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THE PARADOX OF INSURANCE

Gideon Parchomovsky* and Peter Siegelman**

In this Article, we uncover a paradoxical phenomenon that has hitherto largely escaped the attention of legal scholars and economists, yet it has far-reaching implications for insurance law: loss-creation by uninsured parties caused by the presence of insurance. Contrary to the conventional wisdom, we show that insurance can create significant negative externalities by inducing third parties to engage in antisocial, illegal and unethical activities in order to extract money from insureds or insurers. Moreover, as the amount and scope of insurance grows, so does its distortionary effect on third parties. We term this phenomenon the paradox of insurance. The risk and harm-causing effects of insurance are ubiquitous. They can be seen in a myriad of contexts, from medical insurances to automobile liability insurance to kidnapping insurance to directors' and officers' liability insurance, and even life insurance. It may even have played a role in the 2008 financial crisis. We also explain the economic, social and psychological reasons for this phenomenon. Our analysis suggests that the downside of insurance is far greater than previously believed; in extreme cases, it may even offset the social benefits of insurance.

Against this backdrop, we advance normative recommendations for handling the problem. We start by explaining why the standard techniques that insurers use to curb opportunistic behavior by insureds (deductibles, co-pays, and loss-control or mandatory precautions) are ill-suited to address third party moral hazard; hence, it presents a formidable challenge. We then move on to construct a comprehensive legal response, comprising a combination of self-help, regulatory and technological measures, as well as qui tam suits that allow members of the public to sue opportunistic actors who seek to misappropriate insurance proceeds. Together, these interventions should reduce the incidence of third party moral hazard.

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INTRODUCTION

In this Article, we explore a widespread problem that has so far largely evaded the attention of legal scholars and economists alike and has the potential to change the way we view insurance: how insurance alters the behavior of third parties. We show that the presence of insurance can induce third parties—anyone other than the insurer or the insured—to create or cause losses, or to increase risks covered by insurance, even at a cost to themselves, in order to capture or otherwise divert an insurance payment or to save on costs. We further demonstrate that the higher the insurance coverage, the stronger the distortionary effect of insurance on the behavior of third parties. We term this phenomenon “the insurance paradox.” The insurance paradox spans many contexts and legal systems.

Begin with the “slip and sue” phenomenon that plagues retail stores all over the U.S.¹ Driven by the motivation to collect insurance money, patrons feign falls in stores and rush to sue the owners. Between 2008 and 2011, slip-and-sue cases went up by 25% nationwide,² costing retail stores millions of dollars in higher insurance premia. According to reports, organized crime organizations were quick to join the action, targeting specific chains with this illicit behavior.³ While security cameras helped cull some of the easier cases, the problem persists.

¹ See *Publix Super Markets, Inc. v. Anderson*, 92 So. 3d 922, 923 (Fla. Dist. Ct. App. 2012) (“Experience has shown all retail stores that people who fall in their stores try to be compensated for their injuries. Experience has also shown those stores that bogus or frivolous or exaggerated claims might be made.”). Incidents of slip-and-fall fraud have also been widely reported. See, e.g., Press Release, The United States Attorney’s Office for the Southern District of New York, 3 Members of Trip-And-Fall Scheme Convicted of Defrauding New York City-Area Businesses and Their Insurance Companies of More Than \$31.7 Million (May. 28, 2019).

² Bryan Polcyn, *Slip and fall scam takes insurance companies for millions*, FOX6 News (Nov. 15, 2011, 4:41 PM), <https://fox6now.com/2011/11/01/slip-and-fall-scam-takes-insurance-companies-for-millions/>.

³ See *Id.* (“The scammers usually work in teams, but few are prolific as a band women accused of fleecing dozens of Milwaukee area retailers.”); see also Matthew Goldstein & Jessica Silver-Greenberg, *How a Web of Slip-and-Fall Cases Puts a New Spin on an Old-Fashioned Scheme*, The New York Times (May 11, 2018), <https://www.nytimes.com/2018/05/11/business/dealbook/how-a-web-of-slip-and-fall-cases-puts-a-new-spin-on-an-old-fashioned-scheme.html> (“A group of five men orchestrated the fraud, recruiting people to stage so-called slip-and-fall accidents, and then organizing the legal and medical appointments that followed Along the way, the group enlisted doctors, lawyers and finance companies.”).

Our next example comes from a video from the United Kingdom that went viral on the internet.⁴ It features a motorcyclist wheeling his motorcycle backwards into a moving car, slamming the motorcycle into the car, jumping on the hood and smashing his head repeatedly against the windshield; he ends up on the ground, writhing in “pain.” All the while, a friend of his films the aftermath of the incident. The motorcyclist continues to feign pain, when the driver of the car gets out in shock to check on him. But when she tells them that she has recorded the whole incident on a dashboard camera, the “injured” motorcyclist miraculously recovers, and both he and his witness flee the scene. What explains this strange incident? The most likely explanation is that the motorcyclist and his accomplice sought to claim the generous third party auto insurance that is mandatory in the United Kingdom.⁵

An even more appalling example comes from Sicily, where organized criminals have a practice of deliberately inflicting significant and gruesome injuries to homeless people and

⁴ ViralHog, *Insurance Scam Backfires on Scammer*, YOUTUBE (July 14, 2017), <https://www.youtube.com/watch?v=UnP7-1-W4VQ>. The video has had more than 4 million views, and judging by the setting and accents, it appears to take place somewhere in Britain.

⁵ Road Traffic Act, 1988, c. 52 §143(1)(a) (Eng.) (as amended) states that “ a person must not use a motor vehicle on a road or other public place unless there is in force in relation to the use of the vehicle by that person such a policy of insurance or such a security in respect of third party risks as complies with the requirements of this Part of this Act . . .” Section 143(2) makes it an offense to drive without appropriate insurance. Crucially, the Road Traffic Act defines what constitutes an acceptable insurance policy, which “. . . must insure [the policyholder] in respect of *any* liability which may be incurred by him . . . in respect of the death of or bodily injury to any person or damage to property caused by, or arising out of, the use of the vehicle . . .” (emphasis added). Policies are *not* required to cover “more than £1,200,000 in respect of all such liabilities as may be incurred in respect of damage to property caused by, or arising out of, any one accident involving the vehicle,” however. In the U.S. personal injury plaintiffs typically limit their claims to the amount of the defendant’s insurance coverage. Thus, they rarely reach the defendant’s *own* assets, which are known among lawyers as “blood money.” Tom Baker, *Blood Money, New Money, and the Moral Economy of Tort Law in Action*, 35 L. & SOC. REV. 275 (2001) (hereinafter – *Blood Money*) While we can’t be sure that the same norms apply to plaintiffs in the UK, we suspect that they do, which implies that high-limit insurance coverage makes fraud dramatically more profitable. And of course, many drivers do not have sufficient wealth to pay for the injuries they cause, so in these cases, any recovery by the “victim” can only come from the insurer, if there is one. See, e.g., Eric Smith & Randall Wright, *Why Is Automobile Insurance in Philadelphia So Damn Expensive?* 82 AMER. ECON. REV. 756 (1992) (suggesting that there are large numbers of judgment-proof drivers in the U.S. who prefer to have minimal or no insurance coverage).

drug addicts, in whose name they had previously taken out insurance policies.⁶ Here, too, the availability of insurance changes the behavior of third parties.

But perhaps the case that best illustrates the paradox of insurance is kidnap insurance.⁷ Some versions of this insurance cover all or part of the expenses incurred by the family of the victim. It is intended to provide policyholders with both peace of mind and financial risk-spreading, assuring them that if their loved ones fall victim to this crime, the insurer will cover part of the cost of securing their release. Perversely, however, the presence of insurance actually increases the probability of kidnapping. There is some evidence that kidnappers respond positively to the presence of insurance: when kidnap insurance is banned, kidnappings tend to decrease.⁸ Similarly, the incidence of piracy—the maritime version of kidnapping—also seems to positively correlate with the ransom amounts paid.⁹ Tellingly, Italy, Colombia and other countries where kidnapping has been endemic have actually banned kidnap insurance (although there is evidence that it nevertheless continues to operate in secret).¹⁰

The effect of insurance on the behavior of third parties can also be seen in the operation of Directors and Officers (D&O) insurance in the U.S., where insurance may induce third parties to manufacture suits against corporate officers in the hope of collecting from their insurer.¹¹ Similar effects can be seen in the U.S. healthcare market, where a wide range of wasteful, as

⁶ Frances D’Emilio, *Police Say Sicily Gangsters Crushed Limbs in Insurance Fraud*, ASSOCIATED PRESS, Aug. 8, 2018 available at <https://www.apnews.com/a38d73b5875e460dab91e770cb0017a9>. (Eleven people were arrested, and the amounts of money in question allegedly reached several hundred thousand Euros in this case).

⁷ The story is actually more complicated than this simple example suggests. As we discuss at greater length below, kidnap insurance has apparently evolved various techniques to mitigate third party moral hazard problems. See Anja Shortland, *Governing kidnap for ransom: Lloyd’s as a “private regime”*, 30 GOVERNANCE 283 (2017).

⁸ We appreciate that the evidence in favor of a causal relationship between insurance and kidnapping is not robust by the standards of modern social science.

⁹ Shortland at *Id*; see also Olaf J. de Groot, Matthew D. Rablen & Anja Shortland, *Barrgh-gaining with Somali Pirates* (European Security Economics Working Paper 74, 2012), https://www.diw.de/documents/publikationen/73/diw_01.c.408689.de/diw_econsec0074.pdf.

¹⁰ See, e.g., Meadow Clendenin, “No Concessions” *With no Teeth: How Kidnap and Ransom Insurers and Insureds are Undermining U.S. Counterterrorism Policy*, 56 EMORY L. J. 741 (2006) (suggesting that kidnapping insurance was at odds with US security policy because it made kidnaps more likely and funded operations of terrorist groups).

¹¹ Again, the story is more complicated than it appears, and D&O insurers may have developed some clever strategies to fend-off strike suits of this kind. See discussion *infra*, Part I.B.2.

well as downright fraudulent, decisions are made possible by the availability of insurance.¹² For example, there is compelling evidence that insurance facilitates the over-use of medical imaging services. Patients are commonly treated based on the coverage they have, rather than their medical condition, a practice for which doctors have even coined the descriptive phrase “a wallet biopsy.”¹³ Such industry practices that received the title “offensive medicine”¹⁴ contribute to the notoriously high cost of healthcare in the U.S.

The presence of insurance has also contributed to serious wrongdoing in the provision of rehabilitation services for opioid addicts.¹⁵ Some states now host a sizeable industry of for-profit rehab centers that offer recruiting bonuses to freelance “patient brokers” to attract addicts whose treatment can be billed to their insurer.¹⁶ Such rehabilitation services are

¹² In his seminal article on moral hazard, Kenneth Arrow noted that “[t]o some extent the professional relationship between physician and patient limits the normal [moral] hazard in various forms of medical insurance. By certifying to the necessity of given treatment or the lack thereof, the physician acts as a controlling agent on behalf of the insurance companies. Needless to say, it is a far from perfect check.” Kenneth J. Arrow, *Uncertainty and the Welfare Economics of Medical Care*, 53 AMER. ECON. REV. 941, 961 (1963). Arrow did not seem to see the possibility of the opposite effect, however—that doctors could promote, rather than deter, unnecessary claims.

¹³ See, e.g., M. Kit Delgado et al, *Factors Associated With the Disposition of Severely Injured Patients Initially Seen at Non-Trauma Center Emergency Departments Disparities by Insurance Status*, 149 JAMA SURGERY 422, 427 (2014) (concluding that “severely injured patients initially seen at non-trauma center E[mergency] D[e]partment[s] who are uninsured are more likely to be appropriately transferred [to a trauma center], whereas patients who are insured are more likely to be hospitalized in the non-trauma center” because the latter group are more profitable for the treating hospital.) But see, Charles D. Mabry, MD *Does a “Wallet Biopsy” Lead to Inappropriate Trauma Patient Care?* 149 JAMA SURGERY 430, 430 (2014) (commenting critically on some findings of the study, while acknowledging that “a common notion in the trauma community that the financial status (known commonly as a “wallet biopsy”) of a patient influences how and where trauma patients are treated).

¹⁴ Ronen Avraham & Max M. Schanzenbach, *The Impact of Tort Reform on Intensity of Treatment: Evidence from the Heart Patients*, 39 J. HEALTH ECON. 273 (2015) (finding that capping damages increased the probability that doctors choose a riskier, but more profitable heart by-pass surgery rather than an angioplasty, an example of “offensive medicine.”).

¹⁵ See Julia Laurie, “Mom, When They Look at Me They See Dollar Signs:” *How rehab recruiters are luring recovering opioid addicts into a deadly cycle*, MOTHER JONES, March 2019, <https://www.motherjones.com/crime-justice/2019/02/opioid-epidemic-rehab-recruiters/>. For a harrowing first-person account of this system that assigns an important causal role to insurance, see Colton Wooten, *My Years in the Florida Shuffle of Drug Addiction: Cycling through relapse and recovery, and the industry that enables both*, THE NEW YORKER, Oct. 14, 2019.

¹⁶ Laurie, *Id.*

considered “essential benefits” under the Affordable Care Act,¹⁷ and must be offered without annual or lifetime caps, creating a large pool of money that unscrupulous centers can tap into. Their business model is to bring in patients for “treatment” that is completely ineffective, precisely so as to generate a relapse and readmission shortly thereafter. This practice is known in the addiction community as “the Florida shuffle,” “a cycle wherein recovering users are wooed aggressively by [for profit rehabilitation centers] and freelance “patient brokers” in an effort to fill beds and collect insurance money.”¹⁸ Rehab centers can charge private insurers as much as \$50,000-\$100,000 per month of treatment;¹⁹ and private insurance claims for treatment of opioid users rose from \$75 million in 2011 to \$650 million in 2014.²⁰ The availability of generous insurance payments has helped create an entire industry of phony rehabilitation programs whose purpose is precisely *not* to cure addiction, but rather to maintain it as a source of ongoing revenue.

There is even evidence that third party moral hazard played a significant role in the financial crisis of 2008. Many readers are familiar with the story that large banks took advantage of the state-sponsored de facto insurance, established by their size and vitality for the economy, to give risky loans that promised a high return. The standard explanation for the crisis is that banks knew that they were “too big to fail,” and therefore took on excessive risks, certain that the government would have to bail them out if things went sour.²¹ While plausible, this narrative has encountered criticism for failing to account for some important facts about banks’ lending behavior.²² A complementary story suggests that third party moral hazard played a significant role in the crisis. Its effects were felt as private creditors of the “too big to fail” banks realized that there was no need to monitor them, given the certainty of a bailout.²³

¹⁷ See 42 U.S.C. § 18022(b)(1)(E) (2010) (defining Essential Health Benefits to include “Mental health and substance use disorder services, including behavioral health treatment”).

¹⁸ Laurie, *supra* note 12. See also, <https://www.fixthefloridashuffle.com/florida-shuffle>. Even worse, Laurie’s reporting uncovered examples in which brokers actually *induced* recovering addicts to relapse so that they could be referred to a “treatment” center.

¹⁹ *Id.*

²⁰ *Id.* (citing data from the Substance Abuse and Mental Health Administration). Of course, not all of this increase represents fraud.

²¹ See, e.g., JAMES KWAK & SIMON JOHNSON, 13 BANKERS (2009).

²² See NICOLA GENAOLI & ANDREI SHLEIFER, A CRISIS OF BELIEFS: INVESTOR PSYCHOLOGY AND FINANCIAL FRAGILITY (Princeton University Press, 2018). The authors argue that bankers did not make deliberate efforts to take on unjustified risks because they were covered by “too big to fail” insurance. Instead, the bad loans that created the financial crisis were based on bankers’ overoptimism about the riskiness of their loan portfolios.

²³ Darrell Duffie, *Prone to Fail: The Pre-Crisis Financial System*, 33 J. ECON. PERSP. 81, 99 (2018) (noting perverse effect of implicit guarantees on monitoring by lenders).

The government-provided insurance, in this case, eroded market-based incentives for financial discipline by lenders.

