards, negligence remains the fundamental principle of our tort system. Tort law scholars have traditionally justified negligence's dominance on nonefficiency grounds, such as a community's sense of

fairness. This Article has offered a different, efficiency-based rationale for negligence, which rests on its information-production effects.

The Article thus joins a burgeoning literature on the interactions between legal and nonlegal systems. The existing literature focuses on the extent to which market discipline can substitute tort law. 217 A classic example is Professors A. Mitchell Polinsky and Steven Shavell's proposal to abolish products liability for widely sold products.²¹⁸ Polinsky and Shavell reason that manufacturers of widely sold products already have strong reputational incentives to invest optimally in the safety of their products even without the threat of liability, so maintaining a costly system of litigation is superfluous.²¹⁹ Our analysis here exposed the fallacy in treating legal and nonlegal systems as totally independent of each other. We showed that the effectiveness of market discipline is rather a function of the underlying tort liability regime. Consider for example the link between media scrutiny and litigation. Reputational discipline of defective products is a function of effective media scrutiny; effective media scrutiny is a function of the quantity and quality of information journalists can glean from court records;²²⁰ and the quality of information from litigation is a function of the underlying liability rule. Tort law and market discipline thus complement each other.

Other accounts do highlight the information-producing aspects of tort litigation.²²¹ Our argument here generalizes and deepens the critique that they offer: While the other accounts maintain that without tort liability the market will be devoid of important information, they do not fully engage with how information production translates into reputational judgments.²²² We

²¹⁷ See generally, e.g., Paul H. Rubin, Markets, Tort Law, and Regulation to Achieve Safety, 31 CATO J. 217 (2011); A. Mitchell Polinsky & Steven Shavell, The Uneasy Case for Product Liability, 123 HARV. L. REV. 1437 (2010).

²¹⁸ See generally Polinsky & Shavell, supra note 217.

²¹⁹ Id. at 1443-50.

²²⁰ For empirical evidence, see Shapira, *supra* note 33, at 180–92.

²²¹ For examples of such accounts, see generally Engstrom, supra note 128; Wagner, supra note 123; Burch & Lahav, supra note 186; Mungan & Fluet, supra note 186; John C.P. Goldberg & Benjamin C. Zipursky, The Easy Case for Products Liability Law: A Response to Professors Polinsky and Shavell, 123 HARV. L. REV. 1919 (2010). See also Dillbary, supra note 185, at 440–42.

Another type of account emphasizes a different, nonreputational informational advantage of negligence over strict liability—namely, how it produces information on appropriate safety technologies and levels of care, which the defendants' peers can then use. See generally, e.g., Claus Ott & Hans-Bernd Schäfer, Negligence as Untaken Precaution, Limited Information, and Efficient Standard Formation in the Civil Liability System, 17 INT'L REV. L. & ECON. 15 (1997). But see generally Steven Shavell, Liability and the Incentive to

decipher the conditions that make certain tort cases assist reputational sanctioning more than others (as in the difference between negligence and strict liability). We also offer a fuller account of how accurate reputation-relevant information is in a sense a public good, and private litigation, costly as it may be, comes with an added benefit of producing this public good.

The information-production aspects of tort law make for a vast, understudied topic with many implications, and we acknowledge that we were not able to cover all its ramifications and nuances. Still, at minimum this Article has generated tractable hypotheses that future empirical inquiries can probe.²²³ Importantly, the Article has also produced concrete policy implications, such as for judges considering the public-interest prong when evaluating parties' requests of confidentiality or for legislators considering how to set the liability standard for autonomous-vehicle accidents.

Obtain Information About Risk, 21 J. LEGAL STUD. 259 (1992) (arguing that strict liability creates better incentives for potential injurers to obtain information about the risks inherent in their activities).

²²³ For example, we highlighted how, for a given case, a negligence regime produces more granular information than a strict liability regime; but a strict liability regime may generate a higher volume of cases (since victims are more likely to sue), which in turn may lead to overall more (better?) information, such as by allowing market observers to identify a pattern of risky behavior. Future studies could therefore test which one of these effects—more granular information under negligence versus better pattern identification under strict liability—dominates.