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FOUNDATIONS FOR PLATFORM LIABILITY

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From spreading misinformation to selling deadly products, bad actors use technology platforms to their advantage while causing devastating harms to privacy, health, and even democracy. Despite their central role in enabling these bad actors, the platforms almost entirely escape liability. This legal immunity is purportedly grounded in economics. From the beginning, courts and legislatures feared that liability would chill innovation, growth, and user access. They also speculated that platforms have sufficient market incentives to voluntarily police bad actors, making liability unnecessary.

Whereas many scholars have argued that platform immunity is blind to justice, this Article shows that it is also blind to economics. We challenge the fundamental precepts that market incentives suffice and that liability inevitably brings detrimental chilling effects. By tracing the legal origins of platform immunity and synthesizing decades of legal and economic research, we show how judges and lawmakers have consistently applied shallow or misguided economic reasoning. Their misconceptions rely on an outdated depiction of economics and a narrow view of efficiency. Once updated for key factors such as platforms' financial incentives to allow bad actors and the feasibility of platforms deploying automated monitoring technologies to prevent harms, economics fails to justify a broad shield against liability.

Instead, economics offers a promising roadmap for holding platforms accountable for their harms while preserving their social benefits. Designing a better liability framework is increasingly important as advances in artificial intelligence accelerate technology's presence in our everyday lives, creating

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unpredictable opportunities for bad actors to weaponize platforms. Anchoring platform liability more effectively in economic reasoning will help create a more adaptive legal framework that keeps pace with the future.

INTRODUCTION

Russia deployed thousands of artificially intelligent bots to spread disinformation on Twitter and Facebook in support of President Trump during the 2016 presidential election.[1] Anonymous social media users circulated deepfakes of Taylor Swift and countless others by swapping facial photos into explicit images and pornographic videos.[2] On Amazon, merchants continued to sell toys that contained dangerous levels of lead and defective helmets linked to motorcycle fatalities despite those products violating federal safety standards.[3] Yet in these and a range of related incidents technology platforms avoided liability.[4]

Why does the law shield platforms from liability when independent bad actors use them to cause harm? Many of the primary justifications are purportedly rooted in economics.[5] In e-commerce, the key doctrine shielding Amazon and others rests on the question of whether market incentives would promote optimal safety.[6] In the context of social media, judges and lawmakers asked whether the costs of liability would cause platforms to curtail innovation, scale back services, or even go out of business.[7]

This Article revisits the economic case for platform immunity and concludes that it is unsound. To reach this conclusion, it synthesizes and extends the most relevant insights from decades of economics research.

1 *See* Nicholas Fandos, Cecilia Kang & Mike Isaac, *House Intelligence Committee Releases Incendiary Russian Social Media Ads*, N.Y. TIMES (Nov. 1, 2017), https://www.nytimes.com/2017/11/01/us/politics/russia-technology-facebook.html [https://perma.cc/9W6C-TNA9]; *cf.* Francesca L. Procaccini, *Equal Speech Protection*, 108 VA. L. REV. 353, 430 n.305 (2022).

2 *See* Brian Contreras, *Tougher AI Policies Could Protect Taylor Swift—And Everyone Else—From Deepfakes*, SCI. AM. (Feb. 8, 2024), https://www.scientificamerican.com/article/tougher-ai-policies-could-protect-taylor-swift-and-everyone-else-from-deepfakes/ [https://perma.cc/E2XR-QDSA] (describing how proposed legislation could allow victims of deepfakes to sue the creators and distributors of content).

3 Alexandra Berzon, Shane Shifflett & Justin Scheck, *Amazon Has Ceded Control of Its Site. The Result: Thousands of Banned, Unsafe or Mislabeled Products*, WALL ST. J. (Aug. 23, 2019, 8:56 AM EDT), https://www.wsj.com/articles/amazon-has-ceded-control-of-its-site-the-result-thousands-of-banned-unsafe-or-mislabeled-products-11566564990 [https://perma.cc/WBD9-89Z8].

4 *See infra* Part I. For exceptions in which platforms are held functionally accountable for third-party conduct based on regulatory agency authority, see Rory Van Loo, *The New Gatekeepers: Private Firms as Public Enforcers,* 106 VA. L. REV. 467 (2020).

5 *See infra* Part I. Of course, economics is not the only consideration.

6 *See infra* Section I.B.

7 *See infra* Section I.A.

Once updated for key factors such as the many harms reaching beyond a platform's network, the judgment-proof nature of many bad actors, the monetization of user engagement, and the feasibility of platforms deploying artificially intelligent monitoring technologies to prevent harms, economics fails to justify a broad shield against liability. Instead, in many contexts, economics offers strong normative foundations for the law to serve as a carefully wielded sword imposing greater platform liability.

Grounding the platform liability framework more rigorously in economic scholarship is not simply an academic exercise—it is integral to the real-world path of the law.[8] In meaningful modern updates to liability laws, legislatures and courts have repeatedly followed economically informed legal scholarship.[9] For instance, since at least an 1842 case in which the stagecoach manufacturer was held not liable for a postal worker's injuries,[10] once a defective product entered the chain of distribution manufacturers and sellers enjoyed a "citadel" of legal immunity.[11] The "fall of the citadel" followed decades of academic research and culminated in the 1960s rise of strict liability.[12] Judge Cardozo famously summarized the reasoning behind that judicial revolution as follows: "Precedents drawn from the days of travel by stagecoach do not fit the conditions of travel [today]."[13]

Unlike during the 1960s fall of the immunity citadel, in the 1990s when judges and lawmakers became alarmed by children accessing nude photos online and users defaming one another anonymously on electronic bulletin boards, they did not have decades of academic research to help them craft

8 *See* Oliver Wendell Holmes, *The Path of the Law*, 110 HARV. L. REV. 991, 1005 (1997) (describing economics as the intellectual frame best situated to determine legal intent).

9 *See, e.g.*, George L. Priest, *The Invention of Enterprise Liability: A Critical History of the Intellectual Foundations of Modern Tort Law*, 14 J. LEGAL STUD. 461, 462–64 (1985) (summarizing the intellectual influences on product liability). As another example, after a wave of law and economics scholarship emerged in the 1980s critiquing the strict liability holding some sellers liable who could have done nothing to prevent the harm, judges cited to and followed some of the suggestions in that scholarship in their opinions as they carved out exceptions to strict liability. *See, e.g.*, Feldman v. Lederle Lab'ys, 479 A.2d 374, 382 n.4, 384, 388–89 (N.J. 1984) (setting a new precedent of an exception to strict liability for prescription drugs while citing to legal scholarship nine times: the *N.Y.U. Law Review* (three times), *Seton Hall Law Review* (two times), *Georgetown Law Journal*, *Mississippi Law Journal*, *Rutgers Law Review*, and *Stanford Law Review*).

10 *See* Winterbottom v. Wright (1842) 152 Eng. Rep. 402; 10 M. & W. 109 (Exch.).

11 Ultramares Corp. v. Touche, 174 N.E. 441, 445 (N.Y. 1931) ("[An] assault upon the citadel of privity is proceeding in these days apace.").

12 *See generally* William L. Prosser, *The Assault Upon the Citadel (Strict Liability to the Consumer)*, 69 YALE L.J. 1099, 1107 (1960) (recounting the decades of legal adjustments that led to strict liability); Priest, *supra* note 10, at 462–64 (summarizing the economic academic influences on liability law). For a more historically nuanced account of this citadel narrative, *see* Kenneth S. Abraham, *Prosser's* The Fall of the Citadel, 100 MINN. L. REV. 1823, 1826 (2016) (explaining how many of the pieces of the citadel had already fallen).

13 MacPherson v. Buick Motor Co., 111 N.E. 1050, 1053 (N.Y. 1916).

liability laws for their rapidly developing world.[14] Lawmakers were, from an economic standpoint, legislating in the dark when they passed the "Internet's Magna Carta,"[15] Section 230 of the 1996 Communications Decency Act.[16] Yet lawmakers explicitly stated in the Act that Section 230 aimed "to preserve the vibrant and competitive free market that presently exists for the Internet."[17] Congress has yet to revisit the economic foundations for Section 230 even as the issues have expanded from mundane to existential, with bipartisan concern about how bad actors exploit platforms to sell deadly products,[18] recruit terrorists,[19] and erode democracy.[20]

Perhaps more surprising is that scholars have yet to speak comprehensively to the core economic concerns animating platform liability policy.[21] Since Section 230 was enacted, legal scholars have used mostly intuitive economic reasoning or, more often, avoided economic norms altogether when proposing greater liability for platforms.[22] Although

14 *Infra* Section III.B.

15 Kyle Langvardt, *Regulating Online Content Moderation*, 106 GEO. L.J. 1353, 1373 (2018) (describing how Section 230 is widely described this way).

16 47 U.S.C. § 230 (2018).

17 *Id.* § 230(b)(2).

18 *Cf. infra* Section I.B.

19 *Cf. infra* text accompanying note 187.

20 *See infra* notes 217, 363 and accompanying text.

21 For some scholarship related to tech liability in other contexts, see, e.g., Rory Van Loo, *The Revival of Respondeat Superior and Evolution of Gatekeeper Liability*, 109 GEO. L.J. 141, 179 (2020) (concluding that liability imposed on tech platforms and other large businesses could improve efficiency and economic inequality); Talia B. Gillis, *The Input Fallacy*, 106 MINN. L. REV. 1175, 1176 (2022) (analyzing the intersection of efficiency, fairness, and discrimination in algorithms); Alicia Solow-Niederman, *Administering Artificial Intelligence*, 93 S. CAL. L. REV. 633, 667 (2020) ("[A] system of stricter ex post sanctions in tort and/or criminal law could change the cost-benefit analysis of safety tradeoffs and thereby incentivize manufacturers to proceed more cautiously."); Rebecca Crootof, *The Internet of Torts: Expanding Civil Liability Standards to Address Corporate Remote Interference*, 69 DUKE L.J. 583, 667 (2019) ("[E]xpansive articulations and applications of current doctrines could retain the benefits and more fairly allocate the costs of [internet-of-things] technology going forward."). And for valuable foundational economic work focused on related tort issues outside of platforms, see, e.g., Alberto Galasso & Hong Luo, *Tort Reform and Innovation*, 60 J.L. & ECON. 385, 387 (2017) ("[O]n average, the demand for new technologies that high liabilities generate through defensive adoption exceeds their negative chilling effect on medical device innovation."); Jennifer Arlen & W. Bentley MacLeod, *Torts, Expertise, and Authority: Liability of Physicians and Managed Care Organizations*, 36 RAND J. ECON. 494, 496 (2005) ("Failure to hold [managed care organizations] liable for negligent treatment decisions results in both inefficient authority and inefficient physician expertise."); A. Mitchell Polinsky & Daniel L. Rubinfeld, *The Welfare Implications of Costly Litigation for the Level of Liability*, 17 J. LEGAL STUD. 151, 152 (1988) (analyzing adjustments to compensatory damages).

22 *See, e.g.*, Edward J. Janger & Aaron D. Twerski, *The Heavy Hand of Amazon: A Seller Not a Neutral Platform*, 14 BROOK. J. CORP. FIN. & COM. L. 259, 264 (2020) (making a doctrinal argument that Amazon is a seller under tort law).

economists have actively studied platforms for at least twenty years,[23] they only recently began in earnest to turn their attention to formally modeling platform liability.[24] While that more formal economic research provides key theoretical insights, it necessarily focuses on modeling a subset of the most important issues and devotes limited space to connecting the economics to law.[25] By contrast, judges and lawmakers must weigh all important factors, not only those a given economic model has isolated. Astonishingly, the focused economic literature has yet to emphasize the single most influential economic factor for policy makers: the potential innovation-chilling effects of imposing liability on platforms.[26]

This Article aims to advance the project of providing courts and lawmakers with direct economic foundations that were not available when they first began adjudicating and legislating platform liability over the past several decades. The need for rigorous economic reasoning is all the more pressing as key legal institutions have begun to pay platform liability renewed attention. The Supreme Court has recently considered cases about platform liability.[27] Regulators and attorneys general are investigating

23 Seminal work on platform economics includes Jean-Charles Rochet & Jean Tirole, *Platform Competition in Two-sided Markets*, 1 J. EUR. ECON. ASS'N 990 (2003) and Mark Armstrong, *Competition in Two-Sided Markets*, 37 RAND J. ECON. 668 (2006).

24 *See, e.g.*, Xinyu Hua & Kathryn E. Spier, Holding Platforms Liable (July 2, 2024) (unpublished manuscript), https://ssrn.com/abstract=3985066 [https://perma.cc/S2JX-UVVT] (modeling platform liability to identify key factors for platform incentives); Xinyu Hua & Kathryn E. Spier, Platform Liability Rules: Strict Liability Versus Negligence (Aug. 20, 2024) (unpublished manuscript), https://ssrn.com/abstract=4411026 [https://perma.cc/MLQ3-2DCG] (modeling platform liability and identifying the platform's pricing structure as a key factor determining whether strict liability or negligence provides the best incentives); James Grimmelmann & Pengfei Zhang, *An Economic Theory of Intermediary Liability*, 38 BERKELEY TECH. L.J. 1011 (2023) (formally modeling content moderation liability in light of investigation costs for false positive and false negatives); Yassine Lefouili & Leonardo Madio, *The Economics of Platform Liability*, 53 EUR. J. L. & ECON. 319 (2022). Other recent working papers include Doh-Shin Jeon, Yassine Lefouili & Leonardo Madio, *Platform Liability and Innovation* (CESifo, Working Paper No. 9984, 2024), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4241624 [https://perma.cc/K4AS-USCA]; Yusuke Zennyo, Should Platforms be Held Liable for Defective Third-Party Goods? (Dec. 9, 2023) (unpublished manuscript), https://ssrn.com/abstract=4405671 [https://perma.cc/72MK-FHZV]; Yuta Yasui, Platform Liability for Third-Party Defective Products (Sept. 20, 2022) (unpublished manuscript), https://ssrn.com/abstract=4224267 [https://perma.cc/9CTX-XGD8]; Alessandro De Chiara, Ester Manna, Antoni Rubí-Puig & Adian Segura-Moreiras, *Efficient Copyright Filters for Online Hosting Platforms* 1 (NET Inst., Working Paper No. 21-03, 2021), https://ssrn.com/abstract=3945130 [https://perma.cc/3VNU-HRFE].

25 For instance, a given economics model might show why a key factor for liability is whether the injured party is outside the platform's network because the platform has no financial incentives to avoid harming such parties. *See* Hua & Spier, Holding Platforms Liable, *supra* note 25, at 26–27. Articles written for specialized economics audiences and peer-reviewed journals tend to emphasize narrow technical contributions over sustained policy implications.

26 Part II, *infra*, adds the consideration of chilling effects to these other factors.

27 *See, e.g.*, Twitter, Inc. v. Taamneh, 143 S. Ct. 1206 (2023) (finding Twitter, Facebook, and other social media companies' content matching algorithms did not aid and abet ISIS in terrorist

Google, Amazon, Facebook, and other large platforms.[28] And Congressional committees are advancing bills reimagining platform regulation.[29] Key policy makers appear poised to make legal design decisions that could last for generations.[30] If the past is any indication, economic considerations will influence those decisions. Now is the time to ensure that the inevitable application of economics is informed rather than impressionistic.

This Article advances that project in three parts, each of which makes a novel contribution to the literature. Part I reviews the evolution of platform liability laws in content moderation, e-commerce, and copyright. Although the paths of platform liability laws have been traced many times before, economics typically remained in the background of those histories if mentioned at all.[31] Thus, Part I contributes to the literature a more comprehensive legal review of platform liability through the lens of economics. That focus is crucial for diagnosing the misuse of economics by judges and lawmakers, as well as for identifying key policy issues, like chilling effects and incentives, that have heavily influenced the existing design of platform liability.

Part II applies economics to platform liability in a comprehensive manner not previously undertaken. It analyzes the platform business model, paying special attention to the platform's insufficient incentives to reduce risks posed by bad actors. Part II then identifies and analyzes the most important factors that should be weighed by judges and lawmakers when designing platform liability—informed by both the economic issues unearthed in the origins of platform liability from Part I and the decades of economics research indicating what should matter most. One of the contributions of this analysis is a reframing of the question of chilling effects. Chilling effects should not weigh against liability altogether, as lawmakers assumed in drafting Section 230. Instead, chilling effects should inform the choice of liability standard (fault-based or strict) and the level of appropriate damages.

attacks); Gonzalez v. Google LLC, 143 S. Ct. 1191 (2023) (concluding that the same logic applied to Google in lawsuit for terrorist attacks in Paris that killed 130 people).

28 *See, e.g.*, Aitor Jiménez & J.C. Oleson, *The Crimes of Digital Capitalism*, 48 MITCHELL HAMLINE L. REV. 971, 1008 (2022) (summarizing ongoing investigations).

29 For example, bills have regularly circulated through Congress in recent years that might curtail the reach of Section 230. *See, e.g.*, Accountability for Online Firearms Marketplaces Act of 2021, S. 2725, 117th Cong. (2021) (proposing to remove federal immunity for platforms that facilitate firearms-related transactions, advertise proposals to transfer or sell firearms, or provide digital instructions for three-dimensional printing of firearms); Brief in Opposition at 3, Gonzalez v. Google LLC, 143 S. Ct. 1191 (2023) (No. 21-1333) (summarizing proposed legislation relating to Section 230).

30 On the enduring nature of historical liability regimes, *see infra* Part I.

31 For the leading treatment of secondary platform liability's history, which considers economics without focusing on it, see generally Jonathan Zittrain, *A History of Online Gatekeeping*, 19 HARV. J.L. & TECH. 253, 262 (2006).

Part III considers the future of platform liability, describing a world where legal scholars, judges, and lawmakers rigorously apply economic reasoning. Using three current examples, Pornhub and content moderation, Alex Jones and defamation, and Amazon and product safety, we illustrate how the key factors identified in Part II can guide judges and lawmakers going forward. We conclude by observing that stronger economic foundations will better prepare the law to keep pace with future generations of platform harms.

Before turning to the main discussion, two caveats are in order. First, we do not focus on settings where the platform causes the harms unilaterally. If Amazon produces its own products that are defective, or Facebook carelessly leaks its users' sensitive personal data, that conduct implicates traditional direct liability. Direct platform liability is the easy economic case. Instead, we focus on secondary platform liability for the harms caused by platform participants to others. Our analysis also applies to a middle area in which the platform amplifies a third party's harmful conduct—such as if Facebook and Twitter help radicalize users by feeding them conspiracy theories.[32] In these instances, the law may hold the platform and the third party jointly liable.

Second, we do not take a position on the relative importance of different values implicated by platform liability, such as fairness, equality, information access, and free speech. Scholars have begun dismantling other key normative foundations for platform immunity. They have offered constitutional speech frameworks for regulating platforms' "dangerously toxic political speech environment."[33] And they have extensively developed the privacy norms for holding platforms liable when bad actors use them to "turn others into objects of pornography without their consent."[34] In

32 *See, e.g.*, Karen M. Douglas, Chee Siang Ang & Farzin Deravi, *Reclaiming the Truth*, BRIT. PSYCH. SOC. (May 12, 2017), https://www.bps.org.uk/psychologist/reclaiming-truth [https://perma.cc/83LE-JSJL] (analyzing the viral tweet spread across Twitter and Facebook that falsely alleged protesters were being bussed into Austin, Texas, to disrupt then-candidate Trump's campaign).

33 *See, e.g.*, Procaccini, *supra* note 1, at 446 ("Recognizing that the hierarchy of speech protection and its attendant truism that political speech garners near-absolute protection are doctrinal myths clarifies the constitutionality of speech regulations aimed at protecting a safe and healthy political discourse." *Id.* at 361.). For an influential account of how "the First Amendment has emerged as a powerful deregulatory engine—and one with great implications for modern governance," see Amanda Shanor, *The New* Lochner, 2016 WIS. L. REV. 133, 133 (2016).