The insurance literature to date has focused almost exclusively on the ways in which insurance alters the behavior of insureds, ignoring the much larger group of uninsured parties. The two problems that have preoccupied insurance scholars are adverse selection and moral hazard. The former is concerned with the informational advantage that potential insureds have about themselves, and with securing a sustainable insurance pool that comprises high-risk and low-risk insureds alike.²⁴ The latter results from the tendency insurance to incentivize insureds to take less care than they otherwise would, thereby increasing the insured risk.²⁵ Indeed, scholars of insurance law now believe that many features of insurance contracts and practices (such as pricing and underwriting) should be understood as effective efforts to control these problems.²⁶

Our focus is not on the effects of insurance on actual or potential insureds, but rather on third parties who interact with them. In keeping with tradition, we call this paradoxical effect of insurance “third party moral hazard.” In cases of third party moral hazard, the risk-increasing effects of insurance are not caused by the behavior of the insured policyholder.²⁷ Rather, they are manifest as an increase in losses generated by the behavior of some *third party* in response to insurance.²⁸ To see the distinction, return to the auto accident with which we started our

²⁴ For a survey of empirical work on adverse selection, see Alma Cohen & Peter Siegelman, *Testing for Adverse Selection in Insurance Markets*, 77 J. RISK & INS. 39 (2010); for an accessible theoretical overview, see Liran Einav & Amy Finkelstein, *Selection in Insurance Markets: Theory and Empirics in Pictures* 25 J. ECON. PERSP. 115 (2011).

²⁵ The pioneering reference is Kenneth J. Arrow, *supra* note 10. Additional refinements were made by Steven Shavell, *On Moral Hazard and Insurance*, 93 Q.J. ECON. 541 (1979) and Bengt Holmstrom, *Moral Hazard and Observability*, 10 BELL J. ECON. 74 (1979). For an intellectual history of the term, see Tom Baker, *On the Genealogy of Moral Hazard*, 75 TEX. L. REV. 237 (1996).

²⁶ Ronen Avraham, *The Economics of Insurance Law—A Primer*, 19 CONN. INS. L. J. 29 (2012); Omri Ben-Shahar & Kyle D. Logue, *Outsourcing Regulation: How Insurance Reduces Moral Hazard*, 111 MICH. L. REV. 197 (2012). Cf. Steven Shavell, *On Liability and Insurance*, 13 BELL J. OF ECON. 120 (1982) (demonstrating that (first-party) moral hazard is unlikely to pose a serious problem in liability insurance in the context of the standard model of accidents).

²⁷ In the insurance context, “first party” typically refers to the insured policyholder; the “second party” is the insurer, and the third party (at least in liability insurance) is the “victim” who is injured by the policyholder’s negligence. In kidnap insurance, the victim of the kidnapping is the insured herself, but payment is made to the kidnapper (the perpetrator), so from an accounting perspective, the terminology still makes sense.

²⁸ The phrase “third party moral hazard” has been used four times in previous scholarship. See Randall R. Bovbjerg, *Liability and Liability Insurance: Chicken and Egg, Destructive Spiral, or Risk and Reaction?*

discussion. Conventional moral hazard would occur if the policyholder had driven more recklessly after having purchased insurance that limited or eliminated her responsibility for harms she caused.²⁹ But that was clearly not the problem: it was, instead, the putative self-seeking *victim* who altered his behavior because of the presence of insurance.

Third party moral hazard operates differently from its conventional cousin. Under standard moral hazard, the chain of causation is straightforward: by removing an insured's potential losses, insurance weakens her incentive to avoid the underlying risks. That provides a motivation for the policyholder to shift or externalize costs to her insurer. A fully-insured policyholder has very little reason to be careful (besides caring for his life and limb when he is unwilling to substitute them by money). After all, what's the point of taking costly precautions if all they do is reduce the *insurer's* payout in the event of a loss?

By contrast, third party moral hazard is about the creation of (real or ostensible) risks or losses by actors other than the policyholder, in a way that capitalizes on the presence of insurance to transfer wealth to the loss-creator. If first-party moral hazard is the failure of insureds to take costly precautions to prevent losses from occurring, third-party moral hazard involves the deliberate causing of losses by someone other than the insured policyholder so as to obtain a payout.

72 TEX. L. REV. 1655 (1994) (suggesting that liability insurance might lead to more misbehavior by third parties); Adrian Vermeule, *Congress and the Costs of Information: a Response to Jane Schacter*, 89 B.U. L. REV. 677 (2009); Richard A. Ippolito, *Freedom to Contract in Medical Care: HMOS, ERISA and Pegram v. Herdrich*, 9 SUP. CT. ECON. REV. 1 (2001); George A. Nation III, *We the People: the Consent of the Governed in the Twenty-first Century: the People's Unalienable Right to Make Law*, 4 DREXEL L. REV. 319 (2012). Other than the first, however, none of these authors treat the idea as more than a catchphrase, and the problem has received virtually no systematic attention from legal scholars or insurance theorists. For an extended and rigorous theoretical discussion of insurance fraud, which is related to our subject, see Pierre Picard, *Economic Analysis of Insurance Fraud*, in GEORGES DIONNE (ED.), HANDBOOK OF INSURANCE (2nd ed, 2013). There are some discussions that touch on the problem, including Kent D. Syverud, *On the Demand for Liability Insurance*, 72 TEX. L. REV. 1629 (1994), Steven W. Pottier & Robert C. Witt, *On the Demand for Liability Insurance: An Insurance Economics Perspective*, 72 TEX. L. REV. 1681 (1994), Alexander Fink & Mark Pingle, *Kidnap insurance and its impact on kidnapping outcomes*, 160 PUBLIC CHOICE 481 (2014) and Christopher Parsons, *Moral Hazard in Liability Insurance*, 28 GENEVA PAPERS ON RISK AND INS. ISSUES AND PRACTICE 448 (2003), which we discuss *infra*. Clendenin, *supra* note 8 makes similar arguments with respect to kidnapping insurance.

²⁹ There is evidence that supports the existence of this kind of moral hazard. Alma Cohen & Rajeev Dehejia, *The Effect Of Automobile Insurance and Accident Liability Laws On Traffic Fatalities*, 47 J. L. & ECON. 357 (2004) (finding that no-fault insurance laws increase accident risk).

Third party moral hazard is related to—but distinct from—insurance fraud. Arson constitutes insurance fraud, for example, but does not meet the definition of third party moral hazard. Kidnapping is not insurance fraud, but it may be subject to third party moral hazard; the same can be said for drug companies’ co-pay coupons, discussed *infra*, and the reduced incentives for private monitoring caused by the de facto insurance of “too big to fail” banks.³⁰

It is also important to appreciate that third party moral hazard is not necessarily linked to who is buying the insurance. Some of our examples can best be understood as third party insurance, in which the policyholder purchases coverage against losses that she imposes on others: traditional liability insurance is a classic example. Others are so-called first party insurance, where the insured buys coverage for losses to herself (for example, health and property-casualty insurance).

Third party moral hazard is important for at least four reasons. First, the presence of third party moral hazard negates the claim that full insurance is necessarily welfare-enhancing. It is well known that full insurance is not optimal when the risk being insured against is controlled or influenced by the insured.³¹ The same logic applies where risk is partially determined by the behavior of third parties: if insurance generates any added incentives for risk-creation, welfare analysis must take these additional insurance-engendered risks into account as a social cost of insurance. This is something that standard analysis has completely failed to do.

Importantly, the magnitude of third-party moral hazard costs may be large relative to those caused by first-party moral hazard, even when most people are honest. Most third-party moral hazard involves deliberate loss creation, and the damage done by such conduct can easily outweigh the losses from mere insurance-induced negligence: The modest additional negligence of many may be less harmful than the deliberate loss-causing activity of a few.

³⁰ Although this Article is primarily concerned with intentional behavior by third parties in the presence of insurance, third-party moral hazard is not limited to intentional behavior; the concept is broad enough to encompass insurance-induced third party negligence as well. We are grateful to Eyal Zamir for pointing this out.

³¹ As Kenneth Arrow has famously pointed out:

[C]ompetitive insurance markets will yield optimal allocation [only] when the events insured are not controllable by individual behavior. If the amount of insurance payment is in any way dependent on a decision of the insured as well as the state of nature, then the effect [of insurance] is very much the same as any excise tax and optimality will not be achieved [...] by the competitive system.

Kenneth J. Arrow, *The Economics of Moral Hazard: Further Comment*, 58 AMER. ECON. REV. 537 (1968).

A second reason to care about third party moral hazard is that it is not easily handled by the methods insurers have developed to limit its first-party cousin. The standard recipe for combatting traditional moral hazard—and the optimal method for doing so, according to economic theory—is risk-sharing in the form of a deductible.³² When conventional moral hazard is a problem, insurance contracts will deliberately leave some of the risk with the insured policyholder, giving her some incentive (“skin in the game”) to take loss-avoiding precautions. But the size of the deductible paid by the policyholder is of no consequence to the uninsured kidnapper or fraudster.

A third reason to care about third party moral hazard is that the techniques that can be used to control it are themselves costly, and these costs will be passed on to insurance buyers, making them pay more for insurance.³³ Like any other insurer expense, detecting and combating third party moral hazard drives a wedge between the actuarially fair premium and the price consumers actually have to pay. In turn, this reduces the demand for insurance, limits the efficacy of risk-spreading, and can even induce follow-on selection effects. So in addition to the actual costs of third party moral hazard, there are the direct costs of combating it, and spillover effects on insurance consumers and the industry as a whole.

Finally, victim precautions against third party moral hazard may have different efficiency consequences from those taken against conventional risks. Human-engendered risks, including third party moral hazard, have a strategic aspect that naturally-occurring misfortunes lack. Hurricanes do not decide where to strike based on how flimsy the housing stock is, but kidnappers presumably *do* take potential targets’ precautions into account when choosing their victims.³⁴ When precautions can divert harmful activity without reducing *overall* risk, social and private benefits will diverge. When A builds a higher wall to deter kidnappers, and as a result they end up kidnapping B instead, the wall will have helped A, but only by diverting risks somewhere else—it yields little or no gain to society. Private efforts to deter many human-engendered strategic risks—even if successful at the individual level—are therefore not as socially-beneficial as they appear to be.

³² The so-called “theorem of the deductible” states that “[i]f an insurance company is willing to offer any insurance policy against loss desired by the buyer at a premium which depends only on the policy’s actuarial value, then the policy chosen by a risk-averting buyer will take the form of 100 percent coverage above a deductible minimum.” Kenneth Arrow, *supra* note 10 at 969. Besides deductibles, there are many other well-known strategies for controlling conventional moral hazard, but most are ineffective against third party moral hazard. For discussion, *see* Part III, *infra*.

³³ In insurance parlance, the difference between the pure risk premium and the price charged to consumer is called the insurance “load.”

³⁴ The displacement/diversionary effects of insurance in the context of human-caused harms were first noted by Jack Hirshleifer, *War Damage Insurance*, 35 REV. ECON. & STAT. 144 (1953).

For these reasons, third party moral hazard presents a formidable challenge to insurers, lawmakers and society at large. Importantly, our characterization of the unique features of third party moral hazard provides a blueprint for how the problem should be addressed, which leads us to the normative contribution of this Article. We propose a three-pronged response to the problem. First, insurers are not completely helpless in the face of third-party moral hazard. Insurance contracts can be used to ameliorate the problem. True, insureds do not control the actions of third parties, but they can take precautions to reduce their vulnerability to intentional actions by strangers. For example, insurers can, and in some countries do, require or incentivize insureds to install dash cameras as part of the insurance contract. Dash cams don't just track the actions of insureds; they also monitor the activities of those who interact with them. Individual insurance companies cannot bear the high costs of developing preventive technologies on their own, and must rely on the technology market for help. As is often the case, the development of monitoring technologies and preventive devices may be aided by regulatory actions.

This brings us to the second intervention. Supra-contractual methods are required to deter the behavior of third-party risk-creators. The problem requires action by police forces or regulators. Criminal sanctions and punitive damages are necessary to achieve effective deterrence of intentional risk- or loss-causing behavior.

Finally, we advocate using *qui tam* suits to combat third party moral hazard. Filed by a single plaintiff on behalf of many, *qui tam* suits can deter risk- and loss-causing behavior when insurers may not have an incentive to monitor or to sue by encouraging reporting and actions by members of the public. And they can accomplish this without unduly empowering insurers in disputes with policyholders, while simultaneously disrupting the loss-causing enterprise.

The rest of this Article unfolds in three parts. In Part I, we document the phenomenon of third party moral hazard across a wide range of insurance settings, analyze its scope and assessing its social costs. In Part II, we investigate the causes of the phenomenon and suggest four different dynamics that can explain why it is so prevalent. In Part III, we delve into potential policy responses to the problems posed by third party moral hazard. While insurers have an array of mechanisms for controlling *first* party moral hazard, we show that most of those mechanisms cannot resolve the problem of losses caused by third parties. We then offer a comprehensive set of technological, criminal and procedural interventions that can address the problem more effectively.

I. THIRD PARTY MORAL HAZARD IN ACTION

In this Part, we discuss the existence and empirical significance of third party moral hazard in several domains of insurance. Since the phenomenon has largely managed to escape the probing gaze of scholars and has not been systematically analyzed to date, it is difficult to assess the extent of third party moral hazard.³⁵ Moreover, since most insurance data are kept in the hands of insurers and much of third party moral hazard is illegal or morally dubious, it is impossible to pin down with any degree of precision the cost it imposes on society. Still, we offer abundant evidence that the phenomenon is worth paying attention.

A. Liability Insurance

1. General Considerations and Welfare Analysis

Liability insurance pays others (third parties) for losses that an insured policyholder has imposed on them and for which the insured could be held legally responsible. By virtue of this structure, liability insurance is an obvious place to look for third party moral hazard, since it directs funds not to policyholders themselves, but to those claiming to have been injured by them.

We stress that in the context of liability insurance, third party moral hazard has ambiguous welfare consequences.³⁶ In standard models of liability insurance, it is implicitly assumed that all and only those plaintiffs with meritorious claims bring suit. From that baseline, any increase in litigation generated by the presence of insurance is welfare-reducing, since by assumption, the additional lawsuits would be without merit.

But in a world where information is incomplete, lawsuits are expensive to bring, defendants may be judgment proof, capital markets are imperfect, courts sometimes make errors, plaintiffs are risk averse, and there are strong social norms against complaining, not everyone

³⁵ But see sources cited *supra* note 28.

³⁶ A major theme of KENNETH S. ABRAHAM, *THE LIABILITY CENTURY* (2008) is that liability insurance actually makes the tort system possible by creating incentives for injured victims to sue. Without it, there would be very little reward for successful litigants, and no reason to bring even meritorious suits.

who is injured will actually choose to bring a lawsuit.³⁷ (Of course, none of these considerations preclude those who have *not* actually been injured from filing as well.³⁸)

If introducing liability insurance increases the number of *meritorious* lawsuits brought, insurance-induced litigation would presumptively be welfare-enhancing. This is a key normative difference between third party moral hazard in litigation and, for example, kidnapping. The optimal amount of kidnapping is zero, so all insurance-induced kidnaps are welfare-reducing. But there are almost certainly “good” lawsuits that are never actually filed. As a result, insurance-induced litigation may be welfare-enhancing (or reducing), depending on whether it generates more good suits than bad ones, and on the relative costs and benefits of each. Ultimately, it is the net effect of liability insurance that is relevant for welfare analysis, and that effect has an ambiguous sign.

Liability insurance can create third party moral hazard if it raises the expected return to filing a claim.³⁹ There are several ways this could occur. The simplest story is based on deep pockets and wealth constraints: liability insurance will often allow successful claimants to collect more than would be possible if injurers had to pay out of their own pockets.⁴⁰ Suppose X is accused of causing \$100,000 in harm, but has wealth of only \$10,000. A lawsuit costs \$5,000 to bring and \$5,000 to defend, and has a 10 percent chance of success. In the absence of insurance, the suit has an expected value to the plaintiff of

$$EV = 10\% \times (\$10,000 - \$5,000) + 90\% \times 0 - \$5,000 = -\$4,500.$$

³⁷ See generally, Richard L. Abel, *The Real Tort Crisis—Too Few Claims*, 48 OHIO ST. L. J. 443 (1987); William L.F. Felstiner, Richard L. Abel & Austin Sarat, *The Emergence and Transformation of Disputes: Naming, Blaming, Claiming...*, 15 L. & SOC. REV. 631 (1980-1981). For example, one careful study of medical malpractice found that of 1047 patients sampled at one academic hospital, 17.7 percent (185) experienced at least one serious adverse event (defined as causing temporary physical disability, or worse) during their stay. But only 1.2 percent of patients (13) made any claim for compensation. That amounts to only 7% of those who were injured. Lori B. Andrews et al., *An Alternative Strategy for Studying Adverse Events in Medical Care*, 349 LANCET 309, 311 (1997).