34 Danielle Keats Citron & Mary Anne Franks, *Criminalizing Revenge Porn*, 49 WAKE FOREST L. REV. 345, 390 (2014). Danielle Citron and Mary Anne Franks wrote the first law review article on revenge porn in 2014 and have continued to build the case. *See id.*; Danielle Citron & Mary Anne Franks, *Evaluating New York's "Revenge Porn" Law: A Missed Opportunity to Protect Sexual Privacy*, HARV. L. REV. BLOG (Mar. 19, 2019) [hereinafter Citron & Franks, *Evaluating*], https://harvardlawreview.org/blog/2019/03/evaluating-new-yorks-revenge-porn-law-a-missed-opportunity-to-protect-sexual-privacy/ [https://perma.cc/L84S-LWHK]; Danielle Keats Citron, *Sexual Privacy*, 128 YALE L.J. 1870, 1922 (2019).

contrast, the project of building a comprehensive economic framework for platform liability has received far less sustained attention.[35]

This Article's importance does not depend on one's normative hierarchy.[36] Indeed, if one seeks to balance important values such as justice, privacy, and speech in the information age, it is necessary to determine how laws and market forces will influence for-profit business decisions. Even if only implicitly, that inquiry requires a consequentialist analysis of platform incentives to understand how markets will respond to various liability regimes.[37] Our analysis accommodates a pluralistic vision for what values should be prioritized in that it provides economic foundations for balancing the costs of liability against the harms that society deems worth preventing.

I. THE LEGAL FOUNDATIONS OF PLATFORM LIABILITY

Academics, policy makers, and the general public are in broad agreement that online platforms create significant economic and social benefits.[38] Platforms allow us to easily connect with friends, collaborate with coworkers, find products and services, and learn new information and skills. Nevertheless, by bringing together billions of people and businesses, platforms can also be the ideal breeding ground for bad actors, from sexual predators to sloppy manufacturers, to harm innocent victims.[39] Consequently, from tech platforms' early days, courts and lawmakers faced the task of bringing liability laws from the world of print newspapers and stagecoaches into the digital era.

This Part revisits those liability developments with a spotlight on the role of economics. It focuses on the two main areas in which the law has shielded platforms from liability, content moderation and product injuries, as well as the legal area that has most prominently preserved platform

35 Scholars have offered valuable economic foundations on which this Article builds. But those prior works only cover pieces of what we offer here, and key normative gaps remain. For further articulation of our contribution, and examples of scholars who have contributed components to this framework, see *supra* notes 23–27 and accompanying text.

36 Nor is our thesis necessarily inconsistent with non-instrumental theories of liability. For a leading example of such a theory, see, e.g., John C.P. Goldberg & Benjamin C. Zipursky, *The Moral of Macpherson*, 146 U. PA. L. REV. 1733, 1744, 1847 (1998) ("A relational conception of the duty of due care should now be recognized as an option in negligence theory."). It is beyond our scope to reconcile these varying approaches, but at a minimum economic analysis can play a role in advancing such duties.

37 *See infra* Part II.

38 *See, e.g.*, Erik Brynjolfsson & Avinash Collis, *How Should We Measure the Digital Economy?*, HARV. BUS. REV., Nov.–Dec. 2019, at 140 (discussing how measures including GDP underestimate platforms' value).

39 *See infra* Sections I.A–B.

liability, copyright.[40] These case studies show how courts and legislatures think about liability, thereby surfacing the key legal issues relevant to understanding how and why a better understanding of economics is necessary for the legal architecture of platforms.

A. The Legal Path to Content Moderation

When the internet exploded in the early 1990s, courts were faced with applying longstanding liability laws to novel contexts.[41] However, the early legal test cases did not involve the companies that are now the main subjects of platform liability law, such as Google, Twitter, and Facebook, which did not yet exist.[42] Instead, the futuristic tech platforms that then served as the "gatekeepers" to cyberspace were service providers like CompuServe, Prodigy, and America Online, which charged people by the hour or month to gain internet access.[43] Someone wanting to connect to the internet would receive a software floppy disk or CD by mail from one of these companies to install on their computers.[44] After connecting their landline telephone cord to their computer, consumers would then typically use a slow dial-up connection to access the internet through CompuServe's, Prodigy's, or America Online's web portals, message boards, chat areas, and search services.[45] Thus, the most important early platforms combined the precursor services of Google, Facebook, and Comcast into one company.

It was against that institutional backdrop that in 1991 a federal district court of New York heard the first seminal legal case for platform liability, *Cubby, Inc. v. CompuServe Inc.*[46] In *Cubby*, a subscriber posted a news clip to a private online forum, stating that the plaintiffs were founders of a "start-up scam," and that one of the plaintiffs had been "bounced" from his prior

40 This Part is not meant to be a comprehensive treatment of liability areas. Other areas of law, such as trademark, also can impose liability on platforms for the acts of third parties. *See, e.g.*, 15 U.S.C. § 1114(2)(B)–(C) (2018) (imposing trademark liability relevant to online platforms).

41 *See generally* Zittrain, *supra* note 32 (recounting the history of third-party liability as applied to online companies).

42 *See* Derek Khanna, *Guarding Against Abuse: The Costs of Excessively Long Copyright Terms*, 23 COMMLAW CONSPECTUS 52, 110 n.357 (2014) (listing the founding of Google in 1998, Facebook in 2004, and Twitter in 2006).

43 *See, e.g.*, Zittrain, *supra* note 32 (applying gatekeeper theory to early platforms); Peter H. Lewis, *The New Internet Gatekeepers; Beware, David, the Goliath Providers Are Coming!*, N.Y. TIMES (Nov. 13, 1995), https://www.nytimes.com/1995/11/13/business/the-new-internet-gatekeepers-beware-david-the-goliath-providers-are-coming.html [https://perma.cc/4A4D-ELME] (detailing the entry of large companies into the "gatekeep[ing]" internet access business).

44 *See, e.g.*, Jefferson Lankford, *A Lawyer's Practical Guide to the Internet*, 34 ARIZ. ATT'Y 20, 21, 26 (1998) (describing the mailing of "diskettes").

45 *See* Anthony Ciolli, *Chilling Effects: The Communications Decency Act and the Online Marketplace of Ideas*, 63 U. MIA. L. REV. 137, 169 (2008).

46 Cubby, Inc. v. CompuServe Inc., 776 F. Supp. 135 (S.D.N.Y. 1991).

job.[47] The common law of defamation had changed significantly since its original focus on oral statements in 1500s England,[48] but there was no established precedent for applying defamation law to online content.

The *Cubby* court approached this question as would later liability courts in other areas—by searching for a similar predigital industry.[49] More specifically, the central analogic question was whether CompuServe was more like a "publisher," such as a newspaper, or a "distributor," such as a library or bookstore.[50] Newspapers are held liable for publishing defamatory statements made by others, whereas bookstores are more insulated. Intuitively, newspapers are in a better position to know (or have reason to learn about) the defamatory content.[51] The Court concluded that CompuServe was "in essence an electronic, for-profit library that carries a vast number of publications" in part due to the lack of editorial control.[52] Consequently, CompuServe was not liable for defamation because there was no evidence it had reason to know of the allegedly defamatory content before it was posted online.[53]

In deciding whether CompuServe should be subjected to the standard of liability for newspapers or libraries, the Court weighed the societal implications of classifying the platform one way or the other.[54] Importantly, for present purposes, that normative inquiry hinged on a market analysis. Despite clear implications for speech, the *Cubby* court, citing *New York Times Co. v. Sullivan*,[55] engaged in an economic analysis by considering the platform's business model and optimal liability burden.[56] The court emphasized that getting the burden inquiry right is necessary for advancing core societal interests in information access and constitutionally protected speech.[57] Moreover, burden setting was particularly precarious because platforms' ongoing "[h]igh technology" innovations in information transfer speeds had advanced access to knowledge.[58] The *Cubby* court thus sought to ensure that its classification of CompuServe would not deprive society of the existence or growth of platforms that at the time provided the primary means of accessing the internet.

47 *Id.* at 138.

48 3 DAN B. DOBBS, PAUL T. HAYDEN & ELLEN M. BUBLICK, THE LAW OF TORTS § 517 (2d ed. 2024) (recounting how common law courts allowed damages for slander in the 1500s).

49 *See Cubby*, 776 F. Supp. at 140 ("A computerized database is the functional equivalent of a more traditional news vendor . . . .").

50 *Id.* at 139.

51 *Id.*

52 *Id.* at 140.

53 *Id.* at 141.

54 *Id.* at 140.

55 New York Times Co. v. Sullivan, 376 U.S. 254 (1964).

56 *Cubby*, at 137, 140 (citing *Sullivan*, 376 U.S. at 277).

57 *Id.* at 139.

58 *Id.* at 140.

Several years later, the test established in *Cubby* produced a different outcome in another seminal platform liability case, *Stratton Oakmont, Inc. v. Prodigy Services Co.*[59] An anonymous user had posted on Prodigy's "'Money Talk' computer bulletin board" that the Stratton Oakmont investment bank was a "cult of brokers who either lie for a living or get fired" and whose president was "soon to be proven criminal."[60] Like CompuServe, Prodigy offered an array of internet access, social media, and information search services.[61] But unlike CompuServe, Prodigy moderated and curated content.[62] Again the key issue was whether Prodigy was more similar to a traditional newspaper or a library, printer, or book store.[63] The court concluded Prodigy should be held liable because, like a newspaper, it had exercised editorial control.[64]

The *Stratton Oakmont* opinion—like *Cubby*'s before it—considered the societal implications of classifying the platform as a publisher.[65] That normative inquiry was rooted in a brief high-level consideration of what Prodigy's business incentives would be after being subjected to liability.[66] The court was particularly concerned with countering criticism that its decision would cause Prodigy to try to avoid being treated like a newspaper by halting all content moderation, thereby creating a less safe online community.[67] To counter that concern, the court speculated, without citing to any economic research, that the market might compensate Prodigy's "'family-oriented' computer service" business strategy of editing content.[68] If it had stood, *Stratton Oakmont* would have meant that online companies involved in screening content would incur liability for users' defamatory posts.

Instead, the following year Congress functionally overturned *Stratton Oakmont*.[69] Section 230 of the Communications Decency Act shielded providers of internet services from being "treated as the publisher or speaker of any information provided by another . . . ."[70] In enacting Section 230, Congress weighed similar factors as the courts in *Stratton Oakmont* and *Cubby*. However, whereas the *Stratton Oakmont* court determined that

59 Stratton Oakmont, Inc. v. Prodigy Servs. Co., No. 31063, 1995 WL 323710 (N.Y. Sup. Ct. May 24, 1995).

60 *Id.* at *1.

61 *See id.* at *2, *4.

62 *Id.*

63 *Id.* at *3.

64 *Id.* at *5.

65 *Id.*

66 *Id.*

67 *Id.*

68 *Id.*

69 For a discussion of the relationship between the Communications Decency Act and prior third-party liability cases, *see, e.g.*, Zittrain, *supra* note 32, at 262.

70 47 U.S.C. § 230(c)(1) (2018).

liability for screening content would not impose excess burdens or discourage platforms from taking precautions, the designers of Section 230 came to the opposite conclusion. Again without any supporting economic research, they asserted that screening obscene or offensive language would be prohibitively expensive, causing the "Good Samaritan" platform to refuse to host considerable content.[71] The Section 230 preamble emphasizes the need "to remove disincentives for the development and utilization of blocking and filtering technologies."[72]

Thus, the central analytic exercise in early platform liability reasoning was to consistently apply the liability regime from predigital industries to online platforms. In making that determination judges and lawmakers drew upon their limited understanding of platform business models and market incentives. Consequently, even if only in a speculative manner, economic assumptions drove the creation of the most important liability law for search and social media platforms.

Yet the businesses and their societal role have evolved considerably from these early cases of defamation on private electronic message boards that were open to subscribers only. Since then, it has become standard to search for someone's online identity as a first step before hiring them, dating them, or leasing an apartment to them.[73] For instance, for years, the top Google search result when anyone searched for law student Caitlin Hall's name was an allegation on an admissions platform that she slept "her way into" Yale Law School.[74] Powerless to do anything about it, she endured comments such as one law firm partner opening an interview by saying, "Well, you're certainly the most Googleable candidate we've ever had."[75]

Bad online reputations can also cause significant long-lasting economic harms to small businesses. One Massachusetts tutor hired an online marketing firm to promote his business, but when they failed to deliver he blocked his credit card payment.[76] Soon he was bombarded by fake one-star reviews that threatened his livelihood by claiming that he would "harass and yell at children."[77] Google was, however, slow to respond to the tutor's request for the removal of the defamatory content.[78] Due to Section 230,

71 *See id.* § 230(c) ("Protection for 'Good Samaritan' blocking and screening of offensive material."); Zittrain, *supra* note 32, at 262 (discussing the reasoning).

72 47 U.S.C. § 230(b)(4) (2018).

73 *See* Frank Pasquale, *Rankings, Reductionism, and Responsibility*, 54 CLEV. STATE L. REV. 115, 127 (2006); Citron, *supra* note 35, at 1927–28.

74 Caitlin Hall, *Swimming Downstream: Battling Defamatory Online Content via Acquiescence*, 19 YALE J.L. & FEMINISM 287, 287–88 (2007).

75 *Id.* at 287.

76 *See Needham Business Owner Targeted with Fake Reviews*, NBC BOS. (Sept. 24, 2021, 12:25 AM), https://www.nbcboston.com/news/local/needham-business-owner-targeted-with-fake-reviews/2499927 [https://perma.cc/6QDR-9M7U].

77 *Id.*

78 *Id.*

even if platforms return defamatory search results, publish false statements, or host fake reviews, affected individuals and businesses can do little to defend their reputations.

Additionally, early on it became clear that Section 230 shielded platforms from liability for a broader array of more far-reaching harms than those animating the statute.[79] Defamatory harms, for instance, evolved toward what Danielle Citron and Mary Anne Franks have called "sexual privacy" violations.[80] In one early case, the Ninth Circuit read Section 230 as shielding a dating website from liability after a third party created a profile for a famous actress claiming she was "looking for a one-night stand," causing unwanted visits to her home and lewd messages left on her answering machine.[81] Since then, widely accessible technologies now allow almost anyone with an internet connection to insert people's faces into pornography clips and post them online, creating authentic-looking "deep fake" videos.[82] Rejected suitors and ex-partners also can increasingly post real sex videos for revenge.[83] The original concerns about minors accessing obscene materials were for many years eclipsed by judicial interpretations of Section 230 as shielding the platform from liability for hosting child pornography[84] and advertisements that had subjected children to sex trafficking.[85] Thus, even harms that loosely relate to defamation have transformed significantly in nature and scope.

Platforms have also allowed new categories of harms to reach the public more broadly. Disinformation can undermine public health efforts or elections. Insurrectionists coordinated their January 6 assault on Capitol Hill through social media sites like Parler.[86] In the 2016 election, Russian agents secretively paid for over 3,500 advertisements on Facebook and created thousands of fake Twitter accounts in support of Donald Trump.[87] These

79 Defamation and, to a lesser extent, minors' access to pornography were the main areas of liability forming the backdrop for the enactment of Section 230. Those two areas constituted the most prominent areas of platform liability running through the courts. *See* Zittrain, *supra* note 32, at 257. The text and legislative history of Section 230 suggest that the main harm animating lawmakers was minors' exposure to obscene or offensive material. *See* 47 U.S.C. § 230(b) (2018); Batzel v. Smith, 333 F.3d 1018, 1026–30 (9th Cir. 2003) (summarizing the legislative history and text).

80 Citron & Franks, *Evaluating*, *supra* note 35.

81 *See* Carafano v. Metrosplash.com, Inc., 339 F.3d 1119, 1121 (9th Cir. 2003).

82 *See* Citron, *supra* note 35, at 1874.

83 *See id.* at 1918.

84 *See, e.g.*, Doe v. Bates, No. 5:05-CV-91-DF-CMC, 2006 WL 3813758, at *22 (E.D. Tex. Dec. 27, 2006).

85 *See, e.g.*, Doe v. Backpage.com, LLC, 817 F.3d 12, 20–22 (1st Cir. 2016).

86 *See* Sheera Frenkel, *The Storming of Capitol Hill Was Organized on Social Media*, N.Y. TIMES (Jan. 6, 2021), https://www.nytimes.com/2021/01/06/us/politics/protesters-storm-capitol-hill-building.html [https://perma.cc/6TM6-88CR].

87 1 ROBERT S. MUELLER, III, U.S. DEP'T OF JUST., REPORT ON THE INVESTIGATION INTO RUSSIAN INTERFERENCE IN THE 2016 PRESIDENTIAL ELECTION 14, 25 (2019); *see* Hunt Allcott &

more well-known instances are part of "ongoing campaigns by Russia, China and other foreign actors, including Iran, to undermine confidence in democratic institutions and influence public sentiment and government policies."[88]

For one category of online harms—human trafficking—Congress subsequently recognized that platform self-regulation was insufficient. In 2018, it passed a major carveout from Section 230, in the Fight Online Sex Trafficking Act/Stop Enabling Sex Traffickers Act, which explicitly ended platform immunity from enforcement of state or federal sex trafficking laws.[89] That legislation has been widely criticized as both failing to address sex trafficking and as having harmful unintended consequences, in part because it failed to effectively calibrate platform incentives.[90] In the other areas of harms mentioned above, however, Congress has so far declined to impose significant platform liability. Thus, Section 230 has continued to function as a broad shield from liability even as the nature of the harms has expanded well beyond anything lawmakers in the 1990s could have possibly imagined.[91]

This growth in significant harms matters in part because it raises the question of whether, as the drafters of Section 230 assumed, platforms have the right incentives to act like Good Samaritans to prevent such harms.[92] Part II will elaborate on these and other institutional and market shifts and how they might alter the central economic questions that animate liability law. For now, the main point is that the most important piece of platform liability legislation was cloaked in economic rhetoric and has not been revisited

Matthew Gentzkow, *Social Media and Fake News in the 2016 Election*, 31 J. ECON. PERSPS. 211, 212 (2017) ("[F]ake news was both widely shared and heavily tilted in favor of Donald Trump."). An empirical study of news studies distributed on Twitter documents that "[f]alsehood diffused significantly farther, faster, deeper, and more broadly than the truth." *See* Souroush Vosoughi, Deb Roy & Sinan Aral, *The Spread of True and False News Online*, 359 SCI. 1146, 1148 (2018); *see also* David M.J. Lazer et al., *The Science of Fake News*, 359 SCI. 1094, 1095 (2018) (surveying social science and computer science research); Gordon Pennycook & David G. Rand, *The Psychology of Fake News*, 25 TRENDS COGNITIVE SCI. 388, 388 (2021) (synthesizing the literature on why people share fake news).

88 Press Release, Off. of the Dir. of Nat'l Intel., Joint Statement from the ODNI, DOJ, FBI & DHS: Combating Foreign Influence in U.S. Elections (Oct. 19, 2018), https://www.dni.gov/index.php/newsroom/press-releases/press-releases-2018/3262-joint-statement-from-the-odni-doj-fbi-and-dhs-combating-foreign-influence-in-u-s-elections [https://perma.cc/QMU3-EFAW].

89 Allow States and Victims to Fight Online Sex Trafficking Act of 2017, Pub. L. No. 115-164, § 3, 132 Stat. 1253, 1253–54 (2018).

90 Kendra Albert et al., *FOSTA in Legal Context*, 52 COLUM. HUMAN RIGHTS L. REV. 1084, 1101-02 (2021) (arguing that the legislation made it more dangerous for sex workers); Danielle Keats Citron & Quinta Jurecic, Fosta's Mess, 26 Va. J.L. & Tech. 1, 13 (2023) ("FOSTA hasn't been an effective tool of redress and deterrence against sex trafficking, as the drafters hoped.").

91 *Cf.* Anupam Chander, *How Law Made Silicon Valley*, 63 EMORY L.J. 639, 653 n.58 (2014) (collecting and summarizing cases).

92 *See supra* note 71 and accompanying text.

despite massive transformations in the nature and scope of platform harms. The economic foundations of platform immunity for content moderation are thus ripe for reexamination.

B. The Legal Path to E-Commerce Immunity

In the early years of e-commerce, it appeared that Section 230 would shield platforms from liability even for harms related to product purchases. By 2009, courts had held that Section 230 barred the tort claim of a plaintiff shot by a handgun bought anonymously on Craigslist;[93] gave eBay immunity from third-party liability for fake autographed baseballs, photographs, and other sports memorabilia;[94] and shielded MySpace from a strict product liability claim in four cases filed by girls aged thirteen to fifteen who were victims of sexual assault.[95]

However, with their legal analyses focused elsewhere, none of these cases meaningfully considered what would eventually become the key legal issue in product liability suits—whether e-commerce platforms were akin to traditional brick-and-mortar "sellers."[96] Treating e-commerce platforms as sellers would put them in the same strict liability category as brick-and-mortar stores like Walmart, CVS, and Target.[97] Strict liability would allow injured parties to recover damages from a platform for selling defective products without having to meet the higher bar of establishing that the platform was negligent.[98]

The first influential case on this issue was *Inman v. Technicolor USA, Inc.*, in 2011.[99] The plaintiff had purchased vacuum tubes on eBay, shipped directly by third parties, before suffering "acute mercury poisoning."[100] The court noted that under Pennsylvania common law, a set of economic factors would need to be weighed in determining whether to classify an e-commerce

93 *See* Gibson v. Craigslist, Inc., No. 08 Civ. 7735, 2009 WL 1704355, at *1, *3 (S.D.N.Y. June 15, 2009).

94 *See* Gentry v. eBay, Inc., 121 Cal. Rptr. 2d 703, 707, 716 (Cal. Ct. App. 2002).

95 *See* Doe II v. MySpace Inc., 96 Cal. Rptr. 3d 148, 149–50 (Cal. Ct. App. 2009) (ruling against plaintiffs on the consolidated case).

96 For the leading doctrinal analysis of the legal issue of whether Amazon is a seller, see generally Janger & Twerski, *supra* note 23, arguing that Amazon is a seller. *See* Catherine M. Sharkey, *Products Liability in the Digital Age: Online Platforms as "Cheapest Cost Avoiders,"* 73 HASTINGS L.J. 1327 (2022) (collecting and summarizing cases).

97 *See, e.g.*, Margaret E. Dillaway, *The New "Web-Stream" of Commerce: Amazon and the Necessity of Strict Products Liability for Online Marketplaces*, 74 VAND. L. REV. 187, 214 (2021) (explaining the liability regime); Catherine M. Sharkey, *Holding Amazon Liable as a Seller of Defective Goods: A Convergence of Cultural and Economic Perspectives*, 115 NW. U. L. REV. ONLINE 339 (2020) (discussing strict products liability).

98 *See* Dillaway, *supra* note 96, at 194.

99 Inman v. Technicolor USA, Inc., No. 11-666, 2011 WL 5829024 (W.D. Pa. Nov. 18, 2011).

100 *Id.* at *1.

platform as a seller.[101] Most notably, that doctrinal analysis required considering whether treating eBay as a seller would provide it with the proper incentives to promote product safety.[102] However, the *Inman* court quickly dismissed that question without engaging in any economic reasoning or other policy considerations.[103] For instance, the court suggested in passing that if eBay had taken possession of the vacuum tubes it would have weighed in favor of strict liability.[104] The court did not explain why possession mattered for safety incentives or the basis for that assumption.[105] Possession was not required under Pennsylvania law and, as Part II will show, possession is not essential to a platform's economic incentives.[106] The *Inman* court simply concluded in a cursory manner that applying seller status to eBay would not promote product safety.[107]

Despite the absence of economic analysis in *Inman*, that case heavily influenced the first major decision considering whether Amazon was subject to strict liability. In *Stiner v. Amazon Inc.*, a high school student seeking a workout boost ingested a fatal amount of Hard Rhino Pure Caffeine powder purchased on Amazon.[108] The court dismissed the father's lawsuit after a lengthy quotation to *Inman*, by mechanically stating that Amazon (like eBay) never had possession of the product.[109]

On appeal, the deceased teenager's father urged the court to consider Ohio's public policy goal of incentivizing product safety, pointing out that clearly Amazon had insufficient incentives because it continued to list the product even after customer reviews had provided links to newspaper articles about deaths caused by the product.[110] The appeals court instead followed

101 *See id.* at *5 ("Is the defendant the only member of the marketing chain available to the injured plaintiff? . . . Is the defendant in a better position than the consumer to prevent the circulation of defective products?; and . . . [c]an the defendant distribute the cost of compensating for the plaintiff's injuries?").

102 *Id.*

103 *See id.* The court also found eBay to be shielded by Section 230, a discussion of which is omitted here because courts have moved away from that view. *See id.* at *7.

104 *See id.* at *6 ("Inman . . . has not alleged that eBay ever had physical possession of the products, that they were moved or stored in a facility owned by eBay, or any other facts to suggest that holding eBay responsible would incentivize safety . . . .").

105 *See id.* at *5–6.

106 *See infra* Part II.

107 *See Inman*, 2011 WL 5829024, at *5–6.

108 Stiner v. Amazon.com Inc., No. 15CV185837, 2017 WL 9751163, at *1 (Ohio Com. Pl. Sept. 20, 2017). A prior negligence case against Amazon had not considered the strict liability question or whether Amazon was a seller for purposes of liability (only for purposes of the UCC) in holding that Amazon was not negligent. *See* McDonald v. LG Elecs. USA, Inc., 219 F. Supp. 3d 533, 541–42 (D. Md. 2016) (relying on the plaintiff's admissions that the third party had sold and directly shipped the product).

109 *Stiner*, 2017 WL 9751163, at *6 (citing *Inman*, 2011 WL 5829024, at *6).

110 *See* Redacted Reply Brief of Appellant at 5–6, Stiner v. Amazon.com, Inc., 164 N.E.3d 394 (Ohio 2020) (No. 2019-0488).

Inman in erroneously using the lack of possession as evidence that holding Amazon liable would not incentivize safety.[111]

Since *Inman*, the overwhelming majority of courts have similarly held Amazon not liable for injuries caused by third-party products.[112] These cases include a French press coffeemaker that shattered and severely cut its user, potentially causing permanent disability;[113] various electronics, including a headlamp and a hoverboard, that burned down houses;[114] an insufficiently child-proof television remote control whose battery a one-year-old ingested, causing permanent esophageal damage;[115] and a daughter's gift of electrically heated socks that burned her father's feet, ultimately leading to his death.[116] These courts relied on narrow common law doctrinal analyses, mostly the influential Second Restatement of Torts section 402A, written in 1965,[117] to conclude that Amazon and eBay were by definition not sellers.[118] Even when Amazon has taken possession of the sold goods and shipped them to the consumer as part of its fulfillment services to third parties, most courts have declined to hold Amazon liable, reasoning that Amazon never held title to the goods.[119]

There is reason to think that this avoidance of policy inquiry influences the outcome. The first major case to find Amazon strictly liable was *Oberdorf v. Amazon.com Inc.*[120] Pennsylvania resident Heather Oberdorf had purchased, from a third-party merchant, a retractable collar that suddenly

111 *See* Stiner v. Amazon.com, Inc., 120 N.E.3d 885, 895 (Ohio Ct. App. 2019). The court also referred to the lack of any other court expanding the definition of supplier to hold a platform like Amazon liable. *Id.*

112 *See* Sean M. Bender, Note, *Product Liability's Amazon Problem*, 4 J.L. & TECH. TEX. 95, 116 (2021) (reviewing "the 22 lawsuits that have reached some form of adjudicative outcome" and concluding that plaintiffs had "an especially dismal track record").

113 *See* Eberhart v. Amazon.com, Inc., 325 F. Supp. 3d 393, 395 (S.D.N.Y. 2018).

114 *See, e.g.*, Erie Ins. Co. v. Amazon.com, Inc., 925 F.3d 135, 142 (4th Cir. 2019); Allstate N.J. Ins. Co. v. Amazon.com, Inc., No. 17-2738, 2018 WL 3546197, at *10 (D.N.J. July 24, 2018); Fox v. Amazon.com, Inc., 930 F.3d 415, 425 (6th Cir. 2019); Great N. Ins. Co. v. Amazon.com, Inc., 524 F. Supp. 3d 852, 856–58 (N.D. Ill. 2021) (considering a fire caused by a hoverboard battery).

115 *See* Amazon.com, Inc. v. McMillan, 625 S.W.3d 101, 111 (Tex. 2021).

116 *See* Scott v. Glob. Vasion, Inc., No. 20-cv-1287, 2021 WL 3159875, at *1 (S.D. Ill. Apr. 29, 2021).

117 RESTATEMENT (SECOND) OF TORTS § 402A (AM. L. INST. 1965).

118 *See, e.g.*, *McMillan*, 625 S.W.3d at 107 (concluding that the common law and Second Restatement of Torts definitions of seller were dispositive in interpreting the appropriate Texas product liability statute).

119 *See, e.g.*, Eberhart v. Amazon.com, Inc., 325 F. Supp. 3d 393, 396, 398 (S.D.N.Y. 2018) (finding Amazon not liable despite handling storage and shipping); *McMillan*, 625 S.W.3d at 111 (determining that the lack of title removed Amazon from strict liability).

120 Oberdorf v. Amazon.com Inc., 930 F.3d 136, 153 (3d Cir.), *vacated and reh'g en banc granted*, 936 F.3d 182 (3d Cir. 2019), *certifying questions to* Pa. Sup. Ct., 818 F. App'x 138 (3d Cir. 2020) (en banc).

recoiled when her dog lunged, permanently blinding her in one eye.[121] Whereas the *Inman* court had dismissed the policy case for strict liability in a few lines,[122] the *Oberdorf* court devoted several pages to that discussion.[123] On the crucial topic of safety incentives, rather than mistakenly focusing on the absence of possession, the court made the more economically sound decision to emphasize the ability to prevent harm, observing, "Amazon is fully capable, in its sole discretion, of removing unsafe products from its website."[124] The court concluded that to incentivize safety Amazon should be considered a "seller" and held strictly liable.[125] The few other cases that have found Amazon liable have each engaged in related economic policy analyses.[126]

Granted, even when they do engage in an economic analysis judges do so only in passing, relying largely on intuition about incentives without, at least explicitly, leveraging the large body of relevant economic research.[127] Nonetheless, the absence in so many cases of any attempt to engage with economic issues is striking because economic interests were central to product liability law's updates over the course of the twentieth century—updates that were the direct result of market transformations.[128] Perhaps that failure to engage with economics in adjudicating e-commerce platform liability can be explained by the lack of on-point research available at the time. Yet it is problematic to continue to apply doctrinal tests that resulted from a decades-old doctrinal revolution fueled by economic analysis of then-transformed markets without considering how that older economic reasoning

121 *Id.* at 142.

122 *See* Inman v. Technicolor USA, Inc., No. 11-666, 2011 WL 5829024, at *5 (W.D. Pa. Nov. 18, 2011).

123 *Oberdorf*, 930 F.3d at 144–48.

124 *Id.* at 146. On the decades of economics research supporting the court's use of capability rather than possession to analyze safety incentives, see *infra* Part II.

125 *Oberdorf*, 930 F.3d at 153.

126 *See, e.g.*, Bolger v. Amazon.com, LLC, 53 Cal. App. 5th 431, 438, 453–55, 461–62 (2020) (considering several factors that are core to the economic analysis of platform liability, including which party is in the best position to monitor for harmful products, the ability to use the price it charges to merchants to adjust for liability risks, and the reality that Amazon is often the only party "reasonably available to the injured plaintiff," *id.* at 454); State Farm Fire & Cas. Co. v. Amazon.com, Inc., 390 F. Supp. 3d 964, 968, 974 (W.D. Wis. 2019) (noting "[t]he essential principles underlying the doctrine are that the manufacturer can adjust the price of the product to reflect the risks posed by the product and that such cost-shifting will provide the manufacturer an incentive to improve safety," *id.* at 968, and concluding that Amazon could be found strictly liable under Wisconsin law, *id.* at 974); Loomis v. Amazon.com, LLC, 277 Cal. Rptr. 3d 769, 776 (Cal. Ct. App. 2021) ("California courts must consider the policies underlying the doctrine to determine whether to extend strict liability in a particular circumstance."); *infra* Part II (summarizing the economic factors that are important for platform liability); Catherine M. Sharkey, *The Irresistible Simplicity of Preventing Harm*, 16 J. TORT L. 143, 143 (2023) (analyzing *Loomis*).

127 *See, e.g.*, *Oberdorf*, 930 F.3d at 146 (offering only Amazon's contract language with third-party vendors as evidence that strict liability would produce safety incentives).

128 *See supra* note 10 and accompanying text.

might need to be updated for once-again transformed markets. Ignoring economics is particularly concerning because failing to reexamine the underlying economics has meant reaching an outcome today (platform immunity) opposite to the previous outcome (brick-and-mortar retailer strict liability).

Putting aside these historical and doctrinal inconsistencies, insufficient judicial and legislative attention to economics is surprising given the analyses needed to effectively design product liability laws. Those analyses include inquiry into the relative information and bargaining power of businesses and consumers, manufacturers' ability to spread costs by charging more for their products, and whether internalizing the cost of injury would incentivize manufacturers to invest in preventing harms.[129] These issues are inherently economic.[130]

One reason for the absence of economic considerations in these immunity decisions is that Amazon has worked to prevent courts from engaging in policy analyses. Amazon has adopted a "strategy of removing nearly every products liability case to federal court . . . and arguably stunted the development of state law."[131] Federal judges try to avoid engaging in policy analyses that might change state law, as they prefer to leave such changes to state courts.[132] Consequently, most cases finding Amazon not liable are in federal courts.[133] Other online retailers, such as Walmart.com, have avoided liability in opinions referring to a "growing consensus . . . that product liability claims against defendants like WalMart.com that create online marketplace platforms for products sold by third-party sellers to consumers cannot be sustained."[134] To the extent there is a consensus, it results from judges' noneconomic reasoning rejecting platforms as "sellers" and Amazon's procedural engineering rather than rigorous judicial determination of the appropriate level of liability incentives.

129 *See* Priest, *supra* note 10, at 520.

130 *See infra* Part II; *see also* Steven Shavell, *Strict Liability Versus Negligence*, 9 J. LEGAL STUD. 1, 24–25 (1980) (viewing strict liability through the lens of achieving efficient market production).

131 Erie Ins. Co. v. Amazon.com, Inc., 925 F.3d 135, 145 (4th Cir. 2019).

132 *See, e.g.*, Great N. Ins. Co. v. Amazon.com, Inc., 524 F. Supp. 3d 852, 858 (N.D. Ill. 2021) (noting the well-established norm of federal courts predicting how the state court would rule rather than changing that law and declining to hold Amazon strictly liable).

133 *See supra* notes 112–15 (summarizing cases ruling for Amazon). Of course, when state judges receive the opportunity to consider economic factors in applying liability to e-commerce platforms, there is no guarantee they will do so, and some states' statutes may not allow such leeway.

134 Ind. Farm Bureau Ins. v. Shenzhen Anet Tech. Co., No. 19-cv-00168, 2020 WL 7711346, at *2 (S.D. Ind. Dec. 29, 2020).

C. The Legal Path to Limited Intellectual Property Liability

Although tech platforms have successfully avoided liability for content moderation and product liability, Section 230 explicitly declined to provide immunity for intellectual property lawsuits.[135] That carveout was significant because the internet early on created the alluring possibility of anyone accessing free copies of music, films, and video games online. That utopian prospect for consumers terrified those holding the property rights to content. Movie studios, record labels, and other rights holders thus quickly sought "to prevent a structural sea change that would enable their works to be consistently pirated, and they demanded legal redress as the deck tilted beneath them."[136]

Early copyright cases' doctrinal tests loosely mapped those of the early *Cubby* and *Stratton Oakmont* defamation cases in that the less involved a platform was with its content the more likely it was to avoid liability.[137] In *Sega Enterprises v. Maphia*, for instance, an electronic bulletin board allowed users to download popular copyrighted video games such as *Sonic the Hedgehog*, *Mortal Kombat*, and *N.B.A. Jam*.[138] In holding the platform liable, the court noted that the company knew about and indeed encouraged the copying of video games as part of its sales pitch.[139] In *Playboy Enterprises v. Russ Hardenburgh, Inc.*, the fact that the platform's employees screened and organized content proved influential in finding an electronic bulletin board liable for hosting digital copies of *Playboy* magazine's adult photos.[140]

Other courts, however, declined to hold platforms liable when they were less involved in the content they hosted.[141] In *Religious Technology Center v. Netcom*, a user criticized the Church of Scientology online while posting portions of writings of the church's founder, L. Ron Hubbard.[142] Unlike Prodigy when it was held liable for defamation,[143] the platform on which these Scientology texts were posted did not screen or monitor its messages.[144] The court explained that holding the platform liable despite a

135 *See* 47 U.S.C. § 230(e)(2) (2018).

136 Zittrain, *supra* note 32, at 263; *see, e.g.*, Jonathan Zittrain, *Internet Points of Control*, 44 B.C. L. REV. 653, 683 (2003).

137 *See* Zittrain, *supra* note 32, at 265.

138 Sega Enters. v. Maphia, 948 F. Supp. 923, 929 (N.D. Cal. 1996).

139 *Id.* at 928, 933.

140 Playboy Enters. v. Russ Hardenburgh, Inc., 982 F. Supp. 503, 513 (N.D. Ohio 1997).

141 On the importance of knowledge and ability to act, see, e.g., Marobie-FL, Inc. v. Nat'l Ass'n of Fire Equip. Distribs., 983 F. Supp. 1167, 1178–79 (N.D. Ill. 1997) (holding that a web hosting company could not lose on summary judgment because the company's knowledge and ability to control the website's contents were disputed issues of material fact).

142 Religious Tech. Ctr. v. Netcom On-Line Comm'ns. Servs., Inc., 907 F. Supp. 1361, 1365 (N.D. Cal. 1995).

143 *See supra* text accompanying notes 59–64.

144 *Religious Tech. Ctr.*, 907 F. Supp. at 1372.

lack of knowledge "would also result in liability for every single . . . server in the worldwide link of computers transmitting [the third-party subscriber's] message to every other computer."[145] This reasoning echoes the policy concerns about excessively burdening online platforms seen in the *Cubby* decision and Section 230.[146]

Like it had for defamation, Congress soon intervened through the 1998 Digital Millennium Copyright Act (DMCA).[147] Among the Act's many design features, its "safe harbor" provision shields platforms like YouTube from liability if the platform lacks knowledge of the infringement and quickly removes any material once notified of it.[148] Thus, rather than leaving incentives to free markets as did Section 230,[149] the DMCA sought to provide incentives for the platform to block user content. Courts later held that YouTube and other platforms that were willfully blind, meaning they were "aware of a high probability of the fact in dispute and consciously avoided confirming that fact," would also be considered as having knowledge.[150]

Whether or not it hit the optimal level of liability, the DMCA's framework has pushed platforms to significantly crack down on copyright infringements.[151] For instance, YouTube alone, which is owned by Google, took over 1.5 billion copyright actions in 2022, the vast majority of which resulted in the removal of content.[152] It deploys automated tools to identify copyrighted sound, image, and video materials and automatically processes content takedown processes.[153] Over 99% of the copyright actions are automated and involve movie studios and entities with large copyright

145 *Id.* at 1369.

146 *See supra* Part I.A. (discussing the concerns about burden).

147 Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified as amended in scattered sections of 17 U.S.C.).

148 *See* 17 U.S.C. § 512(c) (2018). Less relevant to the current discussion, passive intermediaries, such as Internet Service Providers (ISPs), could largely avoid liability if they terminated their services to repeat infringers of copyright laws. *Id.* § 512(a). However, if the platform knew of the copyright violation—or if it was apparent—then it could be held liable. *Id.* § 512(c).

149 *See supra* Section I.A.

150 Viacom Int'l, Inc. v. YouTube, Inc., 676 F.3d 19, 35 (2d Cir. 2012) (quoting United States v. Aina-Marshall, 336 F.3d 167, 170 (2d Cir. 2003)) (finding that the DMCA did not abrogate the common law doctrine of willful blindness).

151 *See* Daniel Seng, *The State of the Discordant Union: An Empirical Analysis of DMCA Takedown Notices*, 18 VA. J.L. & TECH. 369, 411 (2014) (providing an empirical study of DMCA takedowns). Many commentators see platforms' responses to this regime as going too far by taking down even noninfringing content subject to complaints in order to qualify for the DMCA's safe harbor. *See, e.g.*, John Tehranian, *The New ©ensorship*, 101 IOWA L. REV. 245, 273–76 (2015).

152 *See* YOUTUBE COPYRIGHT TRANSPARENCY REPORT H1, at 5, 8 (2022) [hereinafter YOUTUBE H1] (January through June); YOUTUBE COPYRIGHT TRANSPARENCY REPORT H2, at 5, 8 (2022) [hereinafter YOUTUBE H2] (July through December).

153 *See* YOUTUBE H1, *supra* note 150, at 12; YOUTUBE H2, *supra* note 151, at 12.

holdings, such as "today's hit song, scenes from a new movie or the latest viral video."[154]

In terms of the economic reasoning behind the Section 230 carveout for intellectual property, the official legislative report summarized lawmakers' rationale by stating that by including the safe-harbor provision in the DCMA, the act "ensures that the efficiency of the Internet will continue to improve and that the variety and quality of services on the Internet will continue to expand."[155] It explicitly mentioned wanting to encourage the development of Yahoo and other "information location tools."[156] Thus, Congress framed the DMCA as primarily motivated by the economic goals of incentivizing harm prevention and promoting the tech industry's growth.