³⁸ Sachin S. Pandya & Peter Siegelman, *Underclaiming and Overclaiming: Bringing Law Back Into the Dispute Pyramid*, 38 L. & SOC. INQ. 836 (2013).

³⁹ We are unaware of any theoretical treatment of the issues. Steven Shavell, *supra* note 23 pioneered the analysis of moral hazard in liability insurance, but does not discuss whether insurance can increase the volume of false claims.

⁴⁰ This is just the flip-side of the well-known judgment proof problem that occurs when the harm that injurers cause is greater than their wealth, which acts as an upper bound on their ability to pay. Steven Shavell, *The Judgment Proof Problem*, 6 INT'L REV. L. & ECON. 45 (1986).

If instead the injurer is fully insured (including defense costs), then the expected value of the lawsuit becomes \$5,000. While plaintiffs may find that negative expected value suits are worth bringing in some circumstances,⁴¹ the return from pursuing litigation is higher in the presence of insurance than without it (other things equal).

Insurance could also generate an increase in (false) claims of liability if insurers have less incentive or ability to detect such claims than would an uninsured individual defendant. And under some circumstances, insurers might be willing to spend less to defend a lawsuit (or would be more willing to settle) than an individual defendant. In the following paragraphs, we demonstrate this dynamic in action in the context of Directors' & Officers' liability insurance and no-fault automobile insurance.

2. Directors & Officers (D&O) Liability Insurance

Directors and Officers ("D&O") liability insurance protects corporate officials, as well as the corporation itself, against potential liability arising from negligent actions and omissions that harm the corporation.⁴² D&O liability insurance pervades the corporate world⁴³ and covers in virtually all public corporations in U.S. and Canada.⁴⁴ While D&O insurance is purchased by corporations, it primarily benefits corporate officials by providing them reimbursement for costs and payments incurred in litigation against them. By law, D&O liability insurance is only applicable to non-intentional breaches of the duty of care. As Tom Baker and Sean Griffith explain, it excludes "claims involving fraud or personal enrichment, claims either noticed or pending prior to the commencement of the policy period and claims between insured persons."⁴⁵

Although D&O liability insurance also protects corporate officials from suits brought against them by the corporation, its principal effect is to protect directors and officers from derivative

⁴¹ STEVEN SHAVELL, FOUNDATIONS OF THE ECONOMIC ANALYSIS OF LAW 419-23 (2004).

⁴² See Tom Baker & Sean J. Griffith, *The Missing Monitor in Corporate Governance: The Directors' & Officers' Liability Insurer*, 95 GEO. L.J. 1795, 1801 (2007) ("D&O insurance protects corporate officers and directors and the corporation itself from liabilities arising as a result of the conduct of directors and officers in their official capacity.").

⁴³ Tom Baker & Sean Griffith, *Predicting Corporate Governance Risk: Evidence From the Directors' and Officers' Liability Insurance Market*, 74 U. CHI. L. REV. 487, 487 (2007) (noting that "[n]early all public corporations purchase D&O policies.").

⁴⁴ TILLINGHAST TOWERS PERRIN, 2005 DIRECTORS AND OFFICERS LIABILITY SURVEY, 20 fig. 21 (2006).

⁴⁵ Baker and Griffith, *supra* note 39, at 1804-05.

suits brought by shareholders.⁴⁶ In principle, the duty of care is owed to the corporation, and if it is breached by an official, the corporation may sue her. Corporations, however, are reluctant to sue their officials. To remedy this problem, corporate law empowers individual shareholders to sue on the corporation's behalf. For this reason, such suits are known as derivative shareholders' suits. By contrast to the corporation, individual shareholders have no qualms about suing corporate officials. On the contrary, they have strong monetary incentives to file such suits.⁴⁷ Hence, D&O liability insurance primarily covers directors and officers against the risk of monetary liability arising from suits brought by shareholders.⁴⁸ In addition to sheltering directors and officers from derivative suits that stem from breaches of the duty of care, D&O liability insurance also protects them in the case of securities class actions.

Champions of D&O liability insurance contend that it lowers "the cost of compensating risk-averse directors and officers and encourages them to take appropriate business risks."⁴⁹ Furthermore, they emphasize the salutary effects of insurance on firm management and corporate governance. As Clifford Holderness wrote:

Monitoring services provided by the insurance convey distinct benefits to both the insurer and the client company's shareholders. They reduce the insurer's exposure, and they encourage directors and officers to act in the shareholders' interests. Moreover, these services, which supplement other monitoring efforts, will be provided even if insurance shifts no risk beyond what is shifted by indemnification, because the policies reimburse companies for their indemnification payments.⁵⁰

Detractors of D&O liability insurance maintain "that liability insurance largely nullifies the disciplining potential of litigation, causing directors and officers to be less attentive to their duties to shareholders."⁵¹

⁴⁶ Baker and Griffith, *supra* note 40, at 487.

⁴⁷ See Giora Shapira, *Shareholder in Respect of a Loss Suffered by the Company: The Problem of Overlapping Claims and "Reflective Loss" in English Company Law*, 37 INT'L LAW. 137, 137 (2003) (describing the legal standard for bringing individual shareholder actions as "not farfetched").

⁴⁸ John E. Core, "The directors' and officers' insurance premium: An outside assessment of the quality of corporate governance," 16 J. L. ECON. & ORG. 449, 450 (2000) (noting that "D & O insurance covers the monetary costs of lawsuits against directors and officers by shareholders or third parties.).

⁴⁹ Clifford G. Holderness, *Liability Insurers as Corporate Monitors*, 10 INT'L REV. L. & ECON. 115, 115-116 (1990).

⁵⁰ *Id.* at 118.

⁵¹ *Id.* at 116. This is, of course, a form of conventional (first-party) moral hazard: insured directors face less or no liability risk, and hence have less incentive to be careful to avoid harms to others.

Naturally, the key question for present purposes is whether the existence of D&O liability insurance creates a third party moral hazard in the form of enhanced litigation. At first blush, it seems clear that the answer is yes.⁵² After all, the prevalent belief among legal scholars is that derivative litigation rates are higher in the U.S. than in other countries, due, in part, to the broad availability of D&O liability insurance. Echoing this conventional wisdom, Dan Puchniak listed “the high levels of directors and officers (D&O) liability insurance,” as one of the principal factors that contribute to the high rate of derivative litigation in the U.S.⁵³ Studies from other countries seem to suggest the same conclusion. For example, Mark West studied the spike in derivative litigation in Japan in the 1990s. West suggested that the presence of insurance was the main driver of the litigation trend.⁵⁴ He suggested, however, that the causal mechanism was not necessarily third party moral hazard, but rather standard moral hazard: corporate directors and officers became less circumspect in the fulfillment of their duties once they knew they were insured.⁵⁵

Economists have expressed the same view. Sanjai Bhagat, James A. Brickley & Jeffrey L. Coles wrote that “[w]ithout insurance, in a judgment against the manager damages may easily exceed the manager's wealth. The derivative suit has somewhat limited value if it cannot achieve its purpose: the reimbursement of the corporation for losses due to negligence or malfeasance.”⁵⁶ Similarly, Maria Gutierrez noted that “[w]hen the director's wealth is low, the incentives for the shareholders to sue can be maintained only through the adoption of an insurance policy (that guarantees the shareholders will receive the full amount of the damage award).”⁵⁷

A careful examination of the relationship between the presence D&O insurance and derivative litigation rates reveals a more nuanced picture, however. The high rate of derivative litigation in the U.S., relative to other countries, cannot prove, on its own, that D&O liability insurance *generates* a third party moral hazard problem. Nor can the fact that companies with high D&O liability insurance coverage get sued more often. There are three possible explanations for the

⁵² See generally Parsons *supra* note 25 (discussing theoretical indicia of third party moral hazard in D&O liability insurance schemes).

⁵³ Dan W. Puchniak, *The Derivative Action in Asia: A Complex Reality*, 9 BERKELEY BUS. L. J. 1, 17 (2012).

⁵⁴ Mark D. West, *Why Shareholders Sue: The Evidence from Japan* 30 J. LEGAL STUD. 351, 375-76 (2001).

⁵⁵ *Id.* at 376.

⁵⁶ Sanjai Bhagat, James A. Brickley & Jeffrey L. Coles *Managerial Indemnification and Liability Insurance: The Effect on Shareholder Wealth* 54 J. RISK & INS. 721 (1987).

⁵⁷ Maria Gutierrez, *An Economic Analysis of Corporate Directors' Fiduciary Duties* 34 RAND J. ECON. 516, 531 (2003). See also Chen Lin, Michah S. Officer & Hong Zou, *Directors' and Officers Liability Insurance and Acquisition Outcomes*, 102 J. FIN. ECON., 507 (2011) (noting that D&O liability insurance “can attract frivolous shareholder suits”).

fact that firms with D&O liability insurance are sued more often. The first is standard moral hazard. Directors and managers who have insurance tend to be less diligent in the performance of their obligations. The second is that firms with high coverage are more poorly managed to begin with. It is for this reason that such firms spend a lot on D&O liability insurance. This is a classic adverse selection story:⁵⁸ the higher premia reflect the higher risk, and the subsequent lawsuits merely prove that point. The third explanation is third-party moral hazard.

It should be noted that the three explanations are not mutually exclusive; they can clearly co-exist and, as we will show, there are empirical studies that provide support for each. For example, a recent study by Stuart Gillan and Christine Panasian reports that firms with high D&O liability insurance are indeed more likely to be involved in litigation. In exploring the root cause for the correlation, Gillan and Panasian arrive at the tentative conclusion that “the association we find is more likely attributable to opportunism or moral hazard in the managers’ actions.”⁵⁹ The article did not consider the third party moral hazard explanation, however.

A study by John Core that used data on Canadian corporations also reported significant correlation between D&O insurance premia and “the quality of firms’ governance.”⁶⁰ In analyzing the reasons for this finding, Core endorses the second explanation, i.e., that higher D&O liability insurance is indicative of poor governance structures. Here, too, we found no reference to the third party moral hazard hypothesis.

Other empirical studies are consistent with the third party moral hazard hypothesis. Tom Baker and Sean Griffith examined the elements that affect settlements of class actions. They use a qualitative research methodology, i.e., interviews with industry participants responsible for settling securities cases. While Baker and Griffith do not focus on third party moral hazard or even mention the term, the answers to their questions suggest that industry participants view D&O insurance as a critical element that shapes their litigation strategy. As one respondent, a claims head, asserted: “I think it is easier to get money out of an insurance

⁵⁸ Empirical tests for adverse selection often rely on the theory’s prediction of a positive correlation between an insured’s risk of loss and the volume of insurance coverage she purchases. The so-called “positive correlation test.” For a survey, see Alma Cohen & Peter Siegelman, *supra* note 21.

⁵⁹ Stuart L. Gillan & Christine A. Panasian, *On Lawsuits, Corporate Governance, and Directors’ and Officers’ Liability Insurance*, 82 J. RISK & INS. 793, 805 (2015).

⁶⁰ Core, *supra* note 45 at 476. Accord John E. Core, *On the corporate demand for directors’ and officers’ insurance*, 64 J. RISK & INS. 63, 84 (1997) (reporting that “firms with greater litigation risk and higher distress probability are more likely to purchase D&O insurance and carry higher limits).

carrier than it is out of an insured. Why? Because it is a third party's money."⁶¹ Baker and Griffith further reported that another respondent, a plaintiff's lawyer, was far more specific about the effect of D&O liability insurance on plaintiffs' motivation to sue, explaining that plaintiffs' lawyers "sue for insurance."⁶²

Finally, in a 2018 article, Donelson, et al. reported a strong correlation between firms' levels of D&O insurance and their likelihood of being involved in securities litigation.⁶³ The study takes advantage of a unique feature of New York law that mandates disclosure of D&O insurance premia. No such requirement exists in the law of other states. The study then compares the exposure to securities litigation of New York firms and non-New York firms. Donelson et al. note that information about D&O premia have two possible effects on litigation: First, high premia can signal to lawyers a potential for high settlement rates. Second, high premia may indicate that the insurer thought that the firm represented a high legal risk. Analyzing a large database of class action brought against firms between 1998 and 2010, they found that "the relation between premiums and litigation is stronger for firms incorporated in New York, compared to firms incorporated elsewhere. As this relation is based on premium levels (rather than disclosure presence), this implies that the disclosure content affects litigation."⁶⁴

Donelson et al. suggested that their "results provide a more nuanced interpretation of prior D&O insurance research."⁶⁵ In particular, they distinguished their findings from those of Gillan and Panasian, explaining that knowledge of D&O liability premia "may partially drive the relation between premiums and litigation."⁶⁶ Furthermore, they estimated that if D&O premia were known in all states, it would have led to an increase of 12 to 19 percent in securities class-action litigation over the period they studied.⁶⁷ The authors also highlighted the potential costs of non-meritorious lawsuits, explaining that "[i]n addition to potential costs

⁶¹ Tom Baker & Sean J. Griffith, *How The Merits Matter: Directors' and Officers' Insurance and Securities Settlements* 157 U. PA. L. REV. 755, 806-07 (2009).

⁶² *Id.* at 805.

⁶³ Dain C. Donelson, Justin J. Hopkins & Christopher G. Yust, *The Cost of Disclosure Regulation: Evidence from D&O Insurance and Non-Meritorious Securities Litigation*, 23 REV. ACC. STUD. 528 (2018).

⁶⁴ *Id.* at 530. The authors also point out that although "the filing of cases based on disclosed premiums is inefficient for the overall legal system, it does not appear to be irrational for plaintiffs' lawyers." *Id.*

⁶⁵ *Id.* at 531.

⁶⁶ *Id.*

⁶⁷ *Id.* at 531. "Applying the higher dismissal rate of New York firms to the broader Compustat/CRSP sample projects to between approximately 160 to 260 additional nonmeritorious suits that might have been filed over the 13-year sample period, which is equivalent to 12% to 19% total securities class actions over this period."

of non-meritorious litigation, both in terms of lawyer fees, nuisance settlements for cases that survive a motion to dismiss, and lost managerial time, excessive selection of non-meritorious cases would undermine the credibility of the U.S. securities litigation system.”⁶⁸

In light of these findings, it appears that the availability of D&O liability insurance has played a role in fomenting derivative litigation against corporate executives. It is likewise clear that the risk of litigation is positively correlated with coverage amounts. Donelson et al. suggest that the *non-meritorious* claims arising from third party moral hazard threaten the integrity of our securities system. We stop short of endorsing this conclusion, but we believe that the problem is real.

3. No-Fault Automobile Insurance

No-fault automobile insurance is designed to simplify the payment of lower-value claims and reduce claims-processing costs. Rather than litigating who was at fault in smaller claims, no-fault makes a policyholder’s own insurer responsible for compensating him or her. In New York, for example, medical and other expenses totaling less than \$50,000 are covered by each insured’s (mandatory) Personal Injury Policy (PIP). More serious injuries can be litigated in the usual manner, with the injurer’s insurer responsible for compensating the victim.

Even though no-fault operates as first-party insurance, it offers substantial opportunities for third party moral hazard. The extent of the problem is hard to assess. Data are difficult to obtain and—if they are from insurers—almost impossible to verify. But there is abundant anecdotal evidence demonstrating elaborate and well-organized schemes to falsify and exaggerate claims, run as sophisticated criminal enterprises in several states.⁶⁹

According to testimony by a Michigan doctor who ran an MRI facility outside of Detroit, for example, a prominent “TV lawyer,” Mike Morse, repeatedly leaned on him to exaggerate the severity of injuries detected in MRI scans of patients referred to him by Morse.⁷⁰ The doctor explained that Morse pressured him to “alter[] MRIs or over-read

⁶⁸ *Id.*

⁶⁹ For a book-length treatment of one such organized scheme, see KEN DORNSTEIN, ACCIDENTALLY, ON PURPOSE: THE MAKING OF A PERSONAL INJURY UNDERWORLD IN AMERICA (1998) (describing the “Friends of the Friendless,” a gang in California that specialized in staging auto accidents to collect from insurers).