What might explain the more nuanced liability regime in copyright? One big difference is the political clout held by the victims.[157] The DMCA debates were strongly influenced by a powerful industry in support of liability—Hollywood and its allies, who had close ties in the White House and Congress.[158] In contrast, for Section 230, there was no strong industry group to counterbalance the emerging technology sector's "army of lobbyists" arguing for immunity.[159]

It is also instructive that copyright is the only one of the three main areas of platform liability that was informed by an economic study of what would be in the public's best interest. Beginning in 1993, a bipartisan federal working group held public hearings in Chicago, Los Angeles, and Washington, D.C., and received over 1,500 pages of comments from over 150 organizations and individuals,[160] including "the academic, research, library and legal communities" and the Council of Economic Advisors.[161] After two years, the working group produced a 267-page white paper, which includes numerous citations to legal scholarship, whose recommendations Congress ultimately followed.[162] That report mentions efficiency seven

154 *See* YOUTUBE H1, *supra* note 150, at 4, 12; YOUTUBE H2, *supra* note 151, at 4, 12.

155 S. REP. NO. 105-190, at 8 (1998).

156 *Id.* at 49 (mentioning a desire to "promote the development of information location tools").

157 Additionally, the harms to Hollywood and its allies were arguably more "capable of ready economic accounting" than those to victims of speech-related harms. Zittrain, *supra* note 32, at 263. This distinction is not wholly satisfying, however, because courts set damages for difficult-to-measure harms, such as defamation and loss of life. *See infra* Section III.B.

158 *See* Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised*, 14 BERKELEY TECH. L.J. 519, 533 (1999) (summarizing the "power politics" surrounding the DMCA).

159 Charles D. Tobin, *Indecent Attacks on the Communications Decency Act?*, 41 LITIG. 8, 8 (2015). The exception is for intellectual property, which was exempted from Section 230 immunity. *See* 47 U.S.C. § 230(e)(2) (2018).

160 *See* INFO. INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 3–4 (1995).

161 *Id.* at 5, app. 3.

162 *See id.*; S. REP. NO. 105-190, at 3 (1998).

times, innovation eleven times, and economics forty-two times.[163] To the extent that the economic insights available to judges, regulators, and lawmakers influence the path of the law, the project of developing those economic foundations is of utmost importance.[164]

II. THE ECONOMIC FOUNDATIONS OF PLATFORM LIABILITY

Should we continue to rely on a liability system that holds only third-party bad actors accountable for the harms suffered by victims? Or should we extend liability also to the platforms when they might have prevented those harms? And if we do indeed hold platforms liable, what should the damages be? To answer these questions, it is necessary to analyze the platforms' business models, network participants, and market incentives.

A. Business Model Fundamentals

The modern economy is increasingly dominated by technology platforms.[165] Understanding that business model, and how it monetizes bad actors, is crucial for designing platform liability.

Consider the simple two-sided platform in Figure 1. On one side of the platform are the users, and on the other side are the firms. The users and the firms, hereinafter collectively referred to as "platform participants," derive benefits from joining the platform.[166] The users may enjoy interacting with each other, such as through sharing photos with family and friends on social media. Users may also get benefits from the firms on the other side of the platform, perhaps by purchasing a toaster, hiring a dog walker, or streaming sponsored content. The firms may be businesses, political campaigns, or other organizations whose benefits include the opportunity to advertise, access user data, or sell directly to users.

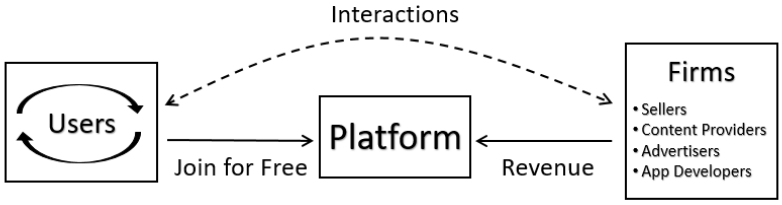
163 *See* INFO. INFRASTRUCTURE TASK FORCE, *supra* note 159.

164 For further evidence that this is the case, see *infra* Section III.A.

165 *Cf.* PAUL BELLEFLAMME & MARTIN PEITZ, THE ECONOMICS OF PLATFORMS: CONCEPTS AND STRATEGY 29 (2021) ("A platform is an entity that brings together economic agents and actively manages network effects between them." (emphasis omitted)); *see also* Marc Rysman, *The Economics of Two-Sided Markets*, J. ECON. PERSPS., Summer 2009, at 125, 125 ("[A] two-sided market is one in which 1) two sets of agents interact through an intermediary or platform, and 2) the decisions of each set of agents affects the outcomes of the other set of agents, typically through an externality.").

166 *See* BELLEFLAMME & PEITZ, *supra* note 164, at 18.

FIGURE 1: TWO-SIDED PLATFORM



Platform participants may enjoy both direct and indirect benefits when others join the platform. Facebook users, for example, get more value from using the platform when more of their friends and family use the platform. These "network effects"[167] are familiar from the adoption of new technologies such as the telephone. The benefits are magnified as more users on one side of the platform attract more firms, such as Facebook advertisers, on the other side.[168]

Platforms can potentially generate revenue from users, firms, or both. In practice, many two-sided platforms generate most of their revenue from one side of the market while charging reduced prices to the other side.[169] For example, social media platforms like Facebook often allow users to join the platform for free and charge advertisers and app developers for access to the users.[170] Retail platforms, including Amazon, allow users to search for products for free while earning a commission on the sales of third-party sellers.[171] This strategy of offering free user access makes good business sense, as it stimulates user participation, thereby making the platform more attractive to third-party sellers, advertisers, and content providers.

Bad actors proliferate online by exploiting this business model. Hereinafter, by "bad actor" we mean a platform participant (a user or a firm in the diagram above) that causes harm to others. In some settings, the bad actors are users. Examples include drug dealers looking for buyers, jilted lovers posting revenge porn, and foreign governments seeking to influence our elections. Bad actors contribute to platforms' revenues for two reasons. First, even bad actors have eyeballs and buy products. As users they thereby increase the size of the platform's user base and thus the price the platform can charge to advertisers. Second, bad actors can generate indirect revenue

167 *Id.* at 11.

168 *See* CARL SHAPIRO & HAL R. VARIAN, INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY 179–182 (1999) (explaining the positive feedback structure created by user demand in the information economy).

169 *See* Jean Tirole, *Market Failures and Public Policy*, 105 AM. ECON. REV. 1665, 1675 (2015) ("Like ordinary businesses, [platforms] choose a lower burden for the side which has a relatively elastic demand . . . .").

170 *See* BELLEFLAMME & PEITZ, *supra* note 164, at 36; Vineet Kumar, *Making "Freemium" Work: Many Start-ups Fail to Recognize the Challenges of This Popular Business Model*, HARV. BUS. REV., May 2014, at 27, 27.

171 *See* Janger & Twerski, *supra* note 23, at 262–64.

for the platform by stimulating general user engagement, such as by posting provocative conspiracy theories or viral deepfake sex videos.[172]

In other settings, the bad actors are firms. Examples include fraudulent paid advertising[173] and sellers of illegal or defective products.[174] The platform generates direct revenue from these bad actors. Although we do not focus on the platform's bad acts, the platform may play more than a passive role, such as by amplifying harmful content. Importantly, even if the platform is not directly responsible, the platform serves as a conduit for the harms and may reap financial benefits.

B. Key Factors for Platform Liability

Should platforms be held liable for the harms caused by bad actors? As we will see, the answer hinges on the difficulties in holding bad actors directly liable, the nature of the victims, the victims' understanding of the platform's risks, and the platform's ability to prevent or mitigate the harms. Applying economics systematically rather than superficially reveals that many common assumptions by judges, lawmakers, and legal scholars are unfounded. In many—but not all—settings, platforms have insufficient incentives to protect victims from bad actors.

1. The Bad Actor Problem

In an ideal world, harms would be prevented by solely holding bad actors directly liable.[175] The economic rationale is that the bad actors, as the primary injurers, are best positioned to prevent harms at the lowest cost.[176] For instance, it costs the malicious user who is considering uploading a deepfake sex video nothing to refrain from uploading malicious content. In contrast, a social media platform must invest in technologies or pay employees to detect and remove the content. Thus, in theory, the malicious

172 For in-depth examples, see *infra* Section III.B.

173 *See* Press Release, Fed. Trade Comm'n, FTC Issues Ords. to Social Media & Video Streaming Platforms Regarding Efforts to Address Surge in Advert. for Fraudulent Prods. & Scams (Mar. 16, 2023), https://www.ftc.gov/news-events/news/press-releases/2023/03/ftc-issues-orders-social-media-video-streaming-platforms-regarding-efforts-address-surge-advertising [https://perma.cc/HHL4-NSJF] ("In 2022 alone, consumers reported losing more than $1.2 billion to fraud that started on social media, more than any other contact method . . . .").

174 *See infra* Section III.B for examples including Pornhub and Amazon.

175 *See* Reinier H. Kraakman, *Gatekeepers: The Anatomy of a Third-Party Enforcement Strategy*, 2 J.L. ECON. & ORG. 53, 56 (1986) ("Direct deterrence is the normal strategy for enforcing legal norms. . . . [I]f legal sanctions could be increased costlessly—and if potential wrongdoers always responded to them—virtually all misconduct might be deterred cheaply and directly.").

176 If one party can avoid the harm more cheaply than the other, then a rule that places liability on that party is efficient. *See* GUIDO CALABRESI, THE COST OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS 26 (1970); Guido Calabresi & Jon T. Hirschoff, *Toward a Test for Strict Liability in Torts*, 81 YALE L.J. 1055, 1060 (1972).

user is the proverbial "least-cost avoider."[177] That avoidance would happen if the malicious user responded to being forced to pay for the harms that they inflicted on others by refraining from harmful activities.[178] By this logic, the bad actors themselves should bear the liability for the harm, not the platforms.

The logic that bad actors should be held responsible for harms they cause makes sense in many traditional settings but is less relevant for digital platforms. In theory, while bad actors on digital platforms are often the least-cost avoiders, they can often evade liability and lack the resources to pay for the harms that they cause.[179] In many instances, it is hard to identify the party responsible for the harm,[180] such as in the *Stratton Oakmont v. Prodigy* case in which an anonymous user posted defamatory comments.[181] Even if the bad actor is identified, it may be impossible to hold the bad actor accountable. Bad actors may be beyond the reach of U.S. laws or may lack the financial resources to pay in full for the harms they cause.[182] Since "judgment-proof" actors do not internalize the harms caused by their actions, they will be under-deterred from engaging in harmful activities and will take too few precautions to avoid accidents.[183]

Can we rely on platforms to take appropriate steps to block bad actors and prevent (or mitigate) harms to victims? An optimist may argue that the answer is "yes," as have many judges and lawmakers, such as those that voted for Section 230.[184] That view at first glance seems sensible because the profitability of the platform ecosystem hinges on the broad participation of the users and the firms.[185] The risk of harm reduces the users' willingness to participate on the platform at all, or their intensity of platform use. Lower user engagement would result in less revenue for the platform.[186] From this perspective, infiltration by bad actors can compromise a platform's very

177 *Cf.* Calabresi & Hirschoff, *supra* note 175, at 1060. Calabresi and Hirschoff referred to this as the "cheapest cost avoider." *Id.* The phrase "least-cost avoider" is used by others. *See* STEVEN SHAVELL, THE ECONOMIC ANALYSIS OF ACCIDENT LAW 17 (1987).

178 *See* Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169, 208–09 (1968); George J. Stigler, *The Optimum Enforcement of Laws*, 78 J. POL. ECON. 526, 526–27 (1970).

179 *See* S. Shavell, *The Judgment Proof Problem*, 6 INT'L REV. L. & ECON. 45, 45 (1986).

180 *See* Kraakman, *supra* note 174, at 57.

181 *See* Stratton Oakmont, Inc. v. Prodigy Servs. Co., No. 31063, 1995 WL 323710, at *1 (N.Y. Sup. Ct. May 24, 1995).

182 For example, in the Cambridge Analytica scandal, the charges against the Russian entities were subsequently dropped because, in the words of the court, the defendants had "no exposure to meaningful punishment in the event of a conviction." *See* Motion to Dismiss Concord Defendants at 2, United States v. Concord Mgmt. & Consulting LLC, No. 18-CR-32, 2020 WL 1931539 (D.D.C. Mar. 16, 2020).

183 *See* Shavell, *supra* note 178, at 45.

184 *See supra* Part I.

185 *See supra* Section II.A.

186 *See supra* Section II.A.

existence. However, as explained above, platforms often enjoy tangible economic benefits from the bad actors.[187] In this sense, the platform and the bad actors are in a symbiotic relationship or partners in crime—sometimes literally so.[188]

Thus, based on platforms' fundamental business model, there is ample reason to doubt that the platforms' private interests are aligned with the best interests of society. For this reason, when bad actors are judgment proof or undeterred by direct liability, platform liability plays an instrumental role in reducing social harm.

2. The Platform's Incentives to Protect Bystanders

In many settings, a victim's likelihood of suffering harm does not depend on being a platform participant. When a terrorist organization coordinates a deadly attack on social media, aided by algorithms that match extremist propaganda with more easily radicalized youths, the victims could not have avoided that harm simply by staying off social media.[189] When a deepfake video of a celebrity engaging in explicit sexual acts goes viral on social media, as happened to Taylor Swift,[190] the celebrity is harmed regardless of whether they use social media themselves. Hereinafter, we will refer to these victims as "involuntary bystanders."

The foundation for platform liability is strongest when the victims are involuntary bystanders. When a victim's likelihood of suffering harm does not depend on being a platform participant, the harms that the victim suffers reflect a *negative externality*.[191] When negative externalities are present, the market has insufficient incentives to take precautions to avoid the social harm. To take a classic example, without regulation a polluting factory typically has little financial incentive to invest in expensive precautions to limit the environmental damage it causes.[192] The presence of negative externalities is a primary rationale for government intervention in markets.[193]

187 *See supra* Section II.A.

188 For instance, copyright violations are punishable by up to five years in prison for the first offense. 17 U.S.C. § 1204(a)(1) (2018).

189 *See* Twitter, Inc. v. Taamneh, 143 S. Ct. 1206 (2023); Gonzalez v. Google LLC, 143 S. Ct. 1191 (2023).

190 Contreras, *supra* note 2.

191 *See* N. GREGORY MANKIW, PRINCIPLES OF ECONOMICS 196 (7th ed. 2015) ("An externality arises when a person engages in an activity that influences the well-being of a bystander but neither pays nor receives compensation for that effect.").

192 *See id.*

193 Solutions to the problem of externalities include taxes and regulations including tradeable pollution permits. *See* MANKIW, *supra* note 190, at 203. Government intervention is unnecessary if the parties can costlessly bargain with each other. *See generally* R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960). If there are transaction costs or impediments to bargaining, then the problems remain. *See* MANKIW, *supra* note 190, at 211.

Proponents of platform immunity argue that platforms already have market incentives to protect society from harm by blocking harmful content and placing contractual limitations on platform participants.[194] The economic logic of negative externalities clearly contradicts this view. Platforms are for-profit businesses and can only be expected to take steps to avoid harming others if it serves their financial interest. Platforms may have financial interests in preserving the well-being of users.[195] But platforms lack sufficient market-based incentives to protect involuntary bystanders. Astonishingly, laws shielding platforms from liability—both Section 230 and state product liability laws—fail to explicitly consider whether harmed parties are involuntary bystanders.

3. The Platform's Incentives to Protect Participants

In contrast to the case when victims are involuntary bystanders, the platform has a stronger incentive to improve safety when the victims are voluntary platform participants. Participant-victims may also be able to avoid or mitigate the harm by not joining the platform at all or by modifying their use of the platform. Since the platform business model relies on user engagement and participation, the platform has an economic incentive to take safety steps that might increase the user base and the level of engagement.[196] Additionally, if users are willing to pay a higher price for safety, the platform has an economic incentive to make the platform safer. Thus, when victims are sophisticated users, market forces can create incentives for the platform to monitor platform activity and remove or constrain the bad actors.

The logic that platforms have an incentive to protect users evokes free-market arguments made in the context of product liability. In an influential article that platforms have repeatedly cited in court to argue against liability,[197] Professors Mitchell Polinsky and Steven Shavell challenged the common view that product liability induces sellers to invest in product

194 *See, e.g.*, *supra* Section I.A. (summarizing lawmakers' assumptions in passing Section 230).

195 Advertisers do, for instance, sometimes withdraw from platforms that host controversial content. *See, e.g.*, Ryan Mac & Kate Conger, *X May Lose Up to $75 Million in Revenue as More Advertisers Pull Out*, N.Y. TIMES (Nov. 27, 2023), https://www.nytimes.com/2023/11/24/business/x-elon-musk-advertisers.html [https://perma.cc/YD2T-2HJQ] (documenting Twitter's loss of advertising revenue after Elon Musk posted an antisemitic conspiracy theory).

196 Platform participants have an incentive to exercise caution to avoid harms, too.

197 *See, e.g.*, Merit Brief of Defendants-Appellees at 36, Stiner v. Amazon.com, Inc., 164 N.E.3d 394 (Ohio 2020) ("Product liability has had no noticeable impact on accident rates." (quoting A. Mitchell Polinsky & Steven Shavell, *The Uneasy Case for Product Liability*, 123 HARV. L. REV. 1437, 1455 (2010)); Supplemental *En Banc* Brief for Appellee at 9 n.2, Oberdorf v. Amazon.com, 818 F. App'x 138 (3d Cir. 2020) (en banc) (quoting Polinsky & Shavell, *supra*).

safety.[198] They pointed out that firms would be highly motivated to improve product safety even absent product liability, as buyers are willing to pay a premium for safer products.[199] Polinsky and Shavell pointed out that if buyers themselves bear the full cost of future accidents they will shy away from dangerous products.[200] Given these market forces and the oversight of government watchdogs, such as the FDA, the incremental benefit from holding sellers liable is likely negligible.[201] Furthermore, the litigation costs associated with products liability have the adverse effect of chilling economic activity.[202] Thus, according to Polinsky and Shavell, the basis for products liability is weak.

Polinsky and Shavell's free-market logic may apply in idealized market settings—namely in mature industries with commonly used products, sophisticated consumers, and transparent business practices.[203] And at first glance, it may appear that their basic theory also suggests that the platform will invest in safety if doing so raises participants' willingness to pay by more than the costs of that safety investment. This logic could even hold with social media platforms that are free for users, if the advertisers are

198 *See* Polinsky & Shavell, *supra* note 196, at 1438.

199 *Id.* at 1443–50.

200 *Id.* at 1459–61.

201 *See id.* at 1450–53, 1469–70 (discussing litigation costs); *id.* at 1470–71 (discussing price distortions and noting that "[w]e discuss here an indirect cost of product liability, that it discourages socially beneficial consumption," *id.* at 1470). Empirical evidence on the effects of products liability on product safety is scant. *See* Mark A. Geistfeld, *Products Liability*, *in* 1 TORT LAW AND ECONOMICS 287, 301–04 (Michael Faure ed., 2d ed. 2009) ("The relationship between seller liability and product risk is hard to identify empirically." *Id.* at 301.). Professor George Priest, in a well-known and influential study that spanned many industries, did not find any connection between the increased volume of product liability litigation and accident rates. *See* George L. Priest, *Products Liability Law and the Accident Rate*, *in* LIABILITY: PERSPECTIVES AND POLICY 184, 193–94 (Robert E. Litan & Clifford Winston eds., 1988). Smaller-scale studies of general aviation aircraft fatalities, automobile safety, and childhood vaccines have failed to show a discernable association. See Polinsky & Shavell, *supra* note 196, at 1455, 1457, for a general discussion which draws from THE LIABILITY MAZE: THE IMPACT OF LIABILITY LAW ON SAFETY AND INNOVATION (Peter W. Huber & Robert E. Litan eds., 1991) [hereinafter THE LIABILITY MAZE]. That book includes chapters on general aviation (Andrew Craig and Robert Martin), *id.* at 456–77, motor vehicles (John Graham), *id.* at 120–190, and childhood vaccines (W. Kip Viscusi and Michael J. Moore), *id.* at 81–119. Professors Kessler and Rubinfeld note, however, that this line of research is at best "suggestive, since many other determinants of the accident rate (such as regulatory policy) may have been changing contemporaneously with aggregate trends in products liability pressure." Daniel P. Kessler & Daniel L. Rubinfeld, *Empirical Study of the Civil Justice System*, *in* 1 HANDBOOK OF LAW AND ECONOMICS 345, 363 (A. Mitchell Polinsky & Steven Shavell eds., 2007).

202 *See* Torres v. Goodyear Tire & Rubber Co., 867 F.2d 1234, 1238–39, 1239 n.4 (9th Cir. 1989) (discussing the importance of litigation costs and summarizing the literature that has measured the impact).