⁷⁰ John Wisely & JC Reindl, *Doctor Claims Morse Demanded Kickbacks*, DETROIT FREE PRESS, July 17, 2017, <https://www.freep.com/story/news/2017/07/18/doctor-claims-mike-morse-demanded-kickbacks/485477001/>.

to make them look more abnormal.⁷¹ I understood he wanted reads with abnormal results to increase the value of his clients' bodily injury claims, and his own fees ...⁷² A network of chiropractors and physical therapists was also used to overbill for treatments and make and receive referrals.⁷³

A similar pattern was documented in a criminal complaint against more than two dozen defendants filed by the United States Attorney for the Southern District of New York in 2015. Quoting the indictment:

In order to take advantage of the patient-friendly provisions of the [New York] No-Fault Law, numerous medical clinics were created solely to defraud insurance companies under the No-Fault Law (the "No-Fault Clinics"). While purporting to be legitimate medical care clinics specializing in treating the Patients, the No-Fault Clinics were, in fact, medical fraud mills that routinely billed automobile insurance companies under the No Fault Law for medical treatments that were either (i) never provided and/or (ii) unnecessary, because the Patients did not medically need the treatments.⁷⁴

Although New York law requires that medical clinics be "owned, operated and controlled" by a licensed medical practitioner (a doctor), the defendants apparently hired doctors to serve as fronts for the clinics, while secretly owning and controlling the operations of the clinics themselves.⁷⁵ The indictment goes on to describe additional layers of fraud: the clinics would provide referrals for "excessive and unnecessary medical treatments" to lower-level entities called "Modality Clinics." These clinics provided further fraudulent medical treatments and supplies (including "acupuncture, chiropractic medicine, physical therapy, neurology, psychology, magnetic resonance imagings, x-rays, range of motion, outcome assessment, functional capacity, pain management, orthopedics, audiology, manipulation under anesthesia, and durable medical equipment"⁷⁶) for which they billed insurers and paid cash kickbacks for

⁷¹ Gunabalan Aff., ¶ X, July 10, 2017 available at <https://www.michiganautolaw.com/wp-content/uploads/2017/07/Affidavit-%E2%80%93-Ram-Gunabalan-MD-State-Farm-vs-Point-PT-E-Dist.pdf>

⁷² *Id.* at 8.

⁷³ *Id.*

⁷⁴ Upwards of two dozen co-defendants, including Yuriy Zayonts, a/k/a "KGB," and Alexander Sandler, a/k/a "Sasha," a/k/a "Nose." The indictment was filed under seal and captioned SI 12 Cr. 171 (JPO) (no date), available at <https://www.justice.gov/sites/default/files/usao-sdny/legacy/2015/03/25/Zemlyansky%2C%20Mikhail%20et%20al.%20-%20Indictment.pdf>.

⁷⁵ *Id.* at 5.

⁷⁶ *Id.* at 6-7.

referrals to the originating clinics.⁷⁷ The no-fault clinics also employed “runners” (recruiters) who were paid \$2,000-\$3,000 per patient brought into the clinic (depending on the quality of the accident report filed with the patient’s injury).⁷⁸

This was not the only such organized scheme. A 2018 article in the New York Times reported that “countless phony companies were cropping up [in the early 2000’s] to exploit so-called no-fault auto insurance laws in New York.”⁷⁹ According to the news story:

The no-fault insurance schemes, which were often masterminded by organized crime figures from the former Soviet Union, all followed a basic template. Staged or exaggerated car accidents were used to generate a tidal wave of “patients.” Transportation companies then took the patients—often low-level criminals—to what in many instances were sham medical clinics, diagnostic testing offices, and acupuncture and physical therapy offices. Billing companies were created to collect money from insurers, and management companies then siphoned the funds out to the scheme’s operators. Some operators were so bold that they sued insurers that had stopped paying after they realized they were being defrauded.⁸⁰

In the aftermath of a thorough investigation, hundreds of indictments were brought against physicians, business proprietors and other involved parties.

Estimates of the magnitude of third party moral hazard in no-fault insurance vary substantially. A widely-cited insurance industry report put no-fault fraud losses in New York at \$230-\$240 million in 2009.⁸¹ But others have disputed that estimate, and the details of the calculation never seem to have been made public, so it is difficult to verify.⁸²

⁷⁷ *Id.* at 6-7.

⁷⁸ *Id.* at 7.

⁷⁹ William K. Rashbaum, Danny Hakim, Brian M. Rosenthal, Emily Flitter & Jesse Drucker, *How Michael Cohen, Trump’s Fixer, Built a Shadowy Business Empire*, N.Y. TIMES, May 5, 2018 at A1, <https://www.nytimes.com/2018/05/05/business/michael-cohen-lawyer-trump.html>.

⁸⁰ *Id.*

⁸¹ Insurance Information Institute, *No-Fault Insurance Fraud in New York State is Ramping Up Premiums* (no date available) available at <https://www.iii.org/article/no-fault-insurance-fraud-new-york-state-ramping-premiums>.

⁸² According to one (admittedly partisan) source:

[t]he breadth of fraud, suggested by the industry, is simply exaggerated and untrue. . . . Indeed, even a cursory review of the industry statistics lead them to be questioned. For example, one industry-funded source claims that no-fault fraud cost \$240 million in 2009. . . . However, a simple multiplication of the total number of reported questionable claims to the Insurance Department last year by the average cost of the entire no-fault claim that is being discussed today actually equals to \$116 million, literally half of what is being asserted by the industry. And yes, while \$116 million in

According to the National Association of Insurance Commissioners, the industry's incurred losses on PIP policies in New York in 2009 amounted to \$1.6 billion.⁸³ So the \$240 million estimate for no-fault fraud (almost all of which is probably third party moral hazard) amounts to 15 percent of all losses; opponents have suggested that this is too high by a factor of 2, but even if we put the figure at 7.5 percent, it translates to a loss of \$120 million.

B. Health Insurance

The tangled relationships among insurers, individual policyholders, drug companies, doctors, and hospitals are rife with examples of third parties creating or exaggerating expenses so as to take advantage of what insurance will pay for. Indeed, the malign effects of third-party moral hazard in health care are the major theme of a recent 550-page book by legal scholars Charles Silver and David Hyman.⁸⁴ As a former Dean of Harvard Medical school put it in the forward to their book, the "root cause[]" of waste and excessive spending in healthcare is "the . . . overreliance on insurance and other forms of third party payment" to cover medical expenses.⁸⁵ In Silver and Hyman's view, health care is all about third party moral hazard writ large: "health care is expensive *because* it is insured. . . . Insurance makes healthcare more expensive than it would be if people paid for it themselves."⁸⁶

Economists have long recognized the potential for conventional moral hazard in health care.⁸⁷ It has taken the economics profession a long time, however, to get past its fixation on the idea

suspect [sic] fraud sounds like and is a lot, it . . . [amounts to] roughly 1 percent of [the \$9.9 billion in] premium dollars collected by NY auto insurers [in 2009].

Hearing on Ways to Reduce the Incidents of No-fault Auto Insurance Fraud before York State Senate Standing Committee on Insurance (2011) (statement of Stuart Israel (President, New Yorkers for FAIR Auto Reform)) <https://www.nysenate.gov/calendar/public-hearings/april-26-2011/examine-ways-reduce-incidence-no-fault-auto-insurance-fraud>.

⁸³ NAIC, *Auto Insurance Database Report*, 108 Table 17B, 108 (2009-10),

⁸⁴ CHARLES SILVER & DAVID HYMAN, *OVERCHARGED: WHY AMERICANS PAY TOO MUCH FOR HEALTH CARE* (2018).

⁸⁵ Jeffrey S. Flier, *Forward*, in *OVERCHARGED: WHY AMERICANS PAY TOO MUCH FOR HEALTH CARE*, *Id.* at xx.

⁸⁶ Silver and Hyman, _____ at 295 (emphasis in original). Of course, even if it is true, that is not the end of the story—insurance clearly has substantial benefits from risk-spreading and access-to-care that cannot be ignored.

⁸⁷ In fact, the first formal economic analysis of moral hazard was in the context of medical care. Arrow, *supra* note 10.

that people with insurance go to the doctor too often,⁸⁸ and to start thinking about the issues that arise because third parties—doctors, hospitals, drug companies, and providers of ancillary services—have figured out how to squeeze funds from insurers in a more-sophisticated and less-blatant version of the automobile insurance scam with which we began this Article.⁸⁹

Perhaps the best indicator of the magnitude of third party moral hazard in health care is that in writing the chapter on health care fraud, Silver and Hyman decided to “ignore any [examples] that didn’t involve at least \$500 million in ill gotten gains[, and] [e]ven so, . . . had more material than [they] could use.”⁹⁰

Silver and Hyman argue that the solution to third party moral hazard problems is increased reliance on so-called consumer-driven healthcare. But one needn’t agree with their proposed solution to acknowledge their diagnosis of (part of) the problem. In the next sections, we turn our attention to two specific examples of third party moral hazard. There are many more.

⁸⁸ There is certainly evidence for the existence of conventional moral hazard, dating from a pioneering experiment conducted by the RAND Corporation in the early 1970’s. See W. G. Manning *et al.*, *Health Insurance and The Demand For Medical Care: Evidence From A Randomized Experiment* 77 AMER. ECON. REV. 251 (1987). More recently, Liran Einav & Amy Finkelstein, *Moral Hazard in Health Insurance: What We Know and How We Know It*, 16 J. EUR. ECON. ASSOC. 957 (2018), conclude that there is strong empirical evidence for moral hazard in health care: “individuals increase their healthcare utilization when the price they have to pay for it is lower.” But these effects turn out to be quite trivial compared to the other sources of waste in health care. Moreover, some insurance-induced demand for healthcare is actually welfare-enhancing. We discuss this issue in more detail in part II.A, *infra*.

⁸⁹ This is somewhat ironic, since it is precisely such non-market institutions and norms that Kenneth Arrow suggested—in response to Mark Pauly’s critique of his pioneering article—could serve as vital checks on conventional first-party moral hazard in health care. Arrow points out that conventional moral hazard leads patients to demand more care than is optimal. To prevent such overuse, he notes, it makes sense to ration care; and one way to accomplish that is to rely on the professional ethics of physicians not to prescribe frivolously expensive cost of treatment, at least where the gain is primarily in comfort or luxury rather than in health proper. . . . One of the characteristics of a successful economic system is that the relations of trust and confidence between principal and agent are sufficiently strong so that the agent will not cheat even though it may be “rational economic behavior” to do so. Arrow, *supra* note 28, at 538.

⁹⁰ Silver and Hyman, *supra* note 80, at xvi.

1. Magnetic Resonance Imaging (MRIs)

Excessive use of medical imaging has been characterized as one of the largest sources of unnecessary procedures in US healthcare.⁹¹ As Horwitz et al. point out, imaging is painless to the patient and highly profitable for the provider; it also helps doctors avoid the possibility of litigation, all of which provide reasons for its overuse.⁹² The result is that even though “all relevant specialty society guidelines support initial management *without imaging* for patients with uncomplicated low-back pain, many physicians continue to order routine imaging without a clear clinical indication.”⁹³ And according to a recent survey, insurance is clearly implicated in the overuse of MRIs.⁹⁴

Distinguishing first-party moral hazard from third party moral hazard in this context is not completely straightforward. Some overuse of MRIs, and some of the failure to obtain them from the lowest-cost provider, can be attributed to patients themselves. A recent study demonstrates, for example, that even when given a price comparison tool, “[m]any patients [go] to very expensive providers when lower-priced options with equal quality are available.”⁹⁵ But the study also shows that patients overwhelmingly get their MRIs at the site their doctors recommend, even when the price is dramatically higher than at easily available

⁹¹ “Excessive imaging is one of the most common suggestions about potentially unnecessary procedures in the Choosing Wisely compendium of health care savings opportunities.” Jill R. Horwitz, Austin Nichols, Carrie Colla, & David M. Cutler, *Technology Regulation Reconsidered: The Effects of Certificate of Need on MRI Access, Quality, and Cost*, 1 (2016) (unpublished paper, on file with authors, citing Nancy E. Morden, et al, *Choosing Wisely – The Politics and Economics of Labeling Low-Value Services*, 370 N. ENGL J. MED. 589 (2014) (reporting results of surveys of medical specialists on which services are particularly low-value).

⁹² Horwitz et al, *id*, consider a situation where one state (e.g., Michigan) regulates MRI providers by requiring them to obtain a “certificate of need” (regulatory approval based on the absence of other nearby providers), while a neighboring state (Ohio) does not. They find that there are many more providers of MRI services located on the Ohio side of the Ohio/Michigan border than on the Michigan side. But that’s not all. Although the authors are careful to point out the limits of their findings, their evidence suggests that more unnecessary MRIs are being done in unregulated states. And since there are probably many unnecessary MRIs done in regulated states, we should be quite confident that MRI providers (in combination with doctors) are driving up costs by generating unneeded imaging.

⁹³ Sarah Jane Reed & Steven Pearson, *Imaging for Nonspecific Low Back Pain*, INSTIT. FOR CLINICAL & ECON. REV., 1, 4 (2015). [emphasis added]

⁹⁴ *Id.*

⁹⁵ Austin Frakt, *Why Don’t We Shop for Health Care? Doctors*, N.Y. TIMES, July 31, 2018 at B4 (quoting Yale health economist Zack Cooper).

alternatives.⁹⁶ And doctors associated with hospitals tend to recommend their own hospital's MRI service, although on average a hospital MRI costs more than twice as much as one provided at an imaging center (with no quality differential).

2. Copay Coupons for Branded Drugs

Health insurers have an obvious interest in incentivizing patients (and their doctors) to choose lower-cost generic drugs instead of branded drugs that are medically identical. One mechanism used to create such incentives has been to set a higher copayment by the patient if she chooses the branded drug instead of the generic alternative. As health economist Austin Frakt explains,

[L]et's say that I needed the brand drug Effexor XR, used to treat depression and anxiety disorders. It would cost me at least \$65 a month on my health insurance plan. It retails for about twice that amount, and the difference [i.e., another \$65] would be picked up by my insurer. But the generic version, Venlafaxine, would cost my insurer far less, and my co-payment would be only \$10 per month.⁹⁷

Manufacturers of branded drugs have figured out a way to subvert this incentive, however—copay coupons. The idea is simple. The patient is given a coupon that covers \$55 of the branded copay, so that she then faces the same net cost for the branded product as for the \$10 generic drug. Subsidizing consumers to the tune of a \$55 copay can be highly profitable for the manufacturer: in the above example, the seller makes an additional sale at \$130 by diverting the consumer from a generic drug, at the cost of the \$55 copayment, for a profit of \$75.

The effects of copay coupons are large and negative, according to a recent study: “[C]oupons increase branded sales by 60+ percent, entirely by reducing the sales of bioequivalent generics.”⁹⁸ Copay coupons do not simply divert customers from cheaper generic substitutes

⁹⁶ See Michael Chernew et al, *Are Health Care Services Shoppable? Evidence from the Consumption of Lower-Limb MRI Scans* (ISPS Working Paper No. 24869, 2018), available at <http://www.nber.org/papers/w24869>, last visited July 31, 2018. For example, in some markets, prices can differ by a factor of 7.5. Merely using the lowest priced MRI service that is no further away than the one they actually chose would save patients an average of 36%.

⁹⁷ Austin Frakt, *When a Drug Coupon Helps You But Hurts Fellow Patients*, N.Y. TIMES, September 25, 2017, <https://www.nytimes.com/2017/09/25/upshot/when-a-drug-coupon-helps-you-but-hurts-fellow-citizens.html>. Frakt is reporting on the original work of health economist Leemore Dafny and co-authors. See, Leemore Dafny, Christopher Ody, & Matt Schmitt, *When Discounts Raise Costs: The Effect of Copay Coupons on Generic Utilization*, 9 AMER. ECON. J. ECON. POL'Y 91 (2017).

⁹⁸ *Id.* at 91.

to branded alternatives, however. They also enable higher prices: the consumers' "cost with the coupon holds the consumers' prices fixed at a low level. That allows the manufacturer to raise the overall price without losing sales. This raises spending, too, but for the insurer."⁹⁹ According to the best recent evidence, copay coupons cause several billion dollars in additional spending per year.¹⁰⁰

Copay coupons are just a particularly compelling example of drug companies' exploitation of insurance to charge higher prices. As health economist David Besanko and co-authors demonstrate in a recent working paper, the presence of insurance has enabled manufacturers of oral chemotherapy drugs to raise prices; and the higher prices are greater than many estimates of the additional value they create for consumers.¹⁰¹

C. Kidnapping and Related Problems

1. Kidnapping and Insurance: Theory

The general economics of kidnapping has been the subject of considerable analysis, both empirical and theoretical.¹⁰² There is very little on the impact of insurance, however. A key finding of most theoretical models is that the number or frequency of kidnappings will depend on the average amount that victims are willing and able to pay. In other words, there is an upward-sloping supply of kidnaps, so that the higher the expected ransom, the greater the number of kidnappings.¹⁰³

The question of interest to us is whether the presence of insurance enhances victims' willingness or ability to pay ransoms. If so, the availability of insurance would likely cause

⁹⁹ Frakt, *supra* note 115.