203 *See* Polinsky & Shavell, *supra* note 196, at 1472–76. Polinsky and Shavell point out that "market forces and regulation are likely to be less effective in promoting safety for products that are not widely sold than for products that are widely sold." *Id.* at 1476.

willing to pay enough for the additional safety.[204] There is thus the prospect of a mutually advantageous bargain between the users and the platform, with the platform making more money and users gaining greater safety.[205] By this logic, market-based incentives would suffice to ensure platform safety.

Upon closer examination, however, the relevance of Polinsky and Shavell's theory to platforms in the digital economy is limited. First, the platform economy lacks a strong regulatory agency that enforces safety standards.[206] Second, as discussed above, many harms have no relationship to whether someone is a platform participant, causing negative externalities that eliminate the incentive structure upon which Polinsky and Shavell's core logic relies.[207] Finally, the following sections demonstrate that imperfect information and cognitive biases may weaken platform incentives to protect even voluntary participants.

a. Imperfect Information

The platform's incentives to protect participants will be distorted if the participants are not well informed about the risks of using the platform. In the free-market scenario outlined above, the market mechanism gave the platform the incentive to identify and screen out the bad actors if more people would then join the platform or users would pay a premium for the extra safety.[208] Those market responses, however, assume that current and prospective users had a good understanding of the platform's safety. If people have insufficient information about safety, however, the platform is not rewarded in the same way for its safety investments. Consequently, under conditions of insufficient information, those free-market arguments for platform immunity do not apply.

Research suggests that platforms' complex and hidden business practices leave users with insufficient information about the risks that they

204 To see why, suppose that if the platform keeps the membership price fixed at $0 per user and the safety investments add a million new users who prioritize safety. If the advertising revenue from the additional million users is higher than the cost of improved safety, the platform will be more profitable after the safety. *Cf. supra* Section II.A (outlining platforms' business model).

205 The insight that private bargaining can solve incentive problems follows from Coase, *supra* note 192.

206 *See* Rory Van Loo, *The Missing Regulatory State: Monitoring Businesses in an Age of Surveillance*, 72 VAND. L. REV. 1563, 1563 (2019) ("An irony of the information age is that the companies responsible for the most extensive surveillance of individuals in history—large platforms such as Amazon, Facebook, and Google—have themselves remained unusually shielded from being monitored by government regulators.").

207 *See* Polinsky & Shavell, *supra* note 196, at 1490–91 (distinguishing between cases where victims are customers to cases where victims are strangers).

208 The extent to which people are willing to pay for privacy has been subject to much study, and the results are inconclusive. *See* Alessandro Acquisti, Leslie K. John & George Loewenstein, *What Is Privacy Worth?*, 42 J. LEGAL STUD. 249, 257 (2013).

face when using social media or buying products and services online.[209] A consumer cannot necessarily know, for instance, that a retractable dog leash might snap and blind the dog walker, because online reviews and peer-to-peer information sharing are inaccurate and subject to manipulation.[210] Part of the problem is simply that personal data is central to the platform business model,[211] yet "individuals rarely have clear knowledge of what information other people, firms, and governments have about them or how that information is used and with what consequences."[212] In the words of whistleblower Frances Haugen, "Facebook became a $1 trillion company by paying for its profits with our safety, including the safety of our children," and "almost no one outside of Facebook knows what happens inside Facebook." [213]

The problem of the underprovision of safety is particularly pernicious when users systematically underestimate the risks of platform use. In the products liability context, economists have pointed out that consumers who underestimate the risks will be less willing to pay a premium for safer products and will consume too much.[214] These consumers will also decline to purchase expensive insurance policies and extended manufacturer warranties. Problems also arise when consumers are sophisticated and have unbiased beliefs but cannot directly observe the safety of the products that they purchase. With asymmetric information, absent liability, manufacturers will succumb to moral hazards and shirk on their duties to consumers.[215] The insights of the economics literature on products liability are relevant in the digital platform context too.

209 *See, e.g.*, Alessandro Acquisti, Laura Brandimarte & George Loewenstein, *Privacy and Human Behavior in the Age of Information,* 347 SCI. 509, 509 (2015) (summarizing evidence of "incomplete and asymmetric information"). This literature about platforms builds on Nobel Prize winning work on information asymmetries suggesting that individuals often lack the information and capabilities they need to make effective market decisions even for more straightforward products such as used cars. *See, e.g.*, George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970) (arguing that market limitations allow bad used car sales to persist).

210 *See, e.g.*, Sherry He, Brett Hollenbeck & David Proserpio, *The Market for Fake Reviews*, 41 MKTG. SCI. 896, 915 (2022) (showing that ratings manipulation is common).

211 *See supra* Section II.A.

212 Acquisti et al., *supra* note 208, at 509.

213 *Holding Big Tech Accountable: Hearing Before the Subcomm. on Commc's & Tech. of the H. Comm. on Energy & Com.*, 117th Cong. 3 (2021) (written testimony of Frances Haugen).

214 *See* Michael Spence, *Consumer Misperceptions, Product Failure and Producer Liability*, 44 REV. ECON. STUD. 561, 561 (1977); A. Mitchell Polinsky & William P. Rogerson, *Products Liability, Consumer Misperceptions, and Market Power*, 14 BELL J. ECON. 581, 581 (1983); Dennis Epple & Artur Raviv, *Product Safety: Liability Rules, Market Structure, and Imperfect Information*, 68 AM. ECON. REV. 80, 90 (1978).

215 For a survey of the literature see generally Andrew F. Daughety & Jennifer F. Reinganum. *Market Structure, Liability, and Product* Safety, in 2 HANDBOOK OF GAME THEORY AND INDUSTRIAL ORGANIZATION 225 (Luis C. Corchón & Marco A. Marini eds., 2018).

It might be argued that disclosures by platforms, or perhaps a government education campaign, would help to fill the information gaps or correct for users' cognitive biases. However, the "[f]ailure of [m]andated [d]isclosure" is well documented.[216] People often ignore disclosures or respond to them in the opposite way intended.[217] Thus, without an empirical basis for concluding that they actually work, mandated disclosures are not a substitute for platform liability.

b. Behavioral Factors

Another reason why users face difficulties protecting themselves is that people often have cognitive biases that compromise their ability to make sound decisions.[218] Most importantly for present purposes, standard free-market economic models assume that peoples' preferences are time consistent in the sense that they value the future the same as the present.[219] In reality, however, a thriving literature on behavioral economics shows that when given a choice between getting something positive today or waiting until a future date, people prefer getting it now.[220]

In unregulated environments, this present bias means that people are often impulsive and may downplay the negative impact of current consumption on their future selves.[221] They may experiment with smoking cigarettes or snorting cocaine, for example, not fully internalizing—or perhaps even understanding—the adverse effects of addiction on their future

216 Omri Ben-Shahar & Carl E. Schneider, *The Failure of Mandated Disclosure*, 159 U. PA. L. REV. 647 (2011).

217 *See* Omri Ben-Shahar & Lior Jacob Strahilevitz, *Contracting over Privacy*: *Introduction,* 45 J. L. STUD. S1, S4 (2016) ("According to one estimate, the average person encounters so many privacy disclosures that it would take 244 hours per year to read them, and the lost time would cost the economy $781 billion." (citing Aleecia M. McDonald & Lorrie Faith Cranor, *The Cost of Reading Privacy Policies*, 4 I/S: J.L. & POL'Y FOR INFO. SOC'Y. 540, 561 (2008))).

218 *See* MANKIW, *supra* note 190, at 475, 579; OREN BAR-GILL, SEDUCTION BY CONTRACT: LAW, ECONOMICS, AND PSYCHOLOGY IN CONSUMER MARKETS 3–9 (2012) (summarizing and applying the economic literature on behavioral economics).

219 *See* Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1539–1541 (1998); Joseph E. Stiglitz & Andrew Kosenko, *The Economics of Information in a World of Disinformation: A Survey Part 2: Direct Communication* (Nat'l Bureau of Econ. Rsch., Working Paper No. 32050, 2024), http://www.nber.org/papers/w32050 [https://perma.cc/NSB7-PRQ4] (reviewing the literature on departures from rational decisionmaking and policy implications for regulating speech).

220 *See generally* David Laibson, *Golden Eggs and Hyperbolic Discounting*, 112 Q.J. ECON. 443 (1997); Ted O'Donoghue & Matthew Rabin, *Doing It Now or Later*, 89 AM. ECON. REV. 103 (1999). The welfare analysis in settings where consumers have inconsistent time preferences is nuanced. *See id.* at 112.

221 *See* O'Donoghue & Rabin, *supra* note 219, at 105–07. This is especially true if people fail to fully anticipate their own self-control problems.

well-being.[222] And even when people realize that they are overindulging, they may perpetually delay quitting under the mistaken belief that they will quit in the future.[223] Businesses have well-known incentives to design products and strategies to exploit consumers' cognitive biases.[224] For example, credit card companies will often charge a low initial fee or a teaser rate that will increase over time, which lures present-biased borrowers into a vicious cycle of repeat and even chronic borrowing.[225] Las Vegas hotels often exploit present bias by charging very little for hotel rooms and alcohol while making their profit margins on the gambling operations. [226]

Empirical evidence shows that social media platforms are addictive in ways that are not dissimilar from cigarettes, opioids, and gambling.[227] Not only do users have self-control problems in using digital technologies, but also they are somewhat inattentive to them and underestimate their severity.[228] One prominent study suggested that self-control problems explain about thirty percent of social media use.[229] As with credit card companies and casinos, platforms naturally design their strategies and organizations to exploit users' cognitive limitations and behavioral biases.[230] The platforms' algorithms function to maximize users' engagement, which means that they essentially feed any present-bias or addictive user tendencies.[231] Addicted users cannot respond to inadequate platform safety as effectively as free-market economic models assume.

222 Relatedly, many people have difficulty saving. 76% of people in the U.S. say that they are not saving enough for retirement. *See* MANKIW, *supra* note 190, at 475.

223 *See* O'Donoghue & Rabin, *supra* note 219, at 120. By contrast, sophisticated parties may abstain entirely as a means of self-control—they know they will lose control if they try to consume in moderation. *See id.* at 118–19. Economists have developed models of "rational addiction" where consuming more of a product today can increase one's propensity to consume the same product tomorrow but reduce overall utility. *See* Gary S. Becker & Kevin M. Murphy, *A Theory of Rational Addiction*, 96 J. POL. ECON. 675, 675 (1988). *See generally* George J. Stigler & Gary S. Becker, *De Gustibus Non Est Disputandum*, 67 AM. ECON. REV. 76 (1977).

224 *See, e.g.*, Stefano DellaVigna & Ulrike Malmendier, *Contract Design and Self-Control Theory and Evidence*, 119 Q.J. ECON. 353 (2004); BAR-GILL, *supra* note 217, at 3–9.

225 *See* DellaVigna & Malmendier, *supra* note 223, at 377; *see also* John Y. Campbell, Howell E. Jackson, Brigitte C. Madrian & Peter Tufano, *Consumer Financial Protection*, 25 J. ECON. PERSPS. 91, 91 (2011).

226 *See* DellaVigna & Malmendier, *supra* note 223, at 379.

227 *See* James Niels Rosenquist, Fiona M. Scott Morton & Samuel N. Weinstein, *Addictive Technology and Its Implications for Antitrust Enforcement*, 100 N.C. L. REV. 431, 431 (2022) (summarizing the evidence).

228 *See* Hunt Allcott, Matthew Gentzkow & Lena Song, *Digital Addiction*, 112 AM. ECON. REV. 2424, 2424 (2022).

229 *See id.* at 2458.

230 *See* Rosenquist et al., *supra* note 226, at 434.

231 *See id.* at 447–48*;* Leonardo Bursztyn, Benjamin R. Handel, Rafael Jimenez & Christopher Roth, *When Product Markets Become Collective Traps: The Case of Social Media* 1 (Nat'l Bureau of Econ. Rsch., Working Paper No. 31771, 2023) (showing that the "fear of missing out" (FOMO) creates negative consumption spillovers on platform users and non-users).

Given platforms' financial incentives to exploit well-documented user biases, we cannot rely on self-regulation to solve these problems.[232] The case for legal intervention to prevent such harms is economically strong.[233] Designers of liability law might therefore begin with a default assumption that users have insufficient ability to protect themselves absent evidence to the contrary. As a practical matter, one way to approach this would be to place the burden of proof on the platform to establish that consumers could have prevented the harm.[234]

c. Additional Market Failures

There may be a need for platform liability in seemingly "ideal" market settings where users fully understand the risks of platform participation, can observe the precautions and safety measures that are taken by platforms, and do not fall victim to cognitive limitations and behavioral biases. The argument, which stems from pioneering work by Professor Spence in the 1970s,[235] is that the free market will fail to supply the right level of product quality (i.e., safety) when consumers differ in their willingness to pay for higher quality. A manufacturer will focus on the needs and preferences of the marginal consumer, the person who is just indifferent between purchasing the good and going without it. In the platform context, if the users who are on the cusp of joining the platform value their safety less than the users who are "inframarginal," then the platform will invest too little in making the platform safer. Products liability can help to align market incentives with society's interests. If the platform is obligated to make consumers whole, then the platform will be thinking about the aggregate harm, not just the preferences of the marginal consumer.[236]

232 *See generally* Tsvetan Tsvetanov, Thomas J. Miceli & Kathleen Segerson, *Products Liability with Temptation Bias*, 186 J. ECON. BEHAV. & ORG. 76 (2021).

233 These harms are sometimes called internalities. *See* Hunt Allcott & Cass R. Sunstein, *Regulating Internalities*, 34 J. POL'Y ANALYSIS & MGMT. 698, 698 (2015).

234 This idea is related to a strict liability regime with a reverse contributory negligence affirmative defense. For such a proposal in the predigital era, see Calabresi & Hirschoff, *supra* note 175, at 1059.

235 *See* A. Michael Spence, *Monopoly, Quality, and Regulation*, 6 BELL J. ECON. 417 (1975).

236 *See* Xinyu Hua & Kathryn E. Spier, *Product Safety, Contracts, and Liability*, 51 RAND J. ECON. 233, 233–34 (2020). Manufacturers may inefficiently waive products liability, reinforcing the need for a public (rather than private) solution. Private markets may fail to assure adequate safety because of adverse selection. Competitive firms may have an incentive to waive products liability in order repel high-risk consumers who are more likely to sue. As a consequence the incentive to produce safe products is diminished. *See* Albert H. Choi & Kathryn E. Spier, *Should Consumers Be Permitted to Waive Products Liability? Product Safety, Private Contracts, and Adverse Selection*, 30 J.L. ECON. & ORG. 734, 734 (2014).

4. The Platform's Capacity To Prevent Harm

When determining liability, the platform's ability to prevent the harm in a cost-effective manner should be taken into account. In the internet's early years, it seemed impractical to ask the platform to police bad actors given the rudimentary state of the available tools.[237] But platforms now often act as gatekeepers.[238] With technologies of mass surveillance powered by artificial intelligence at their disposal, they have considerably greater capability to screen participants, detect harms, and block those who harm others.[239] To illustrate, Amazon has developed a largely automated system that it claims "stops bad actors before they can register or list a single product."[240] And through largely automated processes, Facebook disables over a billion accounts each year.[241] But platform spending on safety and security is neither ubiquitous nor stable. After being acquired by Elon Musk in the fall of 2022, Twitter laid off many workers and significantly cut back on content moderation.[242]

It is important to recognize that in determining capability to prevent the harm, the focus should not be on whether the platform has taken steps to prevent the harm in the past. The early *Cubby v. CompuServe* and *Stratton Oakmont v. Prodigy* courts made this mistake by weighing so heavily the question of whether early platforms were editing content.[243] It was also a mistake for the courts in early Amazon cases to focus on possession.[244] The problem with these backward-looking inquiries is that they create perverse

237 *Supra* Section I.A.

238 *See* Assaf Hamdani, *Who's Liable for Cyberwrongs?*, 87 CORNELL L REV. 901, 902–03 (2002); Rory Van Loo, *The New Gatekeepers: Private Firms as Public Enforcers,* 106 VA. L. REV. 467 (2020); Zittrain, *supra* note 32. For a classification and definition of gatekeepers, observing that gatekeepers are "private parties who are able to disrupt misconduct by withholding their cooperation from wrongdoers," see Kraakman, *supra* note 174, at 53.

239 Rory Van Loo, *Federal Rules of Platform Procedure*, 88 U. CHI. L. REV. 829, 836–49 (2021). *supra* Part I.

240 Amazon, *Product Safety and Compliance in Our Store*, AMAZON (Aug. 23, 2019), www.aboutamazon.com/news/company-news/product-safety-and-compliance-in-our-store [https://perma.cc/4WZP-EDDG]; *see also* Dharmesh Mehta, *Amazon's Brand Protection Report*, AMAZON (June 7, 2022), https://www.aboutamazon.com/news/small-business/amazons-brand-protection-report [https://perma.cc/B2FC-AGLV]; Sharkey, *supra* note 95, at 1344–46 (describing Amazon's capability to prevent harms).

241 *See Community Standards Enforcement Report: Fake Accounts*, META, https://transparency.meta.com/reports/community-standards-enforcement/fake-accounts/facebook/ [https://perma.cc/Z3UH-6Z5L] (last visited Dec. 1, 2024).

242 *See* Dominic Rushe, Gloria Oladipo & Johana Bhuiyan, *Twitter Slashes Nearly Half Its Workforce as Musk Admits 'Massive Drop' in Revenue*, GUARDIAN (Nov. 4, 2022, 8:21 PM EDT), https://www.theguardian.com/technology/2022/nov/04/twitter-layoffs-elon-musk-revenue-drop [https://perma.cc/9364-6HWB]. The mass layoffs and departures raised concerns that the content could become even "more toxic." *See id.*

243 *See supra* Part I.A.

244 *See supra* Part I.B.

incentives, in that refraining from taking precautions could later be used as a defense against liability.

Instead, the adjudicator must consider whether platforms have the technical and financial capability to prevent harms at scale. As Professor Van Loo has argued, some courts have rightly begun to move in this direction.[245] We are not suggesting that platforms have the capability to prevent all harms from occurring and that a platform's effort to block bad actors or remove potentially harmful content must be error free. In settings where independent detection by the platform is particularly difficult, a notice requirement may be appropriate, like that used in copyright, or some other mechanism for limiting liability.[246]

One potential predictor of a platform's capability to intervene is the degree to which its algorithms direct users toward certain content—whether it amplifies the harmful products or viral posts. The more involved the platform is in deciding which users connect with which third-party information, the more cost-effective it should be for the platform to insert safety considerations into its algorithms.

5. Strict Liability Versus Negligence

Should platform liability be strict or fault based? With strict liability, the platform would pay damages regardless of whether the platform took effort to avoid or mitigate the harm. With a negligence rule, the platform would pay damages only if the platform's efforts fell short of a due-care standard.[247] Assuming that the damages and the due-care standard are set correctly, both rules can create incentives for the platform to take cost-justified precautions.[248] The two rules differ in many other important respects, however.

One advantage of strict liability over the negligence rule is its relative simplicity. When determining if a platform was negligent, the court would need to evaluate evidence about what the platform's conduct was and compare that conduct to what would have been "reasonable" under the circumstances. This comparison between what a business did and should have done turns out to be a particularly difficult and fact-intensive issue for

245 Van Loo, *The Revival of Respondeat Superior and Evolution of Gatekeeper Liability*, *supra* note 21, at 158 (concluding that the technological and financial ability to police third parties should increase liability and that in some cases judges have already moved in this direction in adjudicating respondeat superior).

246 *See supra* Part I.C.; *infra* Part II.B.5.

247 *See* STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW 179–181 (2004).

248 *See id.*; Hua & Spier, Platform Liability Rules: Strict Liability Versus Negligence, *supra* note 25, at 5 (arguing that although the two rules lead to the same precautions, strict liability is preferable because it leads to a more efficient scale of operations). *But see* Grimmelmann & Zhang, *supra* note 25, at 1031, 1051 (arguing that both rules can lead to over-moderation of platform content).

the generalist adjudicator—one that can become imprecise and subjective.[249] By contrast, when liability is strict, the court need not delve into the determination of fault. The factors discussed above—such as whether the bad actor is judgment proof and whether the victims are voluntary participants—can be analyzed without knowing what the platform did to prevent the particular harm being litigated. These lower evidentiary requirements for strict liability may be particularly advantageous in the context of digital-platform harms, as the technology for protecting users and nonusers from harm is rapidly evolving.

A potential disadvantage of strict liability is that it would likely lead to a much higher volume of litigation and associated administrative costs. With strict liability, victims would bring suit if the harm they suffered exceeds the cost of suit, without regard for the platform's conduct. With negligence, since the award of damages hinges on insufficient effort by the platform, the victim's incentive to bring suit is smaller.[250] If the victim suspects that the platform took due care, and recovery from trial is unlikely, then the victim will view litigation as a bad investment. Since the volume of litigation is likely to be higher with strict liability, it follows that private expenditures on lawyers and experts and the public expenditures on the infrastructure would be higher under strict liability, too. The cost advantage of the negligence rule may be overstated, however. Since there are more fact-intensive and gray-area issues for the court to evaluate with the negligence rule, namely the platform's conduct and the appropriate due care standard, the court proceedings with the negligence rule are likely to be more prolonged. The tradeoff is thus fewer but more complex cases compared to more numerous but straightforward ones.

In the United States, tort liability is largely fault-based, with strict liability applied in relatively narrow circumstances. According to the Third Restatement of Torts, strict liability may be applied in settings where "the activity creates a foreseeable and highly significant risk of physical harm even when reasonable care is exercised by all actors."[251] Canonical examples of such an abnormally dangerous activity is blasting with the use of explosives, or keeping wild and dangerous animals, near residential neighborhoods. By extension, if a platform serves as a conduit for ultrahazardous or nefarious activities, such as child pornography, and the harms are unavoidable even if the platform were to take reasonable precautions, then strict liability could make sense. But in typical situations where harms are avoided with reasonable care on the part of the platform, a fault-based rule could create adequate incentives without the associated cost burden.

249 *See* SHAVELL, *supra* note 245, at 217–18.

250 *Id.* at 283.

251 RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL & EMOTIONAL HARM § 20 (AM. L. INST. 2010).

6. Getting Damages Right

Getting damages right is a balancing act. Imposing too little liability would lead to suboptimal safety efforts by the platform, allowing preventable harms to proliferate. On the other hand, imposing too much liability on the platform could lead the platform to waste economic resources on excess precautions. In the extreme, the platform might become "overzealous" in its efforts to ferret out bad actors, causing it to take down some accounts erroneously.[252] Going too far in either direction—too much or too little safety—is socially costly. Yet the existing platform immunity regime focuses on only one side of this equation, essentially opting for universally setting damages at zero.[253]

Our main proposal is to move away from that extreme approach by paying even greater attention to the economic incentives that damages create.[254] That proposal is in tension with how, historically, most legal scholars, judges, and lawmakers have assumed that the primary function of tort liability is to compensate victims.[255] While economic incentives are not typically emphasized in traditional scholarship on tort remedies, compensating victims for the harms that they have suffered can also create beneficial economic incentives for injurers.[256] For that to happen, however, compensatory damages must be approached expansively—accounting for all monetary and nonmonetary injuries.[257] Expansive compensatory damages thus offer one path for improving platform safety incentives.

Focusing solely on compensation, however, risks ignoring other important interests—such as the significant personal loss from those later erroneously blocked from social media if the damages are too high, or future deepfake victims with insufficient access to the court system, if the compensatory award is too low. Thus, ideally, adjudicators and lawmakers would not be constrained by the concept of compensating victims.[258]

252 *See* Hua & Spier, Holding Platforms Liable, *supra* note 25, at 3. Many allege that YouTube's Content ID, which allows rights holders to collect advertising revenue associated with infringing content, is overzealous in policing content. *See, e.g.*, Laura Zapata-Kim, *Should YouTube's Content ID Be Liable for Misrepresentation Under the Digital Millennium Copyright Act?*, 57 B.C. L. REV. 1847 (2016); Leron Solomon, *Fair Users or Content Abusers? The Automatic Flagging of Non-Infringing Videos by Content ID on YouTube*, 44 HOFSTRA L. REV. 237 (2015); Nicholas Thomas DeLisa, *You (Tube), Me, and Content ID: Paving the Way for Compulsory Synchronization Licensing on User-Generated Content Platforms*, 81 BROOK. L. REV. 1275 (2016).

253 *See supra* Part I.

254 *See supra* Part I.

255 *See* PROSSER AND KEETON ON THE LAW OF TORTS 5 (W. Page Keeton et al. eds., 5th ed. 1984).

256 *See* SHAVELL, *supra* note 245, at 267–68

257 *Id.* at 267–71.

258 A full treatment of the opportunities and challenges of an economic approach to liability damages is worthy of sustained further study, and space constraints do not allow for integrating the vast law and economics literature on that subject. *See, e.g.*, A. Mitchell Polinsky & Steven Shavell,

At a conceptual level, to align platform incentives with societal interests, damages could be set equal to the net social harm.[259] The net social harm would be calculated by subtracting the harms sustained by victims (including negative externalities) from the broader social benefits (including positive externalities).[260] Compensatory damages would thereby be adjusted upward or downward in a context-specific manner in light of the platform's business model, the harms in question, and the implications for society of setting damages at a given level. Thus, rather than universally setting damages at zero as the platform immunity regime does, damages would reflect the nuanced context of a harm within a richly diverse platform ecosystem that defies uniformity.

To make this idea concrete, consider the following simple example. Suppose that a platform hosts a bad actor whose content gives users a benefit, $B = 15$, brings the platform revenues, $R = 10$, but causes harm to others, $H = 40$. Since the harm is larger than the benefits, $40 > 15 + 10$, the hosted content is socially inefficient. If the bad actor is judgment proof, then the case for platform liability is clear. Let D represent the level of damages. If held strictly liable for the harm, $D = H = 40$, the platform would lose money by hosting the bad actor, $R - D = 10 - 40 < 0$. The platform has a financial incentive to detect and remove the bad actor, as it should. In this particular numerical configuration, setting damages equal to the gross harm happens to achieve the socially efficient outcome.

But setting damages equal to the gross harm does not generally create the efficient incentives. To see why, suppose that the platform's revenues are $R = 30$ instead of $R = 10$. In this case, the hosted content is efficient since the benefit to users, $B = 15$, plus the benefit to the platform, $R = 30$, is larger than the harm to others, $H = 40$. Considering only these parameters, the bad actor should in fact remain on the platform. If the platform is held

Punitive Damages: An Economic Analysis, 111 HARV. L. REV. 869, 954 (1998) ("Punitive damages should be imposed when deterrence otherwise would be inadequate because of the possibility that injurers would escape liability."); Joni Hersch & W. Kip Viscusi, *Saving Lives Through Punitive Damages*, 83 S. CAL. L. REV. 229, 230 (2010) ("[W]e propose a methodology for setting punitive damages in bodily injury cases that will enable punitive damages to fulfill their proper deterrence role.").

259 Suppose content imposes harm "H" on bystander victims and confers tangible benefits "B" for others. This content is socially harmful if the net social harm is positive: $H - B > 0$. If the platform is liable for the gross harm, it will block too much content ($H > 0$). If the platform is liable for the net harm, $H - B$, it will block the right amount of content.

260 *See* Hua & Spier, Holding Platforms Liable, *supra* note 25, at 2; *see also* MANKIW, *supra* note 190, at 197–202. Taxes and subsidies are standard tools for addressing negative and positive externalities. The optimal tax (and by analogy the optimal level of liability) should reflect the net social harm (social harm minus social benefits). *Cf.* Keith N. Hylton, *Property Rules, Liability Rules, and Immunity: An Application to Cyberspace*, 87 B.U. L. REV. 1, 14 (2007) (proposing a ratio test comparing "an activity's externalized costs to its externalized benefits"); *see also* Grimmelmann & Zhang, *supra* note 25, at 1055 (on the informational challenges of setting subsidies for platform externalities).

strictly liable for the gross damages, D = H = 40, the platform has an incentive to remove the bad actor (since R – D = 30 – 40 < 0). In other words, the platform will be overzealous in rooting out bad actors, to the detriment of the users and society more broadly.

To align the interests of the platform with society, the damages should be set equal to the net social harm, D = H – B = 40 – 15 = 25. Then, the platform will block the bad actors when R – D < 0, or equivalently when the harm H exceeds the social benefits B + R. With this rule, the platform internalizes the benefits to the users as well as the harms to others, and their incentives are therefore brought into alignment with the interests of society.[261]

We address concerns about chilling user access in greater depth below,[262] but in many contexts damages will need to be punitive instead of compensatory.[263] Punitive damages may be particularly appropriate when evidentiary gaps prevent victims from bringing suit, or when the cost of litigation prevents small plaintiffs from pursuing all of their meritorious claims—as is often the case with platform harms.[264] As mentioned above, there are also many settings where victims do not know who if anyone is responsible for their losses or even whether they have been harmed at all.[265] If victims do not know to bring suit, then injurers will be undeterred.[266] In such circumstances, damages above compensatory levels would be appropriate to ensure that the platform considers the totality of its harms to victims, rather than simply those victims who bring lawsuits. Alternatively, class actions or ideally administrative agency prosecution may be necessary, especially when barriers to litigation prevent harmed parties from bringing lawsuits.

Finally, economic analysis suggests that platform liability should complement rather than replace the liability imposed on the bad actors. Placing primary responsibility for paying damages on the bad actors serves the societal goal of deterring bad actors in some instances, while residual

261 *See* Hua & Spier, Holding Platforms Liable*, supra* note 25, at 13–15 (exploring the divergence between platform's private interest and social welfare in a richer environment). When choosing to remove a bad actor, the platform does not take into account the lost surplus of other stakeholders, including advertisers and the content providers themselves. The benefits of other stakeholders would also figure into the calculus of optimal platform liability.

262 *See infra* Section II.C.1.

263 *See* SHAVELL, *supra* note 245, at 243 ("It is conventional to refer to damages that are greater than losses as punitive." (emphasis omitted)).

264 On the infrequency with which users harmed by bad actors seek vindication in court, see Rory Van Loo, *Federal Rules of Platform Procedure*, 88 U. CHI. L. REV. 829, 830–35 (2021).

265 *See supra* Section II.B.

266 *Cf.* Mihailis E. Diamantis & William S. Laufer, *Prosecution and Punishment of Corporate Criminality*, 15 ANN. REV. L. & SOC. SCI. 453, 466 (2019) (arguing that "[n]o one seriously argues" existing laws are adequate to deter).

liability gives the platform the incentive to further mitigate the harms.[267] Although it is not our main focus, if the platform has amplified the harm it should pay additional damages even when bad actors have deep pockets.

Getting damages right will not be easy. But adjudicators already make difficult liability determinations in various areas of law, from setting reputation damages for defamation to loss-of-life injuries in products liability.[268] And assumptions about incentives are already implicit in the overall design of platform liability.[269] Although measuring and implementing compensatory damages and its alternatives is an imprecise science, this approach still easily improves upon the existing regime of universally setting damages at zero. Much work still remains to be done in designing an operational damages framework. Our main goal, for now, is to spark that conversation and orient it around how to best align platforms' incentives with those of society.

C. Further Considerations

1. Chilling Effects

Two central concerns about chilling effects relate to innovation and access. There is a general fear that platform liability will "kill innovation."[270] The early decisions in *Cubby* and *Prodigy*, as well as the preamble of Section 230, reflect varying versions of this concern.[271] The harm to innovation may come if liability puts existing companies out of business, thereby harming past innovation, or if liability disincentivizes future innovation. On the other hand, recent scholarship suggests that platform liability could stimulate more innovation, not less.[272] The idea is that the threat of liability would motivate

267 *See generally* Hua & Spier, Holding Platforms Liable, *supra* note 25.

268 *See* W. Kip Viscusi, *The Value of Life in Legal Contexts: Survey and Critique*, 2 AM. L. & ECON. REV. 195, 195 (2000) (explaining approaches to setting monetary damages for loss of life).

269 *See supra* Part I.

270 The fear is premised on the view that we need to quicken the pace of innovation. This is not the only view. A famous open letter, signed by tens of thousands of signatories including public intellectuals and tech leaders in 2023, advocates for "stepping back from the dangerous race to ever-larger unpredictable black-box models with emergent capabilities." *Pause Giant AI Experiments: An Open Letter*, FUTURE OF LIFE INST. (Mar. 22, 2023), https://futureoflife.org/open-letter/pause-giant-ai-experiments [https://perma.cc/32WM-79GV]. This fear of chilling effects forms part of a broader concern about chilling effects. *See, e.g.*, Stacey Dogan, *The Role of Design Choice in Intellectual Property and Antitrust Law*, 15 COLO. TECH. L.J. 27, 35 (2016) (explaining courts' fear of chilling effects).

271 *See supra* Section I.A.

272 *See generally* Jeon et al., *supra* note 25 (identifying factors for innovation to increase); Peter S. Mennell & Suzanne Scotchmer, *Intellectual Property Law*, *in* 2 HANDBOOK OF LAW AND ECONOMICS, *supra* note 200, at 1473 (surveying the law-and-economics literature on patent law and its impact on innovation).

platforms to develop new technologies and business methods to reduce social harm.

In a famous paper, W. Kip Viscusi and Michael J. Moore explored how the movement towards strict liability in the United States affected new product development.[273] They found that high levels of liability risk for manufacturers were associated with a *decrease* in research and development expenditures.[274] However, for low to moderate levels of liability, an increase in liability risk was associated with an *increase* in research and development.[275] More recent empirical scholarship examines the direct impact of tort reforms and damage caps on innovation activity. In a study of medical device patents, Alberto Galasso and Hong Luo showed that caps on pain and suffering damages were associated with less innovation as measured by fewer new patents.[276] The effect was strongest in medical fields with high frequencies of medical malpractice claims (surgery and orthopedics).[277] The implication is that an increase in liability risk was associated with an *increase* in innovation.[278] Thus, the empirical evidence on the effect of liability on innovation is mixed but overall suggests that liability may lead to more innovation, not less.

The fear about restricting access is the concern that platforms will respond to liability by declining to allow some small businesses to sell on the e-commerce platform or taking down more posts on social media. As a threshold observation, this concern is somewhat mitigated by platforms' financial motivations to not be too aggressive in their content moderation, as doing so threatens their very existence.[279] Thus, while this is a legitimate concern, it is not a reason to extend platform immunity. Instead, this concern should inform the design of the liability framework in a manner that would minimize the risks of the platform overzealously moderating content.

Multiple options exist for addressing these concerns. As mentioned above, a negligence rule would be less likely to lead to overzealous blocking

273 *See* W. Kip Viscusi & Michael J. Moore, *Product Liability, Research and Development, and Innovation*, 101 J. POL. ECON. 161 (1993).

274 *See id.* at 182. The expenditures were measured as reflected in financial statements. *Id.*

275 *See id.*

276 *See* Galasso & Luo, *supra* note 22, at 409 (noting that doctors may want to adopt technologies that reduce litigation risk to avoid being sued for medical malpractice); *see also* Parker Rogers, Regulating the Innovators: Approval Costs and Innovation in Medical Technologies 27 (Oct. 27, 2022) (unpublished manuscript) (on file with the Federal Trade Commission). The deregulation of medical devices, and associated increase in litigation activity, was associated with improvements in product safety. *Id.*

277 *See* Galasso & Luo, *supra* note 22, at 409.

278 *Cf.* Alberto Galasso & Hong Luo, *When Does Product Liability Risk Chill Innovation? Evidence from Medical Implants*, 14 AM. ECON. J. ECON. POL'Y 366, 366 (2022) (lawsuits brought against device makers and their deep-pocketed suppliers was associated with less downstream patenting but had no effect on upstream patenting).

279 *See supra* Section II.A. (explaining how platforms' business models depend on user participation).

of access.[280] Also, the damages could be adjusted downward to reflect the net social advantages of allowing more speech.[281] Another possibility would be to handle the issue by imposing procedural rules on the platform, such as prohibiting the platform from removing users without notice and an appeals process.[282] Related procedural rules are found for credit card companies, credit rating agencies, and in other contexts that require the business to investigate and remove fraudulent or inaccurate information once a consumer complains.[283]

Whatever the design, it is important not to lose sight of the other side of this equation. Platform immunity may promote platform access, but at the expense of victims of defamation, revenge porn, and severe product injuries. As Amanda Shanor has observed, "[b]ecause nearly all human action operates through communication or expression, the First Amendment possesses near total deregulatory potential."[284] Shanor calls for caution about speech-based objections to regulation of businesses because its "advocates . . . are forwarding a concept of liberty that has no limiting principle and, if taken to its analytical conclusion, would render self-government impossible."[285] For some categories of harm, such as speech related to elections, it may make sense to err on the side of making it harder for plaintiffs to show platform negligence because the benefits of allowing such information generally outweigh the risks of missing some defamation. But for other categories, such as sexually explicit content, holding the platform to a higher standard of care may make sense given the population to be protected. The point here is not to draw those lines but to argue that economics suggests they should be drawn in a context-specific manner rather than not at all.

2. Administrative Costs

The liability system is very expensive. Empirical studies estimate that tort victims typically receive less than fifty cents for every dollar paid by the defendant.[286] Some of the estimates do not include the administrative costs of insurance companies or the costs of maintaining the judicial system.[287]

280 *See supra* Section II.B.5.

281 *See supra* Section II.B.6.

282 *See* Van Loo, *supra* note 263, at 851–60.

283 *See id.*

284 Shanor, *supra* note 34, at 133.

285 *Id.*

286 *See* Polinsky & Shavell, *supra* note 196, at 1469–70. The cited studies, some focusing on narrow practice areas, deliver estimates between $0.40 and $0.57 for every dollar paid by defendants. *Id.*

287 *Id.* at 1470. On "the active and central role that liability insurance plays in tort law and litigation," see Kenneth S. Abraham, Catherine M. Sharkey, *The Glaring Gap in Tort Theory*, 133 YALE L.J. 2165, 2187–88 (2024).

The implication is that for every dollar the plaintiff receives in a settlement or a judgment, there is a corresponding dollar of administrative cost. The presence of litigation and administrative costs are relevant for the design of liability rules and whether liability regimes are socially worthwhile at all in a given context.

First, the level of court-awarded damages should arguably be higher when litigation involves administrative costs.[288] Consider a simple accident setting where a potential injurer must choose how much effort to take to reduce the chance of an accident. Ideally, the injurer will consider the social benefit of accident prevention, which includes the administrative costs of future lawsuits in addition to the harms suffered by the victims. If the damage award did not include the administrative costs, the injurer would underinvest and too many accidents would occur. Raising the level of court-awarded damages to include the costs forces the injurer to internalize the full cost of the accident. In addition, inflating the damage award to reflect the victim's litigation cost gives the victim an incentive to pursue the claim rather than abandon it, creating even stronger incentives for the injurer to take care.[289]

There are also settings where liability is not socially worthwhile. As described by Shavell, the costs of the liability system exceed the social benefits in accident settings when the harms are minor, such as "bumping into someone when boarding a bus or insulting someone in a minor way."[290] As argued by Polinsky and Shavell in the products liability setting, market forces and safety regulations often provide adequate incentives for product safety. For widely sold products and services, the incremental incentives created by the liability system may be far smaller than the administrative cost burden. The case for liability is stronger for products and services that are not widely sold, face lax regulation, and when the victims include involuntary bystanders (there are externalities). These administrative considerations should be implemented into the decision about which types of harms merit liability and how much liability to impose.

3. Scale of Operations

Platform liability may also affect the platform's scale of operations. Even when the technological limits of moderation, screening, and design are reached, the platform can reduce the harms even further by reducing the scale of operations or changing their scope. To be sure, if the liability burden is

288 *See* Polinsky & Rubinfeld, *supra* note 22, at 151 (showing that, with compensatory damages, strict liability will generally lead to the wrong level of care and excessive litigation costs).

289 *See id.* at 152. If the incentive benefit is small relative to the administrative cost, deflating the damage award to discourage lawsuits would make sense. *See id.* at 152–53.

290 *See* SHAVELL, *supra* note 245, at 284.

very large then the platform might choose to leave the market altogether.[291] This may or may not be socially desirable. If the platform was a net drain on society to begin with, this is a good outcome. For instance, OnlyFans chose to ban pornography from the site after banks concerned about underage sex workers began to refuse processing fees of some adult entertainment websites.[292] On the other hand, if the platform is creating significant social benefits, then reducing the scale of operations may be bad for society.[293]

The effect of liability on market size and activity level has been considered in the context of dangerous consumer products that may cause harm to others. For example, Professors Hay and Spier have explored whether gun manufacturers should be held liable when a gun owner accidentally or intentionally harms a bystander.[294] They argue that the gun owners should bear primary responsibility with the gun manufactures bearing the shortfall.[295] This gives the manufacturers the incentive to take precautions to design safer products and marketing practices to reduce the harms.[296] Furthermore, gun prices will rise to reflect the harms to others, and the quantity will fall.[297] In short, manufacturer liability forces the market to internalize the harms to others.