¹⁰⁰ Dafny, *supra* note 90.

¹⁰¹ David Besanko, David Dranove, & Craig Garthwaite, *Insurance and the High Prices of Pharmaceuticals*, (National Bureau of Economic Research. Working Paper No. 22353, 2016) <https://www.nber.org/papers/w22353.pdf>.

¹⁰² Reinhard Selten apparently used kidnapping to motivate the idea of a sub-game perfect equilibrium in game theory, for which he was subsequently awarded a Nobel prize. See Marco Vannini, Claudio Detotto, & Bryan McCannon, *Ransom Kidnapping*, in JURGEN BACKHAUS, ED. *ENCYCLOPEDIA OF LAW & ECONOMICS* 5(2015) (citing Selten's 1976 unpublished working paper). Available at https://www.researchgate.net/publication/273574256_Ransom_Kidnapping; see also Alexander Fink & Mark Pingle, *supra* note 25.

¹⁰³ Vannini, *id.*, (summarizing conclusions of the Selten model of bargaining between kidnapper and victim). Of course, this is an "all else equal" result. And supply might be price-insensitive or "inelastic," but that is almost certainly a special case.

more kidnaps. Common sense would seem to suggest an affirmative answer. As Fink and Pingle point out:¹⁰⁴

The provision of kidnap insurance might have an effect on the probability that kidnappings are contemplated. For instance, a potential kidnapper might hear about a successful exchange of a victim for ransom that may have been facilitated with the aid of an insurance company, or a potential kidnapper might conclude from the presence of a kidnap insurance market that his potential victims are on average willing to pay more ransom compared to the situation when no kidnap insurance market exists.¹⁰⁵

Indeed, in Fink & Pingle's game theoretic model, "the existence of a competitive insurance market [always] increases the maximum [ransom] demand a family is willing to pay." The size of the supply-side response to this increase is left open, however.¹⁰⁶ And as we will discuss below, these results need not obtain in models that allow for certain institutional innovations.

2. Kidnapping & Insurance: Empirical Evidence

The available empirical evidence on whether the presence of insurance actually increases kidnappings is unfortunately quite weak, since it is virtually impossible to find exogenous changes in the availability of kidnap insurance that would be required to make a valid inference about its effects.¹⁰⁷ Venezuela, Colombia, and Italy have all banned kidnap insurance at one time or another,¹⁰⁸ but these legal interventions were much broader than merely limiting or banning insurance. That makes it difficult to assign responsibility for any

¹⁰⁴ Fink & Pingle, *supra* note 25 at 491. In addition to the quantity of kidnappings, insurance might also have a separate effect on average kidnap "severity" —for example, the fatality rate—discussed *infra*.

¹⁰⁵ *Id.* In their model, the positive effect of insurance on the volume of kidnapping occurs whenever "insurance increases [victims'] maximum ransom offer," which in turn depends on some technical conditions. Even if insurance increases total kidnappings, it might still reduce *fatal* kidnappings, since higher ransom payments "push[] [some victim] offers above the net willingness to kill of the marginal kidnapper, reducing the fraction of fatal kidnappings." *Id.* at 493. The net effect on the total volume of fatal kidnappings depends on the relative size of the kidnap-increasing and fatality-reducing effects.

¹⁰⁶ *Id.* at 490. As the authors point out, higher willingness to pay will not lead to an increase in kidnaps if all potential kidnaps "were always contemplated by the potential kidnapper." *Id.*

¹⁰⁷ For example, if countries ban kidnap insurance only when kidnappings are unusually bad—as seems likely—then kidnappings will tend to decline after the adoption of an anti-kidnapping insurance law purely by chance (even if the law actually had no effect). Quantitatively sophisticated readers will recognize this as an example of the well-known regression fallacy.

¹⁰⁸ Vannini et al *supra* note 101 at 8.

subsequent changes in kidnappings to insurance bans, as opposed to any of the other forces in play. Some historical case studies are worth considering, however.

Italy has had a long history of kidnappings. “[I]n the period 1960–2000, . . . [there were] 592 cases and an average of 14.4 abductions per year, [which] had a dramatic impact and placed the country at the top of the worldwide kidnapping hotspots throughout the 1970s and most of the 1980s.”¹⁰⁹ In 1991, Italy reacted to its large and growing kidnapping problem by imposing severe restrictions on ransom payments. (At the same time, it also banned private negotiations between kidnappers and victims and imposed an automatic freeze on the victim’s families’ assets whenever a kidnap was reported; any subsequent ransom payments had to be approved by state prosecutors, who were reluctant to authorize such transactions.¹¹⁰) Reported kidnap volume fell substantially after the law went into effect.¹¹¹

Like Italy, Colombia has also seen widespread kidnappings. According to one US court, Colombian “abductions for ransom [were] literally everyday occurrences—1,717 abductions, or approximately 5 per day, occurred in 1991, while 1,320 abductions, or almost 4 per day, occurred in 1992.”¹¹²

The presence of insurance was likely a factor in Colombian kidnappings. According to a recent report by a peace activist group, “[i]t has been reported that [Colombian] guerrillas sometimes run the names of the detained persons through a laptop to check out what they are worth, and

¹⁰⁹ Vannini et al, *supra* note 101 at 4.

¹¹⁰ Celestine Bohlen, *Italian Ban on Paying Kidnappers Stirs Anger*, N.Y. TIMES, Feb. 1, 1998, <https://www.nytimes.com/1998/02/01/world/italian-ban-on-paying-kidnappers-stirs-anger.html>. “[U]nder Italian law, families are barred from paying ransom or negotiating with kidnappers, except with the permission of a prosecutor and the cooperation of the police. [Moreover, the law] imposes an automatic and obligatory freeze on assets belonging to the kidnapped victim’s family.” There was already an anti-kidnapping statute in force from 1974. Vannini et al, *supra* note 101 at 9.

¹¹¹ Bohlen, *Id.*, reports that between 1969 and 1991, Italy experienced roughly 650 reported kidnappings (about 30 per year), while in the seven year period between 1991 and 1998, there were only 38 reported kidnappings (about 5.5 per year). Of course, the raw numbers do not demonstrate that the law itself was responsible for the drop in kidnappings; among other things, it may be have been the case that making ransom payment illegal simply led to a drop in the rate at which kidnaps were reported to the police.

¹¹² *Hargrove v. Underwriters at Lloyd's, London*, 937 F. Supp. 595, 600 (S.D. Tex. 1996). Another US court concluded that kidnappings for ransom in Colombia were “a form of fundraising” and were “virtually day to day news.” *Curtis v. Beatrice Foods Co.*, 481 F.Supp. 1275, 1278 (S.D.N.Y). 633 F.2d 203 (2d Cir. 1980)

whether they have kidnap insurance.”¹¹³ In 1993, the Colombian Congress passed the Colombian Anti-Abduction Act, which specifically prohibited kidnap insurance in an attempt to curtail kidnappings.¹¹⁴ The statute—subsequently declared unconstitutional in part¹¹⁵—also strengthened penalties against kidnapping and made it illegal for victims to pay ransom of any kind.

The bottom line is that while it’s difficult to prove that kidnap insurance increases kidnappings, the limited available evidence is entirely consistent with that possibility, and some theoretical models predict it.

3. Welfare Effects of Kidnap Insurance

Despite the likely existence of third party moral hazard—a positive supply response to kidnap insurance—a complete welfare analysis needs to take account of three countervailing effects of insurance: risk spreading, harm reducing effects, and limiting payments by victims. In the following paragraphs, we elaborate on each of these effects.

First, kidnap insurance allows risk-spreading. In Fink and Pingle’s model, for example, insurance will be welfare-enhancing, even if it generates additional kidnappings, as long as the supply response is sufficiently small. If so, victims and their families benefit from the increased risk-spreading that kidnap insurance provides. If these gains are large enough, insurance will still be good for society despite the additional costs it imposes via third party moral hazard. In this sense, third party moral hazard is similar to its conventional first party cousin. Even when insurance increases losses via ordinary (first party) moral hazard, it does not follow that the world is better off without it. Insurance still contributes positively to

¹¹³ PAX CRISTI NETHERLANDS, *THE KIDNAP INDUSTRY IN COLOMBIA: OUR BUSINESS?* 30 (Pax Christi Netherlands ed. 2001). This evidence is consistent with insurance having a positive effect on the aggregate amount of kidnapping. But it is also possible that insurance has no overall effect and simply redistributes a fixed number of kidnaps to targets who have insurance and away from those who do not.

¹¹⁴ Under the Act, any person who, “knowing that money is going to be destined to pay a ransom for the release of an abducted individual, participates in the transaction thereof,” is considered to have aided and abetted the kidnapper, and faces up to five years in prison. *See* Act 40, article 7, paragraph 2. Article 12 of the Act provides that “[w]hoever participates in an insurance contract the purpose of which is to guarantee payment of a ransom in possible abduction cases, or who participates in the negotiation or intermediation of the ransom demanded thereof,” faces up to two years in prison. *Hargrove, supra* note 111 at 600. Kidnap insurance contracts were also declared void under the statute, and ransom payments by a corporation could trigger suspension of governmental contracts.

¹¹⁵ *Id.* at 600.

welfare as long as the losses it causes are smaller than the gains it generates by shifting risk away from risk-averse parties to risk-neutral ones.

Second, kidnap insurance may reduce the severity of kidnappings. By allowing victims' families to redeem them from those kidnappers with a greater "willingness to kill" (and hence, a greater ransom demand), insurance may reduce kidnap fatalities.¹¹⁶

Finally, it is possible that kidnap insurance might actually *decrease* victims' willingness to pay ransoms by helping to solve a classic overpayment problem that un-coordinated payments would usually entail. (This possibility is not contemplated in the kidnap/insurance models discussed earlier.) According to a perceptive recent study, it appears that international kidnap insurers have managed to organize the market so as to avoid the overpayments that would otherwise occur, and that would lead to increases in kidnappings.¹¹⁷

The payment of ransoms generates an important externality over time—higher ransoms today make kidnapping more attractive and thereby encourage future kidnaps. However, individual victims or their families are concerned only with their own case. They do not care about whether their payment raises the likelihood of *subsequent* kidnappings, and thus have a tendency to "overpay" relative to the socially optimal ransom.¹¹⁸ If the insurance industry is

¹¹⁶ Fink and Pingle, *supra* note 25. On the other hand, it is possible that there is a "marginal deterrence" effect of anti-kidnap laws. See Claudio Detotto, Bryan C. McCannon & Marco Vannini, *Evidence Of Marginal Deterrence: Kidnapping and Murder in Italy*, 41 INT'L REV. L. & ECON. 63 (2015) (finding that murders of Italian kidnap victims went up when the punishment for kidnappings was increased, reducing the *additional* punishment for "kidnap + murder" over kidnap alone.)

¹¹⁷ See Anja Shortland, *supra* note 5 (suggesting that an effective cartel governs international commercial kidnap insurance, and has evolved to limit overpayment that would occur if victims negotiated individually with kidnappers). For a recent book-length treatment of these issues, see ANJA SHORTLAND, *KIDNAP: INSIDE THE RANSOM BUSINESS* (2019).

¹¹⁸ This logic is well known. See, e.g., Rivka Weil, *Exodus: Structuring Redemption of Captives*, 36 CARDOZO L. REV. 177 (2014) (pointing to the difference between one-off and repeat players in kidnap situations); Yvonne M. Dutton, *Funding Terrorism: The Problem of Ransom Payments* 53 SAN DIEGO L. REV. 335 (2016) (arguing that countries that refuse to pay ransoms when their citizens are kidnapped by terrorists should attempt to persuade other countries to adopt similar policies); Yvonne M. Dutton & Jon Bellish, *Refusing to Negotiate: Analyzing the Legality and Practicality of a Piracy Ransom Ban*, 47 CORNELL INT'L L. J. 299 (2014) (arguing that a ransom ban is inconsistent with criminal law's retributive goals, since it punishes innocent ransom-payers who act under duress, and is likely to be ineffective). *But see*, Samantha Kenney, *Regional Shortcomings and Global Solutions: Kidnap, Ransom and Insurance in Latin America*, 14 CONN. INS. L. J. 557 (2008) (arguing that a private market for kidnap insurance should be permitted, but that an international convention against kidnapping for ransom should be promulgated by the United Nations).

properly organized, the presence of insurance may offer a way to overcome this externality, *reduce* ransom payouts, and thereby actually lower the volume of kidnaps.

The evidence that victims of kidnapping will want to “overpay” ransom demands is quite compelling. For example, the 1991 Italian law discussed earlier was at least arguably quite effective in reducing kidnappings. Nevertheless, some victims were still kidnapped under the new regime, and their families were apparently outraged that the authorities impeded their efforts to pay generous ransoms to secure the return of their family members.¹¹⁹ The same scenario unfolded in the kidnapping of Thomas Hargrove by FARC guerillas in Colombia in 1994: his employer refused to pay ransom, in part because it feared a wave of future kidnappings, but his family wished to do so and negotiated with the kidnappers on their own.¹²⁰

Before kidnap victims are known, everyone should favor banning or limiting the payment of ransoms, since it reduces kidnaps.¹²¹ But once a kidnap has occurred, families of current victims *want* to be able to pay (large) ransoms, regardless of the negative consequences for future victims.¹²² The same logic is at work in the case of Somali maritime pirates.¹²³

¹¹⁹ Bohlen quoted several kidnap victims or their families who were vehemently opposed to the no-ransom law. One father stated that “[t]he law should be abolished, immediately. . . . If there had not been any such law, [my daughter] would have been freed at least four months earlier. When the life of a hostage is at stake . . . putting forward purely legal arguments makes absolutely no sense.” Bohlen, *supra* note 109.

¹²⁰ Hargrove’s employer “adopted a public position refusing to pay ransom. This position was grounded, in part, on a fear of further kidnappings if ransom were paid.” *Hargrove supra* note 111, at 598 (S.D. Tex. 1996). After Hargrove was released, his family then sued the employer’s insurance company over its initial refusal to negotiate, arguing that “if the Defendants had immediately begun negotiating with the kidnappers to pay a portion of the ransom demand, Hargrove would have been released much sooner. The Plaintiffs [sought] \$25,000,000 in actual damages, and \$75,000,000 in punitive damages.” *Hargrove, supra* note 111 at 599.

¹²¹ With apologies to John Rawls, one might term this *ex ante* perspective “operating behind the ski mask of ignorance.”

¹²² As Block and Tinsley point out, “one may as well enact legislation forbidding a mugger’s victim from responding ‘life’ to the threat of ‘your money or your life.’” W. Block & P. Tinsley, *Should the law prohibit paying ransom to kidnappers?* 6 AM. REV. POL. ECON. 40 (2008). Cf. MICHAEL SCOTT MOORE, *THE DESERT AND THE SEA: 977 DAYS CAPTIVE ON THE SOMALI PIRATE COAST* (2018) (suggesting that forbidding payment of ransom is futile).

¹²³ See *Barrgh-gaining with Somali Pirates, supra* note 7 at 2 (finding empirically that “higher past ransoms are positively associated with subsequent ransom amounts. Hence higher ransom amounts impart a negative externality on future victims.”) Cf. Vannini et al, *supra* note 101

Conditional on being a victim of piracy, victims want to be able to pay large ransoms, since they ignore the future incentive effects that such payments provide.

In game-theoretic terms, kidnapping entails a classic example of “dynamic inconsistency.” Ex ante, it is always optimal to deny that you will pay ransom in the future so as to deter kidnappers. But if a kidnap nevertheless occurs, it is usually optimal to pay the ransom, despite having earlier promised not to do so.

How might insurance fit into the picture? The key to internalizing the kidnap externality is to have some party who is responsible not only for current ransom demands but for *future* ransoms as well. That payor is then in a position to appreciate both the present benefits of higher ransom payments *and* the future costs that *it* will end up having to pay.

National governments are durable institutions that might be motivated to take this long view.¹²⁴ And a properly organized insurance industry—one with very few players who engage in significant information sharing—might be able to achieve the same long run perspective. As Anja Shortland perceptively points out, international kidnap insurance is in fact organized in a way that internalizes the (future) costs of today’s overly generous payouts. Most international kidnap insurance is written by a small and tightly-knit group of brokers who operate out of Lloyds of London.¹²⁵ If perhaps not a formal cartel, the insurers are in close communication with each other about their payouts. Their ability to coordinate among themselves means that they are in a position to protect their *own* future interests by not over-paying for kidnap victims today. Because paying too much today will cause it to pay even *more* in the future, a monopoly insurer (or a tightly-knit group of insurance companies) has

¹²⁴ But see Gaia Pianigiani, *Italy Denies Paying Ransom for Release of Aid Workers*, N.Y. TIMES, Jan. 16, 2015, <https://www.nytimes.com/2015/01/17/world/europe/italy-aid-workers-syria.html> (suspecting that the Italian government may have secretly paid ransom to terrorist kidnappers in Syria against public policy).