Manufacturer liability is not a panacea, however. As Professors Hay and Spier demonstrate, liability can distort and even destroy socially valuable markets when bad actors have a higher willingness to pay for the product.[298] Suppose that there are two types of gun buyers, criminals and hunters, and the criminals are willing to pay more to acquire a firearm.[299] With manufacturer liability, the price of guns must rise to reflect the harm caused by the average buyer (a mixture of criminals and hunters), but as the price rises the safe hunters will leave the market at a higher rate than the bad

291 There is some anecdotal evidence from other contexts. In the 1980s, given the wave of tort liability against automobile manufacturers, many makers of child safety seats withdrew from the market. *See* Murray Mackay, *Liability, Safety, and Innovation in the Automotive Industry*, *in* THE LIABILITY MAZE, *supra* note 200, at 191, 217.

292 *See* Ryan Browne, *OnlyFans CEO Explains Why the Site Banned Porn: 'The Short Answer is Banks,'* CNBC (Aug. 24, 2021, 2:12 PM EDT), https://www.cnbc.com/2021/08/24/onlyfans-ceo-explains-why-the-site-banned-porn.html [https://perma.cc/W9V7-9DMR].

293 On the possibility of subsidies in such circumstances, see *supra* note 259.

294 *See* Bruce Hay & Kathryn E. Spier, *Manufacturer Liability for Harms Caused by Consumers to Others*, 95 AM. ECON. REV. 1700, 1700–01 (2005). Hay and Spier make this point in the context of dangerous consumer products that may cause harm to others (e.g., guns). *Id.*

295 *See id.* at 1703.

296 *See id.* at 1701.

297 *See id.* at 1703.

298 *See id.* at 1704.

299 The problem arises when the harmful consumer group has a more elastic demand curve than the safe consumer group. *Id.* at 1704.

actors.[300] As in the proverbial "market for lemons,"[301] the market becomes increasingly dominated by bad actors and may disappear entirely. In short, placing full liability on the manufacturers of hazardous products could create such large distortions it would be better to have no manufacturer liability at all.[302] Professor Hay and Spier's logic extends to platforms, too. When a platform is deciding whether to remain in business or exit the market it weighs its own net revenues, adjusted for its expected future liability burden.[303] The platform does not naturally take into account the positive economic, social, informational, and other benefits that it brings to society, since the beneficiaries do not necessarily compensate the platform in full.[304] These dynamics help to explain why a regime that adjusts damages for net social harm would be beneficial, as doing so could help preserve platforms that benefit society while ridding it of predatory platforms.

Some may also be concerned that platform liability will advantage big tech platforms at the expense of smaller firms. Although that is a common refrain by industry to argue against regulation, empirical evidence from products liability does not support this view. A famous empirical study looked at the patterns of entry of small firms into liability-prone markets between 1967 and 1980, a period over which liability laws were rapidly changing.[305] It found that increase in liability risk ''led to roughly a 20 percent increase in the number of small corporations in the U.S. economy."[306] At a minimum, concerns about small businesses should be factored into the design of liability rather than used as justification for immunity.

It bears emphasis that significant liability has not historically prevented rapid growth in a variety of industries, including in oil, automobiles, and finance.[307] Platforms have a variety of potential responses to liability, such

300 *See id.* at 1705.

301 *See generally* Akerlof, *supra* note 208.

302 *Cf.* Hay & Spier, *supra* note 293, at 1701, 1703 (noting that even "residual-manufacturer liability," in which manufacturers are only exposed to liability for shortfalls in consumer damages, "may create such large distortions in the market quantity that it would be better to have no manufacturer liability at all").

303 PENDING new source

304 *See* Grimmelmann & Zhang, *supra* note 25, at 1028–29. They present a formal model with both negative and positive externalities. *Id.* at 1012. Since platforms do not capture the full social benefit of their activities, they may engage in too much content moderation resulting in smaller-than-optimal scale.

305 *See* Al H. Ringleb & Steven N. Wiggins, *Liability and Large-Scale, Long-Term Hazards*, 98 J. POL. ECON. 574, 580 (1990).

306 *Id.* at 589–90 ("The findings then suggest that liability has led to a significant transformation in the organization of hazardous production processes. Large numbers of small firms are entering hazardous sectors." *Id.* at 590.).

307 *See, e.g.*, Robert Adams & John Driscoll, *How the Largest Bank Holding Companies Grew: Organic Growth or Acquisitions?*, BD. OF GOVERNORS OF THE FED. RSRV. SYS.: FEDS NOTES (Dec. 21, 2018), https://www.federalreserve.gov/econres/notes/feds-notes/how-the-largest-

as removing and deterring bad actors, before needing to scale back operations.[308] Thus, while the possibility of reduced growth should be considered in designing platform liability, the underlying economics and historical case studies suggest, at a minimum, that broad immunity from liability is unnecessary for sustained growth even in a research-intensive industry.[309] Moreover, the innovation studies above indicate that liability has the potential to promote innovation overall.[310] An economically and empirically supported conclusion is thus that imposing some level of liability would direct platforms' immense sophistication and resources toward building an online world of greater safety and more widespread access.

III. THE FUTURE OF PLATFORM LIABILITY

The discussion so far has shown that platform liability laws purportedly rooted in economic principles have evolved with scant consideration of economic incentives and market consequences. In the rare instances where economics has been explicitly invoked, lawmakers and judges have tended to gloss over the issues with significant leaps of reasoning.[311] To help liability adapt to rapidly shifting markets and harms, lawmakers and judges should recognize and apply the law's underlying economic principles. Furthermore, lawmakers and judges must acknowledge that these principles may need to be updated as technologies, business models, and the field of economics advance. This Part explores what it would mean for legal scholars, judges, and lawmakers to more rigorously incorporate economic reasoning into the design of liability laws.

A. Taking Platform Economics Seriously

Scholarly inattention to the topic of economics may inadvertently help shield platforms from liability. Consider, for instance, how when a judicial revolution imposed strict liability on product sellers in 1960, scholars had spent three decades thinking through the economics of how to adapt the common law from the world of horse-drawn carriages and handcrafts to

bank-holding-companies-grew-organic-growth-or-acquisitions-20181221.html [https://perma.cc/D9YF-M46L] (summarizing banking industry growth); Mine Yücel & Michael D. Plante, *GDP Gain Realized in Shale Boom's First 10 Years*, FED. RSRV. BANK OF DALL., https://www.dallasfed.org/research/economics/2019/0820 [https://perma.cc/W8EC-EEMJ] (last visited Aug. 15, 2023) (summarizing oil industry developments); Bryan H. Choi, *Crashworthy Code*, 94 WASH. L. REV. 39, 87 (2019) (summarizing the effect of imposing liability on auto manufacturers).

308 *See supra* Section II.B.

309 *See supra* Section II.C.1.

310 *See supra* Section II.C.1.

311 *See supra* Section I.A. (summarizing economic reasoning applied to early social media cases); Polinsky & Shavell, *supra* note 196, at 1478 (finding that judges applied economics in an often cursory manner).

high-speed automobiles and mass manufacturing.[312] In the 1960 landmark judicial decision that ushered in the strict liability revolution, the court cited nine times to law review articles and twenty-one times to tort treatises authored by law professors.[313]

By contrast, in the influential 1995 *Stratton Oakmont v. Prodigy* case the court cited only once to legal scholarship—and it did so to support its proposition that markets might reward safe platforms like Prodigy that decided to invest in content moderation.[314] That source was written by a student in the final year of law school, an essay on "Cyberspace, the Free Market and the Free Marketplace of Ideas."[315] However, that essay is rooted in a doctrinal common law analysis and legal reasoning.[316] It does not draw on either formal economic scholarship or law and economics scholarship in forming its conclusions.[317] Thus, the single piece of research that the *Stratton Oakmont* case cited for its core economic proposition was not even grounded in economics.

Given the court's inattention to economic research, it is not surprising that *Stratton Oakmont* created a misguided set of incentives by rewarding platforms that did not engage in content moderation with platform immunity.[318] Since no on-point economic research existed at the time, it is

312 *See* Anupam Chander, *Future-Proofing Law*, 51 U.C. DAVIS L. REV. 1 (2017) (noting that legal scholars influenced the doctrine that went into the Second Restatement through their law review articles, treatises, and restatements); *see also supra* Section I.B (summarizing the widespread judicial reliance on the Second Restatement of Torts).

313 *See* Henningsen v. Bloomfield Motors, Inc., 161 A.2d 69, 78, 80, 83, 86, 87 (N.J. 1960) (citing to articles in the *Yale Law Journal* (three times), *Columbia Law Review* (two times), *Harvard Law Review*, *Minnesota Law Review*, *Michigan Law Review*, *Virginia Law Review*, and to treatises by professors Harper, James, Prosser, and Vold); Abraham, *supra* note 13, at 1833 (describing this case as setting off the rapid and widespread judicial adoption of strict liability). As another example, after a wave of law and economics scholarship emerged in the 1980s critiquing strict liability even for some sellers who could have done nothing to prevent the harm, judges cited to and followed some of the suggestions in that scholarship in their opinions as they carved out exceptions to strict liability. *See, e.g.*, Feldman v. Lederle Lab'ys, 479 A.2d 374, 382 n.4, 384, 388–389 (N.J. 1984) (setting a new precedent of an exception to strict liability for prescription drugs while citing to legal scholarship nine times: the *N.Y.U. Law Review* (three times), *Seton Hall Law Review* (two times), *Georgetown Law Journal*, *Mississippi Law Journal*, *Rutgers Law Review*, and *Stanford Law Review*).

314 *See* Stratton Oakmont, Inc. v. Prodigy Servs. Co., No. 31063, 1995 WL 323710, at *5 (N.Y. Sup. Ct. May 24, 1995) (citing Eric Schlachter, *Cyberspace, the Free Market and the Free Marketplace of Ideas: Recognizing Legal Differences in Computer Bulletin Board Functions*, 16 HASTINGS COMM. & ENT. L.J. 87, 138–39 (1993)).

315 *See* Schlachter, *supra* note 313, at 87.

316 *See id.* at 98 ("How can we as a society strike a satisfactory balance between private autonomy and appropriate government intervention?").

317 *See generally id.* (drawing on a variety of sources from courts, media, computer science, and legal scholarship).

318 *See Stratton Oakmont*, 1995 WL 323710, at *5; Jennifer H. Arlen & W. Bentley MacLeod, *Beyond Master-Servant: A Critique of Vicarious Liability*, *in* EXPLORING TORT LAW 111 (M. Stuart Madden ed., 2005) (adverse incentives of safe harbor provisions).

also somewhat excusable that lawmakers responded with their own misapplication of economics in the form of Section 230.[319] Similar dynamics were at play in the 2010s when judges lacked any on-point economic research in mostly declining to extend product liability to Amazon and other online marketplaces.[320] In arguing against platform liability, Amazon's lawyers repeatedly cited to law and economics scholarship by Professors Polinsky and Shavell, even though the relevance of their assumptions for digital platforms is limited.[321] Since copyright is the only one of these three main areas informed by significant economic research, and also retained the most significant platform liability among the three main categories in Part I,[322] there is reason to think that a better understanding of economics could influence future reforms toward greater liability.

B. Illustrative Examples

We now illustrate how the economic insights from Part II translate into adjudicatory decisionmaking. The question of whether to impose liability on a platform, and the form that liability will take, will be fact and context specific. In some limited situations, it may not make sense to impose liability on the platform. In particular, sometimes bad actors will have sufficiently deep pockets to pay for the harms that they cause (reducing the need to extend liability to the platforms), sometimes platforms may not have the capacity to prevent the harms, and sometimes the chilling effects and administrative costs are just too high. However, for most of the instances for

319 *See supra* Section I.A.

320 For instance, in the original 2015 complaint seeking to hold Amazon liable for his son's caffeine powder overdose, Stiner did not cite to a single piece of legal or economic scholarship. Complaint for Plaintiff, Stiner, No. 15 Civ. 185837, 2017 WL 9751163. In response to the first product liability cases concerning Amazon, law students began to write notes. *See, e.g.*, Amy Elizabeth Shehan, Note, *Amazon's Invincibility: The Effect of Defective Third-Party Vendors' Products on Amazon*, 53 GA. L. REV. 1215, 1225–26 (2019) (analyzing the doctrinal issues raised by the early Amazon cases). Law professors took up the topic soon thereafter as well. *See generally* Janger & Twerski, *supra* note 23 (devoting an article to the doctrinal questions of Amazon product liability in 2020); Tanya J. Monestier, *Amazon as a Seller of Marketplace Goods Under Article 2*, 107 CORNELL L. REV. 705 (2022) (same in 2022). By the time Stiner's counsel wrote the appeal in late 2019, they were able to summarize law professors Ted Janger and Aaron Twerski's "exhaustive look into the way Amazon imposes its will on every transaction which occurs on its platform." Redacted Reply Brief of Appellant at 15, Stiner v. Amazon.com, Inc., 164 N.E.3d 394 (Ohio 2020) (No. 2019-0488). That article makes a strong case for Amazon exhibiting control as a doctrinal matter, but it does not engage with the economics of platform liability. *See* Janger & Twerski, *supra* note 23, at 272–73. Whether speaking to the economic foundations of Amazon's marketplace would have mattered is unclear. However, the doctrinal analysis alone proved unconvincing, as the court concluded that "Stiner has not demonstrated that Amazon was in a position to safeguard the quality and safety of the caffeine powder before it entered the stream of commerce." *Stiner*, 164 N.E.3d at 401.

321 *See supra* Section II.B.3.

322 *See supra* Part I.

which the law currently provides a shield, especially defamation and product liability, incentives appear insufficient to promote the socially optimal level of platform safety. The broader point is that the law should be changed to allow judges to impose greater liability on platforms when the facts indicate that doing so would be in society's best interests.

Inevitably, the application of a complex body of analytical and quantitative research to the real world will be messy and imperfect. Even when relying on law and economics scholarship, lawmakers and judges will not necessarily have all the evidence they need to conclude with certainty that liability will have the intended consequences.[323] Yet it would be better to begin that challenging analysis of platform liability from a strong theoretical and empirical foundation rather than from the historical approach of handwaving at economics.[324]

1. Pornhub and Content Moderation

Consider again the case of people whose sex videos get posted online without their consent.[325] Although ex–romantic partners often posted such videos out of revenge,[326] businesses sometimes produced and monetized them. For years, representatives of the production studio GirlsDoPorn, using aliases to hide their pornographic intent, lied to young women in financial need who were not adult performers[327]—commonly college and graduate school students.[328] The pitch began with an offer for a traditional modeling shoot.[329] Employees would later revise the offer and assure the models that explicit videos of them would not be sold online or in the U.S.—typically adding further assurances like stating that the DVDs would only be sold to private collectors in Australia.[330] Instead, GirlsDoPorn not only posted the videos to the Pornhub platform, but also sent the video links "directly to the models' friends, family members, classmates, employers, and social media contacts," to make the videos go viral.[331] Many of the victims lost their jobs, were ostracized by their communities, experienced emotional trauma, and

323 *See, e.g.*, Polinsky & Shavell, *supra* note 196, at 1478 (critiquing Judge Traynor's reasoning in *Escola v. Coca Cola Bottling Co.*, 150 P.2d 436, 440–44 (Cal. 1944) (Traynor, J., concurring), as economically problematic). *But see* 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, 1922 (2010) (arguing that "it is doubtful that any body of law measures up to the[] . . . standards" applied by Polinsky and Shavell).

324 *See supra* Part II (summarizing and extending the existing economic research).

325 *See supra* Section I.A.

326 *See, e.g.*, Citron, *supra* note 35, at 1918.

327 *See* Doe v. GirlsDoPorn.com, No. 37-2016-00019027-cu-fr-ctl, 2020 Cal. Super. LEXIS 7219, at *2–4, 27 (Cal. Super. Ct. Jan. 2, 2020).

328 *Id.* at *2, *17.

329 *Id.* at *17–23.

330 *Id.* at *4, *25 n.16, *53.

331 *Id.* at *4.

attempted suicide.[332] The GirlsDoPorn employees who participated in these deceptions have received lengthy prison sentences of up to twenty years.[333]

Should the hosting platform, Pornhub, be liable for the harms suffered by the women who were defrauded by GirlsDoPorn? The key factors outlined above provide a logical foundation for analyzing this question.

First, although GirlsDoPorn is a domestic entity and had been in operation for years, it used various wire transfers to offshore entities to avoid creditors and ultimately declared bankruptcy in the wake of the civil lawsuits.[334] Since GirlsDoPorn could not pay for the harms that they caused (as they were largely judgment proof), the threat of direct legal sanctions was insufficient to fully deter GirlsDoPorn.

Second, since the victims were neither users nor voluntary suppliers of the platform, the platform's incentives to protect the victims were compromised, too.[335] As discussed above, there is little reason for a platform to crack down on bad actors when the victims are involuntary bystanders.[336] Indeed, Pornhub had strong financial incentives to leave the videos up and to amplify them, as the GirlsDoPorn channel overall had over 600 million views.[337]

Third, Pornhub was aware of a prior lawsuit in which GirlsDoPorn employees had admitted to lying to women to get them to participate in the videos.[338] Furthermore, many victims contacted Pornhub requesting the removal of the videos and communicating that they had been deceptively told that the videos would not be posted online."[339] Pornhub nonetheless left the content online, presumably under the (correct) assumption that they were protected by Section 230.[340] If instead Pornhub had been held financially accountable for the victims' harms, then they would have been more likely to accommodate the victims' removal requests and to take proactive steps to prevent future harm.[341] Having established a logical foundation for platform

332 *Id.* at *5.

333 Press Release, Joseph Green & Alexandra F. Foster, Twenty-Year Sentence in GirlsDoPorn Sex Trafficking Conspiracy, U.S. Att'y's Off. S. Dist. Cal. (June 14, 2021), https://www.justice.gov/usao-sdca/pr/twenty-year-sentence-girlsdoporn-sex-trafficking-conspiracy [https://perma.cc/LKA6-2YFW].

334 *See GirlsDoPorn.com*, 2020 Cal. Super. LEXIS 7219, at *242–43; Kristina Davis, *Owner of Amateur Porn Site Files for Bankruptcy Amid Legal Battle*, SAN DIEGO UNION-TRIB. (Feb. 13, 2019, 1:09 AM), https://www.sandiegouniontribune.com/news/courts/sd-me-porn-lawsuit-20190212-story.html [https://perma.cc/JU5J-BQUP].

335 *Cf.* Davis, *supra* note 333 (explaining the GirlsDoPorn business model).

336 *See supra* Section II.B.2 (analyzing the economic incentives platforms face with involuntary bystanders).

337 *GirlsDoPorn.com*, 2020 Cal. Super. LEXIS 7219, at *59.

338 MindGeek Deferred Prosecution Agreement at *6.

339 *Id.* at *6.

340 *Id.* at *7. Upon later learning of litigation against GirlsDoPorn, Pornhub asked for a list of content to be removed, and informed at least one complainant that the video had been removed. *Id.*

341 *Cf. supra* Section II.B (outlining the incentives provided by liability).

liability, we now turn to the question of how the court should assess damages. To start, the court should consider the value of the pecuniary and non-pecuniary harms that the victims suffered on account of the fraud. In a civil lawsuit brought by twenty-two women against GirlsDoPorn, the court opined that the victims' lives had been "derailed and uprooted" and they had faced "harassment, emotional and psychological trauma, and reputational harm."[342] The court determined the damages to the victims should be $12.8 million in total.[343] This included about $1 million in monetary profits from the videos, $8.5 million in compensatory damages, and an additional $3.3 million in additional punitive damages.[344] Since GirlsDoPorn was largely judgment proof, economic reasoning suggests that the Pornhub platform should be responsible for the residual harm.

One can also make the economic argument that the damages should have been higher than $12.8 million. The twenty-two women who brought the civil lawsuit represent just the tip of the iceberg, as the number of victims is estimated to be as many as four hundred.[345] Insofar as not all victims are willing to come forward (perhaps out of fear of further embarrassment), a damages multiplier that adjusts the damages proportionally upward would be appropriate.[346] The additional damages could be paid to the victims who brought suit, placed in a separate fund to compensate yet-unidentified and future victims, or put towards socially worthwhile projects that would, for instance, benefit the victims of sexual exploitation.