¹²⁵ Anja Shortland, *supra* note 5. Shortland focuses on the market for employees of first world companies, governments and NGOs working in the third world. We know, for example, “that foreigners . . . account for a relatively large amount of ransom payments, although they are few in number compared with the thousands of Colombian victims every year.” *The Kidnap Industry in Colombia: Our Business? Supra* note 112. Markets for insuring locals (e.g., in Colombia or Nigeria) are run locally, and little is known about how they function. But it is unlikely that local insurance companies are able to coordinate amongst themselves as Shortland reports is the case for international insurers.

the motivation to hold the line on ransom payouts.¹²⁶ That is an incentive that any individual victim lacks.

D. Life Insurance

A particularly grim form of third party moral hazard comes from the relationship between life insurance and murder.¹²⁷ While murders motivated by the existence of life insurance are fortunately quite rare, they are by no means unheard of.¹²⁸ Indeed, some of the earliest objections to life insurance were based on the possibility it created for beneficiaries to hasten the death of insureds so as to collect from insurers. Geoffrey Clark's cultural history of life insurance demonstrates compellingly that this was a widespread—if perhaps somewhat overblown—concern at the inception of life insurance in the early 18th century.¹²⁹

Fortunately, there are many forces that run counter to the monetary gains available from insurance-induced murder. For most people, murder is about as taboo an activity as there is. In addition, when A stands to realize significant pecuniary gains from B's demise, that fact alone will generally make A an obvious suspect should B turn up dead, which serves as a

¹²⁶ The largest insurer, Hiscox, has roughly 60-70% of the market, according to its website: "We write two thirds of the industry's kidnap and ransom insurance premium, and have led the development of this market for 21 years." <http://www.hiscoxlondonmarket.com/kidnap-and-ransom>.

¹²⁷ Thanks to Brian Galle for this suggestion.

¹²⁸ Cf. *DOUBLE INDEMNITY* (Paramount Pictures, 1944) (wife hires insurance salesman to kill her husband for the life insurance proceeds). *DEATH BENEFIT* (Chris/Rose Productions (1996) (https://www.imdb.com/title/tt0118946/?ref_=ttfc_fc_tt, murder to collect life insurance). For a compilation of real life examples, see <https://www.jrcinsurancegroup.com/murder-for-life-insurance-scams/> (listing 21 stories of insurance-related murders in the US). See generally, CASEY CEP, *FURIOUS HOURS* (2019) (narrating history of Alabama man who got away with five murders, despite having taken out substantial life insurance policies on the victims, with himself as beneficiary).

¹²⁹ GEOFFREY CLARK, *BETTING ON LIVES: THE CULTURE OF LIFE INSURANCE IN ENGLAND, 1695-1775* (1999), at 26 writes that "Continental jurists . . . objected to life insurance as an inducement to fraud and murder," and demonstrates that such behavior was, if not common, at least not unheard of. *Id.* at 15. Life insurance was also widely used as a form of gambling, a mechanism that allowed the public to make wagers on the lives of famous persons. "Much insurance in the eighteenth century was indeed underwritten on purely speculative contingencies such as . . . the longevity of [well-known] individuals." *Id.* at 3. Indeed, it is fear of both gambling and incentives for murder that are the origins of the venerable "insurable interest" doctrine, a fundamental precept of insurance law stating that insurance is unavailable unless the beneficiary has an insurable interest in (traditionally, some kind of financial loss resulting from) the thing being insured.

deterrent to murder-for-insurance.¹³⁰ Finally, life insurance contracts are written with exclusions that disallow benefits if the beneficiary caused the death of the insured,¹³¹ and in any case, all but one state has some version of a so-called “slayer statute” that prevents murderers from inheriting from the estate of the person they killed.¹³²

How significant are insurance-motivated murders? There were about 17,000 persons murdered in the US in 2016.¹³³ Unfortunately, the available statistics do not break down murders by “motive” (nor is it even clear what such a breakdown would mean). The Federal Bureau of Investigation’s data on “Murder by Circumstances” appears to be the closest thing we have for the US, but it does not include any financial motives and concedes that the circumstances were unknown or unspecified in half of the murders on file.¹³⁴

A 2017 opinion piece in the Washington Post listed seven children who were killed for life insurance proceeds during years between 1999 and 2012, although it suggested that there were many other examples.¹³⁵ Probably the best assessment of the extent of insurance-related murders comes from a recent report by an industry-sponsored research group. It asserts that it “has logged more than 160 cases of murder for life insurance in recent years.”¹³⁶

¹³⁰ See <https://www.jrcinsurancegroup.com/murder-for-life-insurance-scams/>, last visited June 30, 2018. (“Money is often a primary motive for murder so one of the first questions every homicide investigates [sic] is to find out about the life insurance policies on the deceased and to look closely at the beneficiaries to determine if they could be a suspect.”).

¹³¹ See Thomas Warlick, *Life Insurance – Effect of Homicide Exclusion in Double Indemnity Clause*, 37 N.C. L. REV. 92 (1958).

¹³² Carla Spivack, *Killers Shouldn’t Inherit from Their Victims-or Should They?*, 48 GA. L. REV. 145, 145 (2013) (noting that “[a]lmost all states have laws, called ‘Slayer Rules,’ barring killers from inheriting from their victims.”).

¹³³ See <https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-1>, last visited June 29, 2018.

¹³⁴ See https://ucr.fbi.gov/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/offenses-known-to-law-enforcement/expanded-homicide/expanded_homicide_data_table_12_murder_circumstances_2009-2013.xls. Australian data do break out murder by motivation, and list money/drugs as accounting for 22/201 homicides in 2003-2004. See, <https://aic.gov.au/publications/cfi/cfi110>.

¹³⁵ See, e.g., Editorial Board, *Opinion: Too many children are killed for insurance money. Here’s how states can stop it*, WASHINGTON POST, May 14, 2017, https://www.washingtonpost.com/opinions/too-many-children-are-killed-for-insurance-money-heres-how-states-can-stop-it/2017/05/14/f9b4b242-3746-11e7-b4ee-434b6d506b37_story.html.

¹³⁶ See http://www.insurancefraud.org/downloads/Coalition_life_disability_report_04-17.pdf.

Thankfully, cases of murder motivated by the desire to claim insurance payouts do not appear to cast a significant shadow on the market for life insurance. The situation was apparently worse in the past, however,¹³⁷ and it is probably because of improved law enforcement and tighter contractual and statutory regulation that insurance-motivated murders are now relatively rare. These increased expenditures on law enforcement efforts should be counted as an indirect cost of third party moral hazard. There is a more important lesson here for our analysis, however, and it concerns the centrality of criminal law as a means of combating third party moral hazard. We return to the role of criminal law in Part III.

II. THE MECHANISMS OF THIRD PARTY MORAL HAZARD

In this Part, we investigate the possible causes of third party moral hazard. Since we are dealing with a phenomenon that has received little systematic scholarly attention, we offer several possible mechanisms by which the presence of insurance causes third parties who are not privy to the insurance contract to engage in risk causing or harm causing activities. We consider four explanations: deep pockets, poorer detection, depersonalization and crowding out.

A. *Deep Pockets*

The most straightforward explanation of third party moral hazard is that insurers are much wealthier than policyholders, making them more attractive targets for ripping-off, simply because they can cover larger losses. When asked why he robbed banks, Willie Sutton allegedly replied “because that’s where the money is;” so too with insurers. In many contexts, an uninsured entity’s ability to pay is significantly constrained by its wealth. But that is essentially never true for an insurer.

For example, the staged motorcycle accident with which we began this article would probably not be profitable if the “injurer” were uninsured and had to pay out of her own pocket, because the “victim”/loss-causer’s expected recovery would likely be too small. Similarly, in the context of legal malpractice litigation, Leslie Levin has noted that

[m]any solo and very small firm lawyers do not carry LPL [lawyer’s professional liability] insurance. If there is no insurance . . . experienced plaintiffs’ LPL lawyers will almost never take on the malpractice case. Plaintiffs’ lawyers know that even

¹³⁷ Clark, *supra* note 128.

if a case is meritorious, they will not receive their contingent fee because there will be no money to pay the judgment.¹³⁸

The same logic would seem to apply to those *creating* losses or *feigning* harm: there is no profit in causing (or faking) a loss for which the “injurer” cannot pay. Thus, by guaranteeing that there will be someone who *is* able to pay, the presence of insurance promotes claiming.¹³⁹

John Nyman’s “access motive” for health insurance coverage supports a different version of this deep pockets effect, with vastly different welfare implications. Consider a kidney transplant that costs \$300,000 and will be required by 1 in 1,000 people (0.1% of the population). Each person would be willing to pay \$300 for coverage of a 0.1% risk of needing the operation, but no one has the \$300,000 to spend on her or his own. Without insurance, therefore, there would be no transplants; with insurance, the cost of the procedure is no longer a constraint on any individual’s ability to afford it.¹⁴⁰ As with some versions of liability insurance, this can be a benign story about how insurance makes it possible to achieve outcomes that would be unobtainable in its absence. But it could also have a darker side. Instead of legitimate claims for a justified kidney transplant, consider medically illegitimate claims for a procedure such as an unnecessary MRI. The same logic applies—insurance makes it possible to generate (illegitimate) claims that would not be profitable in its absence.

B. *Depersonalization*

Insurance companies are not flesh and blood individuals. They are psychologically “remote” corporate entities that are understood to be *in the business* of paying-out to cover losses. That could lead third party loss-causers to feel less inhibited when dealing with an impersonal corporate insurer than with an individual who has to come up with the funds from her own bank account.¹⁴¹ Money paid out by an insurer probably has a

¹³⁸ Leslie Levin, *When Lawyers Screw Up*, 32 GEO. J. LEGAL ETHICS 109, 113 (2019) (reviewing HERBERT M. KRITZER & NEIL VIDMAR, *WHEN LAWYERS SCREW UP: IMPROVING ACCESS TO JUSTICE FOR LEGAL MALPRACTICE VICTIMS* (2018)).

¹³⁹ As we explained, liability insurance may increase both meritorious and non-meritorious litigation. We define third party moral hazard to include only the latter effect.

¹⁴⁰ John A. Nyman, *Is Moral Hazard Inefficient? The Policy Implications of a New Theory*, 23 HEALTH AFFAIRS 194 (2004).

¹⁴¹ See, e.g., Sharon Tennyson, *Economic institutions and individual ethics: A study of consumer attitudes toward insurance fraud*, 32 J. ECON. BEHAVIOR & ORG. 247, 260 (1997) (concluding based on survey of consumer attitudes that “tolerant attitudes toward fraud will be expressed more often by individuals who have negative perceptions of insurance institutions”).

different moral and psychological valence for loss-causers than money taken from the pocket of a particular individual.¹⁴²

Tom Baker's account of the moral economy of "blood money" in tort litigation suggests that these kinds of concerns are widespread.¹⁴³ Baker reports that plaintiffs' lawyers rarely ask for more in damages than the limits of the defendant's insurance policy: funds obtained from an insured's *personal* wealth (beyond what is covered by insurance) are known as "blood money," and there is a widespread norm among plaintiff's lawyers against going after such assets (unless the tortfeasor has deliberately chosen to under-insure). These findings are consistent with the hypothesis that loss-causers might feel differently about taking money from insurers than from identifiable individuals.

C. *Poorer Detection or Worse Bargaining*

Beyond enhancing *ability* to pay, another reason why the presence of insurance may make for more loss-causing by third parties is that it can enhance *willingness* to pay: insurers may be in a worse position to detect false or fraudulent claims than are the individuals to whom such claims would otherwise be made. Or, insurers might be more generous, paying out more per dollar claimed, than individuals who are paying out of their own pockets.

We don't have much evidence on these issues, but consider the example of no-fault auto insurance fraud in New York. According to one source, fraudulent claimants were able to swamp insurers' claims-handling and investigation resources by submitting phony or exaggerated claims for reimbursement at a rate that was too high for insurers to handle within statutorily required time limits for payment of claims.¹⁴⁴ Insurers thus ended up

¹⁴² A more traditional economic explanation concerns the diminishing marginal utility of wealth, which drives demand for insurance. Given that dollars are especially valuable in low-wealth states of the world, uninsured individual tortfeasors should be willing to spend heavily to contest liability since they are paying in high-wealth no-liability dollars to avoid having to pay in low-wealth (post-liability) dollars. This makes them unattractive targets for third party loss-causers, especially compared to insurers, who "only" have routine profit motives at stake in deciding whether to contest a claim.

¹⁴³ Baker, *Blood Money*, *supra* note 3.

¹⁴⁴ See, e.g., *Hearing on No Fault Auto Insurance Fraud re: To Examine Ways To Reduce The Incidents [sic] of No-fault Auto Insurance Fraud In New York Before New York State Senate Standing Committee on Insurance* (2011) (statement of Jeffrey Ferguson, Bureau Chief, Rackets Division, King's County (NY) District Attorney's Office) 64-70 (suggesting that fraudulent claimants delay submission of claims so that insurers are unable to investigate carefully without exceeding a statutory maximum time for

paying-out on claims that an individual tortfeasor would almost certainly not have conceded.

More generally, bad faith liability for an insurer's failure to pay a claim could lead to similar effects.¹⁴⁵ If insurers are subject to treble damages for wrongly failing to pay a claim, they will at the margin be induced to pay some questionable claims that an individual paying out of his or her own funds would have been willing to contest.¹⁴⁶ In turn, insurers' reluctance to challenge some claims makes loss-creation more profitable for third parties.

Of course, the reverse possibility also needs to be considered: insurers might well be *better* at detecting illegal claims than individuals would be. A high-volume claims-processing operation could be in position to observe suspicious patterns in claiming that would be invisible to an individual who only sees a single request for payment. And it is likely that there are economies of scale in fraud-detection that insurers are better-placed to take advantage of than are individual payors. As for skill in negotiating, Shortland reports that kidnap insurers drive considerably tougher bargains than individuals. These insurers form a kind of loose cartel; and they are repeat players, not one-shotters, so they internalize the costs that higher ransom payouts (in today's kidnapping) cause in the form of more *future* kidnaps due to deep pockets/supply side response.

In sum, while we cannot be certain that insurers are easier "marks" than are uninsured individuals, that may be the case in some instances, in a way that contributes to third party moral hazard.

D. *Crowding Out*

Third party moral hazard can also occur as a kind of contagion that flows from ordinary first party moral hazard. The idea is that when party X obtains insurance, party Y—whose function is to monitor or protect X—now has less of a reason to do so. In equilibrium, that may either alter X's behavior or the behavior of a "fourth" party, Z. We call this "communicable Moral Hazard" because moral hazard in effect spreads from

payment). Available at <https://www.nysenate.gov/calendar/public-hearings/april-26-2011/examine-ways-reduce-incidence-no-fault-auto-insurance-fraud>.

¹⁴⁵ See, e.g., Mark J. Browne, Ellen S. Pryor, & Bob Puelz, *The Effect of Bad-Faith Laws on First-Party Insurance Claims Decisions*, 33 J. LEGAL STUD. 355 (2004) (finding positive correlation between the existence of a bad-faith remedy and higher settlement payments by insurers).

¹⁴⁶ Sharon Tennyson & William J. Warfel, *The Emergence and Potential Consequences of First-Party Insurance Bad-Faith Liability*, 28 J. INS. REG. 3 (2008).

insureds to those who interact with them. Insurance may crowd-out monitoring by third parties, since the costs of such monitoring are irrelevant if one's counterparty is insured.¹⁴⁷

Consider the stylized example of a museum that hires a security company to guard its collection of paintings. If they know that the museum is insured against theft, the guards might be less vigilant than they would otherwise be. Consequently, thieves might be more willing to rob insured premises, believing the guards will be less alert when the property is insured.¹⁴⁸

Or take the specialized and apparently quite generous form of insurance coverage known as jeweler's block policies, which cover the theft of precious stones from jewelers.¹⁴⁹ If thieves know that most jewelers have such coverage, they may be more likely to rob, since they expect first party moral hazard on the part of jewelers will make theft easier.

Sometimes, however, the contagion may move directly from the insurer to third parties, even without any first party moral hazard. Third party moral hazard of this kind might have played a key role in the financial crisis of 2008.¹⁵⁰ Financial economist Darrell Duffie rejects

[c]onventional moral-hazard explanations of the excessive pre-crisis leverage of the big banks. . . . Instead, the moral hazard explanation applies to *creditors* [of

¹⁴⁷ Victor Goldberg's theory of why corporations buy insurance fits well with this story. See, Victor P. Goldberg, *The Devil Made Me Do It: The Corporate Purchase of Insurance*, 5 REV. OF L. & ECON. 541 (2009) (arguing that corporations purchase insurance because their contractual counterparties—buyers, lessors, etc.—require it).

¹⁴⁸ We are grateful to Brendan Maher for this example. Giuseppe Dari-Mattiacci informed us that many art museums do not insure their paintings against theft, apparently because the most likely purchaser of stolen art is the museum itself. See, e.g., Fox Butterfield, *Boston Museum Says it was Uninsured for Theft*, N. Y. TIMES, March 20, 1990 at A1 <https://www.nytimes.com/1990/03/20/arts/boston-museum-says-it-was-uninsured-for-theft.html> (suggesting that the Isabella Stewart Gardner Museum's decision not to carry theft insurance was "not uncommon" among museums). As with kidnap insurance, this suggests that insurance makes ransoms more expensive, because if thieves know there is insurance, they will demand a higher amount to redeem the stolen paintings.

¹⁴⁹ For a brief discussion of these policies and their potential for conventional moral hazard, see A.M.I. Diamonds Company v. Hanover Insurance Company, 397 F.3d 528, 530 (7th Cir. 2005) (POSNER, J) (suggesting that moral hazard may have been at work in the robbery at issue, given the laxity of the plaintiff's precautions against theft).

¹⁵⁰ Thanks to Gary Klein for this insight.

the Too Big to Fail banks], who were apparently convinced that these firms would not be allowed to fail. In expanding their balance sheets with debt, [the “insured”] financial firms did not even need to think about the moral hazard of [their own] government bailouts—they merely needed to observe the exceptionally low costs of debt financing offered to them by creditors.¹⁵¹

Rather than increasing risk-taking by insureds, this is a story in which insurance erodes *market* discipline: When a bank is understood to be “Too Big to Fail,” its lenders reason that there’s no need to monitor it or charge a penalty for its risky behavior. If something were to go wrong, the borrowing bank is covered; the lender would be guaranteed repayment from the US government, acting as the bank’s implicit insurer.

Accordingly, there are really two separate mechanisms here. In one, insurance erodes market discipline. Creditors of insured entities (here, banks) realize that they have no need to monitor the financial health of their transacting partners, as they would usually do. Monitoring is expensive, and any bank that gets into trouble will always be bailed out. This is true *even if* there is no conventional moral hazard at all. Even if implicit governmental guarantees do not directly cause “Too Big to Fail” banks to make riskier loans, they can cause suppliers of credit to those banks to relax their supervision. A second possible mechanism is that third party moral hazard can *amplify* conventional moral hazard when loss creation is strategic or subject to human control. Jewel thieves know that jewelers are insured (and may be less careful than they would otherwise be), making them more attractive targets for robbery.

Given the current state of research it is impossible to determine which of the four motivations we discussed is dominant. Any conclusion about the relative significance of each would be a mere conjecture. Such uncertainty should not forestall attempts to diminish the problem. All the explanations assume that actors who engage in risk-or-harm causing behavior act in a calculating manner as they respond to the availability of insurance. Hence, the policy responses we discuss in Part III are aimed at either raising the likelihood of detection of loss-causing activities or increasing penalties on such activities, as discussed below.

III. POLICY IMPLICATIONS

In this Part, we detail the costs of third party moral hazard and the efficacy and efficiency of private sector attempts to limit it. Our bottom line is simple: controlling the loss-

¹⁵¹ Darrell Duffie, *supra* note 20, 99 (emphasis added, citations omitted). Note that unlike formal insurance, the risk-spreading provided in the “Too Big to Fail” case was implicit, not contractual.

causing behavior of third parties is difficult for insurers, and even when it is possible, it may have counterproductive effects on welfare. We conclude that extra-contractual measures are needed to efficiently limit third party moral hazard, and we suggest several possibilities in this regard.

A. The Costs of Third Party Moral Hazard

In assessing the cost of third party moral hazard, it is important to distinguish between three kinds of costs that such behavior may impose. First, there are “primary” losses. Most economists would argue that payments made to kidnappers or fake accident victims do not themselves constitute *social* losses. Such payments merely transfer money between parties, without actually using up any resources in the process.¹⁵² But kidnappings and other sources of third party moral hazard *do* generate real losses, including stress and hassle for kidnap victims and their families, the costs of negotiating ransoms, and so on. And even fake accidents can entail some actual harms: for example, if the “victim” in the auto accident had actually sustained an injury in staging the accident, this would constitute a social loss attributable to insurance.¹⁵³

In addition, third party moral hazard generates “secondary” losses in the form of the resources used in *creating* fake losses (for example, the time and effort to stage them). These expenditures constitute true losses from society’s perspective. So too do additional expenses by insurers to audit for fraud or otherwise prevent, detect, or deter third parties from their rent-seeking behavior.

Finally, third party moral hazard may also generate another kind of loss, one which could be larger than those discussed previously. These losses can occur through the creation or

¹⁵² See Gordon Tullock, *The Welfare Costs of Tariffs, Monopolies, and Theft*, 5 W. ECON. J. 224 (1967). (arguing that if a thief steals your stereo, that’s not a loss from society’s perspective because the total number of stereos in the world has not changed). *But cf.* STEVEN E. RHOADS, *THE ECONOMIST’S VIEW OF THE WORLD* (1985) (criticizing this view on moral grounds).

¹⁵³ In some cases, “victims” may suffer real harms, even if their injuries were not real. Consider, for example, a well-known case involving the deliberate and large scale mis-diagnosis of silicosis by a ring of doctors and lawyers. In *Re Silica Products Liability Litigation*, 398 F. Supp. 2d 563 (S.D. Tex. 2005). Most of those diagnosed with the disease were not in fact suffering from it: they were “screened” by fake diagnostic firms that colluded with the plaintiffs’ lawyers. Some of the victims subsequently sued their lawyers, alleging that they “suffered injuries, both financially and mentally, in that they lived their lives [wrongly] believing they had been diagnosed with the incurable disease of silicosis” while their lawyers “reaped the profits of any false diagnosis.” Sabrina Canfield, *Giant Malpractice Suit in Silicosis Litigation*, COURTHOUSE NEWS SERVICE, June 5TH 2013, <https://www.courthousenews.com/giant-malpractice-suit-in-silicosis-litigation/>, quoting from complaint by 153 plaintiffs against their lawyers, John O’Quinn and Associates.

worsening of adverse selection problems. Notice to begin that even if payments by insurers to “victims” are not true *social* costs, they are certainly real from the perspective of the insurer paying the claim. As such, they represent financial costs that the insurer has to cover, and in a competitive equilibrium, they will be recovered in the form of higher prices for insurance. Higher prices, in turn, make insurance less attractive to the least risky (marginal) customers. That’s because the marginal customer (the one just willing to buy insurance at the going rate) is typically less risky than the average customer among all those buying. Pushing people out of the market will lower welfare: those who value insurance by more than it would have cost to provide it to them will suffer a loss.¹⁵⁴

B. Self-Help by Insurers

Insurers have developed a well-known arsenal of weapons to combat first party moral hazard comprising at least the following seven techniques:¹⁵⁵ (a) deductibles and copays (b) exclusions; (c) underwriting to screen high risk individuals;¹⁵⁶ (d) experience rating; (e) loss controls; (f) ex post auditing of claims; and (g) ex ante monitoring.

There is a broad consensus among scholars of insurance law and economics that, in combination, these measures are reasonably effective at controlling first party moral hazard in most contexts.¹⁵⁷ But these mechanisms are inoperative or ineffective when applied to third party moral hazard, and efforts to control deliberate loss-causing behavior have different welfare consequences from attempts to control ordinary moral hazard.

The first four techniques (deductibles, exclusions, underwriting and experience rating) govern risk via the contract between the insurer and the policyholder; they are of little

¹⁵⁴ This point is well-known, but for a particularly clear and accessible graphic exposition, *see generally* Liran Einav and Amy Finkelstein, *supra* note 21. Recent theoretical developments also point to a link in the opposite direction, suggesting: the existence of adverse selection can lead to additional fraud. *See e.g.*, M. Martin Boyer & Richard Peter, *Insurance Fraud in Rothschild-Stiglitz World*, *J. RISK & INS.*, forthcoming. Available at <https://onlinelibrary.wiley.com/doi/10.1111/jori.12264>.

¹⁵⁵ *See* Baker, *Genealogy*, *supra* note 25; Avraham, *Primer*, *supra* note 26, and Ben-Shahar & Logue, *supra* note 26.

¹⁵⁶ *See* Baker and Griffith *supra* note 40, at 489.

¹⁵⁷ Baker, *Genealogy*, *supra* note 25; Ben-Shahar and Logue *supra* note 26; Shavell *supra* note 59; *see also* Tom Baker & Peter Siegelman, *Behavioral Economics and Insurance Law: The Importance of Equilibrium Analysis*, in *THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW* 488 (Teichman and Zamir eds., 2014).

use in constraining the loss-causing behavior of third parties. True, an insured with a substantial deductible will have *some* reason to prevent loss-causing by third parties, since she or he bears some share of any loss that occurs. But this effect is likely fairly small, and in some cases, may even *worsen* the problem of third party moral hazard.¹⁵⁸ Experience rating also offers an insured a modest reason to limit losses caused by third parties, since even if she is covered for a current loss, her future premiums will increase as a consequence of any claim she makes.¹⁵⁹ Underwriting is presumptively irrelevant to third party moral hazard, since the insured's character or riskiness is not really at issue in the occurrence of the loss. Similarly, exclusions are of limited value in deterring third party behavior, since the conduct that is excluded is that of the insured, while the loss is caused by someone else.

That leaves the last three techniques—loss control, ex post auditing, and monitoring—as the primary methods available to insurers to limit third party moral hazard. These may be effective in some contexts, but they pose significant problems for public policy.

1. Loss Control

In some settings, insurers can and do provide instruction to policyholders on how to avoid or mitigate risks posed by third parties. Loss control services are frequently bundled with the provision of kidnap insurance, for example.¹⁶⁰ In that context, loss control consists of advice on security—how big a wall to build around one's house, which areas of the city to avoid, and so on.

Third-party generated losses are more difficult to control than those caused by first parties, however. Third parties are *active* loss-causers, who have agency and strategic capability. Steam boilers do not take countermeasures to increase their ability to explode

¹⁵⁸ See Kai Sülzle & Achim Wambach, *Insurance In A Market For Credence Goods*, 72 J. RISK & INS. 159 (2005) for a theoretical model supporting such results in the context of medical care. The logic is complicated, but turns on the fact that “physicians have to take two considerations into account when deciding whether to diagnose honestly or not. First, the reaction of patients. If patients are less willing to accept a high diagnosis, this makes fraudulent behavior less attractive.” But the behavior of other physicians also matters. “If other physicians behave more dishonestly, and patients often reject their first diagnosis, the chance is high that a patient coming to a physician is already on his second visit. In this case, the patient would accept a high diagnosis as a confirmation of the first diagnosis. This in turn makes fraudulent behavior more attractive.” *Id.* at 160.

¹⁵⁹ Presumably, these forces were what motivated the driver in the fake car accident video, *supra* note 4, to install a dashboard camera in her car.

¹⁶⁰ Shortland *supra* note 5.

if they are inspected more frequently. Kidnappers and pirates, however, *do* respond to efforts to limit their effectiveness.¹⁶¹ Moreover, some third party activities are simply not amenable to loss control directed at first parties. Drug copays, excessive MRI use, and insurance-related murders cannot easily be mitigated by training policyholders about how to avoid such losses.¹⁶² Third party loss controls also work poorly or not at all in some types of liability insurance, especially where insureds and injurers are strangers, as in the Friends of the Friendless auto fraud gang or the no-fault auto example discussed earlier.

Some kinds of liability insurance—for example, Directors and Officers policies—might seem to be amenable to loss control activities directed against third parties. Insurers could provide companies with advice on implementing best practices for corporate governance so as to reduce the risk of being sued for a violation of corporate law, for example. But in practice, D&O insurers do not seem to make widespread use of loss control, for reasons that are not well understood.¹⁶³

By contrast, Employment Practices Liability (EPL) insurers widely tout their loss-control services as part of their marketing efforts.¹⁶⁴ But even when loss control can be used effectively, limiting third party-caused losses has different welfare implications than preventing first party losses. There are at least two important differences between first- and third-party loss control to consider in the liability insurance context.

a. Harm Reduction vs Liability Reduction

The first is the distinction between loss prevention and *harm* prevention. In first party moral hazard, preventing losses is straightforward: the insurer tells the policyholder how to inspect his boiler to minimize the chance it will explode, or how to store chemicals to prevent a leak. But there are actually two kinds of “prevention” at work in the context of liability insurance: forestalling legal liability (conditional on harm) and preventing the occurrence of the harm itself. For example, many EPL insurers advertise their ability to help employers “bullet-proof” their employment policies by establishing proper training

¹⁶¹ De Groot et al. *supra* note 7.

¹⁶² Indeed, even when consumers are coached to use cheaper MRIs, they don’t do so. See Jeff Lagasse, *Why do Patients Often Opt for Pricier MRI Tests? They Don’t Shop Around*, HEALTHCARE FINANCE NEWS, Aug. 1, 2018 <https://www.healthcarefinancenews.com/news/why-do-patients-often-opt-pricier-mri-tests-they-dont-shop-around>.

¹⁶³ Baker & Griffith *supra* note 42. But see discussion TAN 180 of use of the duty to defend/right to control to deter litigation in this context.

¹⁶⁴ Talesh *supra* note 156, at 239.

procedures, refining language in employee handbooks, and so on.¹⁶⁵ Following best practices for Human Resources management may indeed reduce the likelihood that a plaintiff is successful in a lawsuit against the insured. But preventing liability *ex post* is not the same as preventing the actual occurrence of losses *ex ante*, and most employer training probably has little or no effect on actual behavior—that is, on losses resulting from employee misconduct, such as harassment.¹⁶⁶ Rather, loss control in the context of EPL insurance has become a kind of “bureaucratic vaccine against *lawsuits* for harassment.”¹⁶⁷

Loss controls that actually reduce the *incidence of harms* *ex ante* are different from those that simply forestall *liability* *ex post*. Cost-effective harm reduction benefits both the insured and potential victims (who are not injured), with clear positive welfare effects. Forestalling liability (without reducing harm) will presumably deter some third parties from loss-causing behavior: fake victims are less likely to file lawsuits if such suits are less likely to succeed. But if insureds can defeat liability without actually reducing harms, then even victims with legitimate claims are less likely to succeed. Reducing the success rate of plaintiffs (without reducing the incidence of harms) deters deliberate loss-causers, but at a cost of leaving *all* losses where they fall, even for innocent victims who did nothing to cause their loss.

b. Diversion

A second problem with efforts to control losses from third parties is that they may lead to the strategic diversion of harm-causing activity. For example, suppose a kidnap insurer advises a policyholder to build a larger wall around his house to deter kidnappers. If the wall does its job, it will reduce the likelihood of third party moral hazard directed at the policyholder (and his insurer). But it will likely do so, in large measure, by deflecting potential kidnappers towards some other victim, with little or no gain to society as a whole. Indeed, shifting the incidence of misdeeds from one party to another will typically produce net social losses—building the wall uses up resources

¹⁶⁵ *Id.*

¹⁶⁶ Joanna L. Grossman, *The Culture of Compliance: The Final Triumph of Form Over Substance in Sexual Harassment Law*, 26 HARV. WOMEN'S L. J. 3, 3 concludes that “[s]exual harassment policies and procedures do not seem to have any reliably negative effect on the incidence of sexual harassment.” Other scholars who have looked at the issue agree. See, e.g., Frank Dobbin & Alexandra Kalev, *Why Diversity Programs Fail*, HARV. BUS. REV. 1, 52 (July, 2016) (discussing how policies fall victim to over-control and poor structure).