Although such additional damages would not normally be allowed in civil lawsuits, the Department of Justice did secure punitive payments from Pornhub in a related criminal lawsuit for monetary transactions related to human trafficking.[347] It is only within the past few years, however, that the 2018 Fight Online Sex Trafficking Act/Stop Enabling Sex Traffickers Act

342 *GirlsDoPorn.com*, 2020 Cal. Super. LEXIS 7219, at *5; *see also* Mike LaSusa, *Porn Website Nears $12.8M Trial Loss for Tricking Models*, LAW360 (Jan. 2, 2020, 10:45 PM EST) (quoting *GirlsDoPorn.com*, 2020 Cal. Super. LEXIS 7219, at *5), https://www.law360.com/articles/1231069/porn-website-nears-12-8m-trial-loss-for-tricking-models [https://perma.cc/CW67-PJ7T].

343 LaSusa, *supra* note 341.

344 *Id.*

345 *See* Pete Brush, *Pornhub Owner Avoids Prosecution for Link to Trafficking*, LAW360 (Dec. 21, 2023, 4:55 PM EST), https://www.law360.com/articles/1771489/pornhub-owner-avoids-prosecution-for-link-to-trafficking [https://perma.cc/5KEU-FKVV].

346 Adjusting damages downward might be appropriate, too, if pornographic videos create positive externalities. But since markets for pornography are thriving, the uncompensated social benefits of pornography are likely small. On some of the benefits, see, for example, Julie Dahlstrom, *The New Pornography Wars*, 75 FLA. L. REV. 117, 162 (2023) (overall supporting stronger civil lawsuits for claims related to trafficking but acknowledging how overbroad civil damages "could significantly interfere with commerce, lawful sexual expression, and valuable speech").

347 *See* Deferred Prosecution Agreement at 7–8, United States v. Aylo Holdings S.A.R.L., No. 23-cr-00463 (E.D.N.Y. Dec. 21, 2023).

(FOSTA) opened up the possibility of lawsuits related to sex trafficking.[348] Civil lawsuits are still uncertain.[349] Before then, Section 230 would have denied the victims of GirlsDoPorn any redress against Pornhub, regardless of how easy it might have been for the platform to prevent the harms.[350] Section 230 continues to provide barriers in other related contexts, such as revenge porn and deepfake videos, in defiance of that law's purported economic roots.[351]

Finally, one could make the economic argument that the platform's liability should be less than fully compensatory, or should have other limitations, to avoid the risk of chilling effects. In the aftermath of FOSTA, some platforms responded to liability by removing all related sexual content, both legal and illegal.[352] Critics of that law pointed out that sex workers consequently had to find more dangerous avenues for finding clients, such as on the streets.[353] In the context of pornography, there are ways to address these concerns, such as by imposing liability only after the platform has been notified of content by a participant in the video. Thus, the concerns about chilling effects need not defeat liability for explicit content altogether and should instead inform how to tailor the imposition of liability and the setting of damages.

2. Alex Jones and Defamation

In 2012, a gunman walked into the Sandy Hook Elementary School in Connecticut and massacred twenty children.[354] Alex Jones, a media personality and conspiracy theorist, soon took to social media and his media company, InfoWars, where he routinely described the tragedy as an elaborate hoax orchestrated by the Obama administration to gather political momentum for stricter gun control laws.[355] As a consequence, the families of the victims faced death threats, virtual and in-person harassment, and other harms.[356] The Sandy Hook families brought civil claims against Alex Jones and InfoWars for defamation and won, obtaining more than $1.4

348 *See* Allow States and Victims to Fight Online Sex Trafficking Act of 2017, Pub. L. No. 115-164, § 3, 132 Stat. 1253, 1253–54 (2018).

349 *See* Dahlstrom, *supra* note 345, at 157–58.

350 *See* Doe v. Backpage.com, LLC, 817 F.3d 12, 20–22 (1st Cir. 2016); *supra* Section I.A.

351 *See* Dahlstrom, *supra* note 345, at 155–58.

352 *See supra* Part I.A.

353 *Id.*

354 Michael Ray, *Sandy Hook Elementary School Shooting*, BRITANNICA (Nov. 25, 2024), https://www.britannica.com/event/Sandy-Hook-Elementary-School-shooting [https://perma.cc/9WJV-X4FJ].

355 *See* Lafferty v. Jones, No. x06-uwy-cv18-6046436-s, 2022 WL 18110184, at *1 (Conn. Super. Ct. Nov. 10, 2022).

356 *Id.* at *2.

billion in compensatory and punitive damages.[357] Yet Section 230 shields Twitter and YouTube from damages although Jones had used those platforms to reach millions of people.[358]

The court reasoned that the punitive damage component of the award, almost $500 million, was supported in part by "the defendants' concealment of their conduct."[359] Also relevant was the fact that the path to achieving a verdict "was a tortuous one" for the plaintiffs, who had a "low incentive to bring and maintain an action like this."[360] Under these circumstances, increasing the damage award above the compensatory level makes good economic sense. If an injurer can withhold or shroud evidence to reduce the chance of liability, inflating the compensatory damage award can restore the injurer's incentives and improve deterrence.[361] If a victim has little incentive to bring suit because the cost of litigation and the personal toll of prolonged adversarial proceedings are large, then raising the damage award to reflect that victim's costs can both make the lawsuit credible and deter the injurer's wrongdoing.[362]

Is platform liability necessary in cases like this? If bad actors like Alex Jones have sufficiently deep pockets and can be compelled to pay for the harms that they cause, then the case for platform liability is weaker. Holding the primary injurer, and just the primary injurer, responsible for the harms would, in theory, deter socially harmful behavior and fully compensate victims for all their emotional, monetary, and other harms. The case for platform liability is stronger when the bad actors are judgment proof. Indeed, despite the media success of Alex Jones and popularity of InfoWars, Alex Jones and InfoWars declared bankruptcy, and so the fight between Sandy Hook families and Alex Jones continues in bankruptcy court.[363] Alex Jones has reportedly offered to settle the claims for $5.5 million per year for ten years.[364] The Sandy Hook families are unlikely to collect anything close to the $1.4 billion award.

Whether because Alex Jones was unable to pay in full for the harm that he has caused or for other reasons, he did not have the right incentives to protect potential victims. Furthermore, since the victims who suffered from

357 *Id.* at *2, *10.

358 *See supra* Section I.A.

359 *See Lafferty*, 2022 WL 18110184, at *9, *10.

360 *Id.* at *9.

361 *See supra* Section II.B.6.

362 *See supra* Section II.B.6.

363 *See* Elizabeth Williamson, *Alex Jones and Sandy Hook Families Enter Final Stretch in Bankruptcy Figh*t, N.Y. TIMES (Dec. 15, 2023), https://www.nytimes.com/2023/12/15/us/politics/alex-jones-sandy-hook-bankruptcy.html [https://perma.cc/E48U-UFYB].

364 *Id.* It was never clear to the court how much money was available to compensate the victims, or whether the award would "financially destroy the defendants," as financial records had been concealed. *Lafferty*, 2022 WL 18110184, at *10. The defendants were estimated to have earned somewhere between $100 million and $1 billion after 2012. *Id.*

Alex Jones's actions, namely the surviving families, were involuntary bystanders, platforms had little if any financial motivation to protect them. Platforms did, however, have strong financial incentives to allow or even help Alex Jones to stimulate user engagement, as he had millions of followers and the defamatory content drew millions of views.[365] Indeed, Alex Jones's videos and his show InfoWars remained on the YouTube platform for at least six years despite public scrutiny and criticism.[366] Platform damages above the compensatory level may further be appropriate in light of negative externalities such as harms to democracy from widespread dissemination of misinformation.[367] The harms to the Sandy Hook families would have been mitigated if the platforms faced liability for the residual harm.

3. Amazon and E-Commerce

Consider again the case of Stiner, who in May of 2014, just days before his high school graduation, ingested a fatal dose of caffeine powder purchased on Amazon.[368] It is unclear whether the third-party manufacturer was judgment proof, but the case against them settled or was resolved before the suit against Amazon.[369] If the third party had sufficient resources to pay for damages, the case for liability against Amazon is weaker. Assuming the third party was at least partially judgment proof, however, would weigh significantly in favor of allowing Stiner's family to sue Amazon for the loss of life.

Unlike the cases of PornHub and Alex Jones, the harmed party in this case was a voluntary participant.[370] Consequently, in theory, Amazon would have some incentives to protect that party from harms. However, information asymmetries make it difficult for consumers to know about the latest health risks posed by caffeine powder.[371] Additionally, even with adequate disclosures, a consumer may misunderstand, be overconfident, or succumb to a caffeine powder addiction.[372] As further evidence that Amazon

365 *Id.* at *1; Dave Collins & Pat Eaton-Robb, *Jury Hears Closing Arguments in Alex Jones' Sandy Hook Trial*, PBS NEWS (Oct. 6, 2022, 4:21 PM EDT), https://www.pbs.org/newshour/politics/jury-hears-closing-arguments-in-alex-jones-sandy-hook-trial [https://perma.cc/5YTA-F6MX].

366 *See* Donie O'Sullivan, *YouTube Says It'll Ban Accounts that Promote Nazism or Deny Sandy Hook Massacre*, CNN (June 5, 2019, 4:50 PM EDT), https://www.cnn.com/2019/06/05/tech/youtube-nazi-ban/index.html [https://perma.cc/E9AX-KGJ2]. Facebook had previously instituted a ban on objectionable content. *Id.*

367 *See supra* Part I.A.; II.B.6.

368 *See* Stiner v. Amazon.com, Inc., 120 N.E.3d 885, 887 (Ohio Ct. App. 2019).

369 *Id.*

370 Stiner received the powder from a friend who had searched for workout supplements. *Id.*

371 *See supra* Section II.B.3.a (summarizing the literature on information asymmetries in consumer markets).

372 *See supra* Section II.B.3.b.

had inadequate incentives to remove harmful products, it has repeatedly failed to adequately remove illegal and even deadly products—including baby cribs, hoverboard batteries, motorcycle helmets, and toxic paint materials.[373] Thus, it is perhaps not surprising that Amazon took some steps to monitor for dangerous products, but for years devoted only a handful of employees to policing an enormous marketplace.[374]

As to the key factor of whether Amazon could have taken meaningful steps to prevent such harms, the medical community had already documented that caffeine powder was deadly.[375] Four years before Stiner's death, in 2010, the *New York Daily News* reported on a twenty-three-year-old man who had died from caffeine powder.[376] The year before Stiner's death, an academic publication warned of the deadly nature of caffeine supplements through a literature review, the listing of forty-five caffeine overdose deaths, and an extended case study of a thirty-nine-year-old Georgia man who overdosed on caffeine powder that he had added to his exercise drink.[377] Additionally, users in product reviews had posted warnings to Amazon about the risks of the specific powder Stiner purchased, including linking to reports of the Georgia death.[378] Moreover, Walmart.com and Target.com each have far more selective processes for allowing third-party merchants onto their online marketplaces.[379] Amazon was therefore in a position to take more meaningful steps to mitigate risks of caffeine overdose, whether through better screening of product labels or by simply declining to profit from potentially fatal products.

373 *See* Berzon et al., *supra* note 3; *supra* Section I.B; Todd C. Frankel, *Dozens of Infant Deaths Have Been Tied to a Popular Baby Product. But Regulators Are Too Paralyzed to Act.*, WASH. POST (Nov. 23, 2019, 6:09 PM EST), https://www.washingtonpost.com/business/economy/dozens-of-infant-deaths-have-been-tied-to-a-popular-baby-product-but-regulators-are-too-paralyzed-to-act/2019/11/23/c6348d68-f5a1-11e9-a285-882a8e386a96_story.html [https://perma.cc/9L3Y-FT25].

374 *See* Berzon et al., *supra* note 3.

375 *E.g.*, Seema B. Jabbar & Mark G. Hanly, *Fatal Caffeine Overdose: A Case Report and Review of Literature*, 34 AM. J. FORENSIC MED. PATHOLOGY 321, 321 (2013) (summarizing deaths reported and analyzing medical risks).

376 *Man Dies from Caffeine Overdose, Ingested 'Spoonfuls' of Powder Equivalent to 70 Cans of Red Bull*, N.Y. DAILY NEWS (Jan. 11, 2019, 4:03 AM EST), https://www.nydailynews.com/2010/11/03/man-dies-from-caffeine-overdose-ingested-spoonfuls-of-powder-equivalent-to-70-cans-of-red-bull [https://perma.cc/EU5P-XLKB] (reporting on the death of a twenty-three-year-old man from caffeine powder overdose).

377 *See generally* Jabbar & Hanly, *supra* note 372.

378 *See* Redacted Reply Brief of Appellant at 5–6, Stiner v. Amazon.com, Inc., 164 N.E.3d 394 (Ohio 2020) (No. 2019-0488); *cf.* Laura Ungar, *Concerns Raised About Dangers of Powdered Caffeine*, USA TODAY (Sept. 16, 2014, 3:41 PM EDT), https://www.usatoday.com/story/news/nation/2014/09/16/poison-control-warning-caffeine-powder-teens/15412253/ [https://perma.cc/YE2T-DS63].

379 *See* Berzon et al., *supra* note 3.

In terms of damages, courts have well-established formulas for valuing the loss of life. These would seek to estimate the future earnings of Stiner, who had a 4.3 grade point average and was set to enroll in a chemical engineering program after graduation.[380] Courts also consider noneconomic harms to surviving family members, such as the loss of companionship and grief suffered.[381] Awards above compensatory damages might be appropriate in light of litigation costs and the possibility that some harmed parties might not sue for various dietary supplement harms, perhaps because they lack sufficient knowledge about their legal rights, did not know that those products caused their medical problems, or were unable to find affordable representation. Importantly, once held liable for such harms, Amazon's incentives to prevent such harms would be more likely to be aligned with society's incentives.

C. Traversing New Liability Frontiers

1. Robust Reasoning for a Changing World

Platform liability faces the challenge of keeping up with a world in which the key inputs into the liability equation are continually shifting. The discussion has already shown how harms, business models, and economic theory have changed dramatically from the time when liability laws were written. Moreover, the pace of technological change has accelerated in recent years. Artificially intelligent robots that inspect our homes for security, buy our groceries online, and prepare meals are in early development and may one day become as central to our lives as platforms today.[382] Startups have begun to allow consumers to monetize their own data, potentially disrupting some platform business models.[383] And one of the next frontiers is neuro-tech embedded in earbuds and other devices with ever more powerful capabilities to monitor brain waves, providing platforms like Apple and Meta with ever deeper access to our minds.[384]

380 *See supra* Section I.B (discussing the *Stiner* case); Viscusi, *supra* note 267, at 195 (explaining formulas that yield "estimates of the value of life in the range of $3 million to $9 million"); *Logan J. Stiner Obituary*, TRIBUTE ARCHIVE, https://www.tributearchive.com/obituaries/809696/Logan-J-Stiner [https://perma.cc/4GBS-UNBD] (last visited July 26, 2023).

381 *See, e.g.*, Viscusi, *supra* note 267, at 196–98 (summarizing approaches for estimating the value of lost lives).

382 *See* Atin Gupta & Geoffrey G. Parker, *What's Next for Generative AI: Household Chores and More*, (Mar 7, 2024), MIT SLOAN, https://mitsloan.mit.edu/ideas-made-to-matter/whats-next-generative-ai-household-chores-and-more.

383 *See, e.g.*, *id.* (describing the startup Invisibly).

384 *See* NITA A. FARAHANY, THE BATTLE FOR YOUR BRAIN: DEFENDING THE RIGHT TO THINK FREELY IN THE AGE OF NEUROTECHNOLOGY 2–6 (2023) (summarizing how various technology companies have developed technologies that can be used in both helpful and alarming ways).

These market transformations mean that judges and regulators will need to apply laws constructed in an outdated world. Scholars have published volumes on "future-proofing law," emphasizing the need for the law to adapt more dynamically.[385] However, that research rarely considers the role of the field of economics in enabling the law to adapt. Instead, technology law scholars tend to focus on the barriers to regulation created by economics, especially how the "desire to promote economic development can lead to a deregulatory race to the bottom."[386] Technology scholars' inattention and sometimes resistance to economics is understandable given how badly lawmakers and judges have applied economics to platforms. Criticism was appropriate, but it would have been better directed at the poor quality of the economic reasoning rather than at the importance of economics.

One advantage of our proposal for adjusting damages to accommodate the net social impact is that it allows for a tort liability regime to adjust as an industry changes. A binary ruling that blocks liability in an industry's early years may make sense before the harms have materialized and when the social benefits are clear. Once established, however, such a rule ossifies the liability regime even as the industry's harms to society become more concerning and concrete, and as the industry's ability to prevent the harms becomes more affordable. By allowing adjudicators to weigh society's best interests, broadly defined, a liability framework more rigorously rooted in economics would help liability to keep pace with market developments.

2. Adaptable Legal Institutional Design

The problem of judicial expertise looms over the task of liability laws keeping pace with platform economics. Thus, it is worth considering what institutional reforms might help. Administrative agencies generally have a greater ability to develop expertise than the state and federal court systems, which rely on generalist judges. Industry-specific agency expertise is particularly helpful when applying the law requires an in-depth understanding of the business model and technology, as does platform liability law. Thus, a new technology-focused administrative agency's involvement in platform liability might help to ensure that economics is integrated more rigorously into platform liability.[387] The FTC, for instance,

385 *See, e.g.*, Chander, *supra* note 311, at 1–25 (distilling the essays in a symposium on this topic); JONATHAN L. ZITTRAIN, THE FUTURE OF THE INTERNET—AND HOW TO STOP IT 31 (2008) (diagnosing the problem of legal designers waiting to see what happens before intervening and proposing a kind of grassroots collaborative response); Rory Van Loo, *Rise of the Digital Regulator*, 66 DUKE L.J. 1267 (2017) (proposing an interdisciplinary uniform lawmaking effort that helps regulation keep up with tech platform change).

386 *See* Chander, *supra* note 311, at 21.

387 For a sense of the benefits and drawbacks of a technology-focused agency, see Matthew R. Gaske, *The Operational Paradox of Centralized Artificial Intelligence Regulation*, MICH. ST. L. REV. (forthcoming 2024), https://ssrn.com/abstract=4524342 [https://perma.cc/JQ9T-XJME].

has a Bureau of Economics that supports its lawyers bringing consumer protection or antitrust cases against platforms when the platforms are the bad actors.[388] The FTC or a new agency's involvement in platform liability for third-party harms could foster greater institutional expertise, if empowered by Congress to bring such lawsuits against platforms.

Absent such reforms, much can still be done within the current institutional framework. Legal actors simply need to find ways to ensure that decisions reflect the latest insights that economics has to offer about incentives. Most importantly, judges can ask court-appointed experts to share updated economic insights rather than relying on well-resourced platform defense attorneys to select favorable but potentially outdated scholarship.[389] Internal institutional design that dynamically incorporates economic knowledge can thereby adapt liability to a rapidly changing world rather than remain frozen in time.

CONCLUSION

Economics has heavily influenced the legal architecture that governs internet platforms. The notion that market incentives create more prosperity and promote life-saving and welfare-improving innovations was enshrined in the Constitution and remains firmly rooted in the U.S. legal system.[390] Unfortunately, unsupported economic inferences have warped the platform liability framework and allowed many harms that the law would ideally prevent.

A sensible path forward lies in providing legal decisionmakers with a robust framework for weighing economic considerations in platform liability. Although much work remains, this Article has begun to lay the foundations for that framework. Of course, economic goals are not the only ones that matter. But economic analysis can help to set platform incentives to advance a wide range of goals, including free speech, that will collectively advance society's interests.

388 *See, e.g.*, FTC v. Amazon.com, Inc., No. c14-1038, 2016 WL 10654030, at *8 (W.D. Wash. July 22, 2016) (finding Amazon accountable for in-app charges).

389 *See* J. Gregory Sidak, *Court-Appointed Neutral Economic Experts*, 9 J. COMPETITION L. & ECON. 359, 359 (2013) (observing the rarity of court-appointed witnesses and stating their feasibility under the Federal Rules of Evidence). We are not arguing for more judicial discretion. Rather, when judges are applying economic reasoning, even if by using a common law test originally intended to channel economics, they should seek to integrate rigorous economic research within the appropriate level of discretion.

390 *See, e.g.*, Mazer v. Stein, 347 U.S. 201, 219 (1954) ("The economic philosophy behind the [Constitution's copyright] clause . . . is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors . . . ."); Holmes, *supra* note 9, at 1005 (tracing the longstanding presence of economics determinations in the law).

Nobody can predict the precise set of threats that will emerge from the next generation of faster and smarter platforms. If presented with a systematic and comprehensive treatment of platform liability economics, judges and lawmakers will be more likely to create efficient and protective liability regimes. Even top-level, economically informed guidance warning lawmakers about the risk of extensive platform immunity would provide a good start. Rather than allowing outdated policies to anchor liability to the past, economics should help build a bridge to its future.