¹⁶⁷ Frank Dobbin & Erin Kelly, *How to Stop Harassment: The Professional Construction of Legal Compliance in Organizations*, 112 AM. J. SOC. 1203, 1234 (2007) (emphasis added).

without reducing kidnapping at all, and may even create negative externalities in the form of too many walls.¹⁶⁸

A further wrinkle is that precautions that are *unobservable* to potential wrong-doers may yield social gains. For example, if kidnapers can't tell who has an alarm system and who doesn't, then when A installs a new alarm, she raises the average level of precautions among *all* victims, and hence lowers the expected return to kidnapping generally.¹⁶⁹

Our bottom line is that loss controls can sometimes reduce some kinds of moral hazard caused by third parties. Unlike efforts to limit first-party losses, however, loss control activities directed against third parties are unlikely to be socially optimal: insurers will choose the wrong scope and type of loss controls because they do not take sufficient account of the externalities that third-party loss controls engender.

2. Monitoring

Another approach to limiting ordinary moral hazard is through monitoring of the insured's conduct. The conventional wisdom is that if an insured's actions can be perfectly observed, it becomes possible to write a contract that specifies the degree of riskiness the insured is able to undertake, eliminating the problem of moral hazard altogether.¹⁷⁰ Of course, third parties can be difficult to monitor, since they operate in the wild and their identities are not known to the insurer in advance of any loss they cause. But first-party monitoring can be used to deter some kinds of third-party moral hazard, since loss-causers must usually interact with insureds in some fashion in order to create a compensable injury. For example, the use of automobile dashboard cameras, might have a dramatic impact on the possibilities for third party moral hazard in automobile

¹⁶⁸ For a contrarian view, see Robert A. Mikos, 'Eggshell' Victims, *Private Precautions, and the Societal Benefits of Shifting Crime*, 105 MICH. L. REV. 307 (2006) (arguing that there are social gains to shifting crime from more- to less-sensitive victims).

¹⁶⁹ See Ian Ayres & Steven D. Levitt, *Measuring Positive Externalities from Unobservable Victim Precaution: An Empirical Analysis of Lojack*, 108 Q. J. ECON. 43 (1998) (finding that unobservable monitoring devices reduce auto theft).

¹⁷⁰ Cf. Holmstrom, *supra* note 22. Technically, behavior must be both observable and objectively verifiable to third parties. See, Oliver Hart & John Moore, *Incomplete Contracts and Renegotiation*, 56 ECONOMETRICA 755 (1988) (explaining how the inability to prove what has happened to an adjudicator limits contractual completeness).

insurance. It is therefore surprising that the technology has not been widely adopted in the US (although it is increasingly used in other countries).¹⁷¹

American auto insurers apparently do not promote dash cams,¹⁷² as their British counterparts assuredly do.¹⁷³ One explanation is that the volume of fraudulent third-party-caused losses in US auto liability insurance may not be high enough to justify subsidizing this kind of monitoring.¹⁷⁴ But it seems unlikely that fraudulent losses are a bigger problem in the UK than in the US. Perhaps there are cultural differences that explain US drivers' lag in adopting dash cams, but the evidence does seem to suggest that cameras are gaining in popularity, albeit from a small base. As of 2018, "there [were] three times as many online searches for terms like "dash cam" as . . . for autonomous driving, according to new data from Google. U.S. wholesale shipments of dash cams are expected to hit 285,000 this year, up 20% from 2017. . . "¹⁷⁵

3. Pre-Committing to (first party) Moral Hazard?

Most liability insurance policies give the insurer the duty of covering both the underlying loss (the duty to indemnify) and any legal defense mounted by the insured (the duty to

¹⁷¹ British insurer Aviva recently reported, based on a nationally representative sample of 2,438 UK motorists, that an estimated 27 percent of UK motorists (roughly 11 million) use dash cams; in the same survey, nearly half of all drivers (47%) said that dash cams make accountability for accidents more clear-cut. <https://www.aviva.com/newsroom/news-releases/2018/07/dash-for-dash-cam/>. Dash cams are also very widely used in Russia. See, Damon Lavrinc, *Why Almost Everyone in Russia Has a Dash Cam*, WIRED, Feb 15th, 2013, <https://www.wired.com/2013/02/russian-dash-cams/>.

¹⁷² According to a pro-dash cam marketing site: "Currently, there are no auto insurance companies in the US that give drivers a discount for installing a dashcam in their vehicle". <https://dashcameras.net/dashcam-insurance-discount/>.

¹⁷³ For a survey of UK insurers' dash cam discounts, which range from 10-30%, see <https://www.driving.co.uk/car-clinic/best-car-insurance-discounts-dash-cam-users/>.

¹⁷⁴ Of course, that raises the question of why UK insurers *do* think it is worthwhile to subsidize cameras. On Americans' lack of interest in dashboard cameras, see <https://www.sfchronicle.com/business/article/Why-Americans-don-t-use-dash-cams-6067560.php>, which offers a pastiche of cultural and psychological explanations, unsupported by any hard data, for the low takeup rate for dash cams.

¹⁷⁵ Rick Barrett, *Dashboard cameras sales rising fast due to safety-conscious drivers*, MILWAUKEE JOURNAL SENTINEL, Feb. 26, 2018, available at <https://www.usatoday.com/story/money/cars/2018/02/26/dashboard-cameras-sales-rising-fast-due-safety-conscious-drivers/373631002/>.

defend).¹⁷⁶ The logic for doing so is clear: if policyholders paid for their own defense, but insurers covered any damages for which the policyholder was ultimately found liable, the insured would want to spend almost nothing on defending the claim, since all damages would be paid by the insurer.

Usually, therefore, the duty to defend is bundled with the right to control the defense: the party that has to pay (here, the insurer) gets to choose how to organize the defense and how much to spend. Again, this makes sense. Consider a policy that covered defense costs only, not liability, and left control of spending with the insured. Such a policy would allow the policyholder to choose what kind of defense to mount and how much (of the insurer's money) to spend, while leaving her with any liability that resulted. In this setting, the policyholder would obviously want to mount a very expensive defense: why spare any costs when they are being borne by someone else? This is the familiar story of (first party) moral hazard.

In D & O liability insurance, however, the duty to defend and the right to control the defense are often separated.¹⁷⁷ Technically, this is known as a duty to reimburse, rather than a duty to defend, and given the logic above, its existence seems puzzling. Why would insurers cede control over the defense and agree to let policyholders freely spend the insurance company's money to defend against liability?

One explanation is that insurers with reimbursement duties do retain some control over defense costs through co-control language, which allows them to forestall some moral hazard problems.¹⁷⁸ But here, first party moral hazard may be a feature, not a bug, because it can be used to control third party moral hazard.

Suppose insureds face the possibility of many strike suits that are brought purely for their settlement value. (That is, the suits would lose if they were litigated, but the costs of mounting a defense are high relative to the costs of filing a complaint.) By pre-paying for an insurance policy that covers generous spending to defend against litigation,

¹⁷⁶ For an excellent analytic and institutional overview, see Charles Silver, *The Basic Economics of the Duty to Defend*, in RESEARCH HANDBOOK IN THE LAW & ECONOMICS OF INSURANCE 438 (Daniel Schwarcz & Peter Siegelman, eds., 2015). We owe the key insight in this section to a conversation with Steve Thel.

¹⁷⁷ Silver, *Id.*; Nick Nierengarten, *The Duty to Advance or Reimburse Defense Costs v. the Duty to Defend*, AMERICAN BAR ASSOCIATION, December 12, 2012, available at http://apps.americanbar.org/litigation/committees/insurance/articles/novdec2012-reimburse-defense-costs.html#_ednref5.

¹⁷⁸ *Id.*

insureds are able to make a credible commitment that they will not settle if sued.¹⁷⁹ In turn, that should mean that plaintiffs will be deterred from filing strike suits in the first instance, knowing that policyholders will want to freely spend their insurer's money to hire the best lawyers and use them extensively in defending against any claims. In equilibrium, therefore, defense reimbursement will not actually be necessary, and premiums can be quite low as a result.

C. Governmental Assistance

Insurers are constrained by the scope of contract law in their ability cope with third party moral hazard. These constraints, we believe, create an important role for governmental actors, whose powers are much broader. Private markets in risk require a regulatory infrastructure to function effectively. We note at the outset that we fully agree with Dan Davies' view that it will not be cost effective to eliminate fraud completely.¹⁸⁰ Nonetheless, governmental action is required to reduce third party moral hazard to the optimal level.

1. Law Enforcement

Not all third party moral hazard—at least as we have defined it—is illegal.¹⁸¹ But law enforcement actions by the state provide an important tool in the portfolio of methods for combating the phenomenon. Kidnapping and murder, for example, are obviously criminal offenses. And insurance-motivated kidnapping or murder are best treated as crimes, rather than as an attempt to extract money from insurers.

¹⁷⁹ A public promise by the policyholder herself to vigorously litigate all claims would not be credible if she had to spend its own money to do so: when the time came, the insured would find it in her interests to settle to avoid having to incur the defense costs. But if she had already sunk the costs of insurance coverage, the policyholder will want to spend lavishly on defense if she is sued. On the other hand, leaving the duty to pay for defense costs with the insurer runs into the reverse commitment problem. Now, it is the *insurer* who would want to settle cheaply, rather than litigate. It is only by separating the decision about how much to spend on litigation from the duty to pay for these costs that the parties can sustain a credible commitment not to settle, and thereby deter litigation.

¹⁸⁰ DAN DAVIES, *LYING FOR MONEY: HOW LEGENDARY FRAUDS REVEAL THE WORKINGS OF OUR WORLD* 16 (2018). As Davies explains, “one of the key decisions that an economy has to make is how much effort to spend on checking [for illegal activities]. This choice will determine the amount of fraud. And since checking costs money and trust is really productive, the optimal level of fraud is unlikely to be zero.” *Id.* at 16-17.

¹⁸¹ For example, consider drug copay schemes discussed earlier, which are apparently legal in most (but not all) US states.

Various forms of fraud are also criminal offenses, and schemes of the type engineered by Michael Cohen¹⁸² are also handled by licensure and criminal law regimes.¹⁸³ Enhanced criminal enforcement is likely to be the best way of deterring large-scale third party moral hazard.¹⁸⁴ More generally, the state has a potential role to play by barring certain kinds of third party moral hazard, as Massachusetts and a few other states have chosen to do in the case of drug copay coupons.

An important risk with state intervention is that it may crowd-out or substitute for private enforcement efforts. On the other hand, state actors do not have the same kind of financial relationship to third party moral hazard as insurers do. Insurers obviously understand that the more claims they turn down, the higher their short run profits. So at the margin, insurers have a built-in incentive to deny claims of ambiguous validity.¹⁸⁵ Shifting some of the job of nabbing third party loss-causers to the state therefore eases pressure on insurers to deny claims, and benefits innocent claimants.

2. Technology Standardization and Reporting

An obvious role for collective action in combating third party moral hazard is to regulate the collection and transmission of data that can be used to detect it. For example, US Life Insurers have apparently established a system of record-keeping for “police departments to check if a homicide victim is named on a life insurance policy. Several perpetrators have been arrested and convicted thanks to this system.”¹⁸⁶ In 2018, English police and dash-camera manufacturers collaborated on a national dash cam safety portal, which

¹⁸² See, *supra* note 79.

¹⁸³ For example, the U.S. Attorney for the Southern District of New York indicted Mikhail Zemlyansky and others on a large-scale conspiracy to defraud automobile insurers. See SI 12 Cr. 171 (JPO) (no date), available at <https://www.justice.gov/sites/default/files/usao-sdny/legacy/2015/03/25/Zemlyansky%2C%20Mikhail%20et%20al.%20-%20Indictment.pdf>.

¹⁸⁴ “[T]he easiest and the most direct way to [reduce no-fault auto insurance fraud] is better law enforcement efforts.” *Hearing on No Fault Insurance Fraud before New York State Senate Standing Committee on Insurance* (2011) 205 (Testimony of Nicholas I. Timko (President, New York State Trial Lawyers Association)).

¹⁸⁵ Indeed, there is an elaborate set of rules, accompanied by significant penalties, governing what constitutes “bad faith denial of an insurance claim.” For a recent empirical analysis, see Danial P. Asmat & Sharon Tennyson, *Does the Threat of Insurer Liability for “Bad Faith” Affect Insurance Settlements?* 81 J. RISK & INS. 1 (2014).

¹⁸⁶ Coalition Against Insurance Fraud, *Fraud in Life and Disability Insurance* 7 (2017) https://www.insurancefraud.org/downloads/Coalition_life_disability_report_04-17.pdf.

“allows owners of any brand of dash cam to submit footage quickly and easily to the relevant authorities.”¹⁸⁷

Monitoring technologies are a double-edged sword, however: they expose illicit activities but raise severe privacy concerns. Therefore, it will be necessary for governments to regulate the permissible uses of information derived from monitoring so as to protect privacy concerns. The social value of dash cameras as deterrents to third party moral hazard appears from our crude calculations to be smaller than one might think. If they expose users to significant privacy losses, they are even less attractive. Society thus faces the challenge of designing rules for the use of dash camera data that take appropriate account of drivers’ legitimate privacy interests.

3. Cartelization or Regulation of Industry Structure

As Anya Shortland persuasively demonstrated in the case of kidnap insurance,¹⁸⁸ some types of third party moral hazard can be managed through the structural design (“governance”) of insurance market contracting. If insurance is provided by a small group (“club”) of sellers, with close social ties and the ability and incentives to share information, it may be possible to overcome certain kinds of dynamic coordination problems that would occur when individual victims make separate payments out of their own pockets.

4. Qui Tam Suits

In addition to the possibilities just discussed, we propose the recognition of a new private cause of action termed an insurance qui tam suit. Our model is based on existing anti-fraud legislation at the federal level, especially the False Claims Act,¹⁸⁹ which has been used to recover more than \$2.5 billion in healthcare fraud and false claims in 2016 alone.¹⁹⁰ The idea is that allowing private individuals to bring suits on behalf of insurers against entities that file false claims for insurance payments amplifies the disincentives.

¹⁸⁷ See Louise Muyanja, *Dash Cams and the Law: what you need to know*, WHICH?, <https://www.which.co.uk/reviews/dash-cams/article/dash-cams-and-the-law-what-you-need-to-know>.

¹⁸⁸ *Supra*, Part I.A.3.c.

¹⁸⁹ 31 U.S.C. § 3729 (2009).

¹⁹⁰Thuy Nguyen and Victoria Perez, *Privatizing Plaintiffs: How Medicaid, the FCA, and Decentralized Fraud Detection Affect Public Fraud Enforcement Efforts*, __ J. RISK & INS. __ (2019), available at <https://onlinelibrary.wiley.com/doi/abs/10.1111/jori.12281>.

At its simplest, *qui tam* litigation expands ordinary notions of standing by offering a bounty to plaintiffs who bring suits to recover losses experienced by someone else.¹⁹¹ Traditionally, that “someone else” is the sovereign, who might, for example, be the victim of fraud by a party from whom it has purchased goods or services. Rather than leaving it solely to the government to detect and prosecute fraud, *qui tam* actions permit those with knowledge of harm to the government to obtain a bounty by uncovering and prosecuting wrongdoing on their own, even though they have not experienced any loss themselves.

Our proposal expands *qui tam* actions so that private individuals can sue third party loss-causers on behalf of insurers, with the right to a share of any funds recovered. Consider, for example, a doctor involved in one of the phony clinics that were set up to “treat” accident victims in the New York no-fault auto insurance scams described earlier.¹⁹² In return for surfacing the problem and pursuing litigation against her or his co-conspirators, the plaintiff (or relator, in *qui tam* parlance) would be entitled to a percentage of whatever recovery was obtained for the insurance company. As we noted, a vibrant insurance *qui tam* mechanism already exists in cases where government provides (health) insurance, namely Medicare and Medicaid. While *qui tam* liability is not without controversy, the evidence in health care and elsewhere suggests that it has been effective.¹⁹³ Our proposal would extend this mechanism to private insurers.

Litigation theory suggests that profit-maximizing private actors should be willing to bring any case with a positive expected value.¹⁹⁴ That would imply that insurance companies already have a good reason to sue any third party who caused them losses (as long as they thought they could recover more than the costs of the litigation). Moreover, insurers can often make use of the law of subrogation, which allows them to pay the

¹⁹¹ The phrase *qui tam* originates from the Latin expression *qui tam pro domino rege quam pro se ipso in hac parte sequitur*, meaning “one who sues in this matter for the lord and king as well as for himself.” Our proposal simply substitutes *insuror* for *domino rege*. For discussion of other proposals to enhance private litigation to enforce substantive legal rights, see David Freeman Engstrom, *Harnessing the Private Attorney General: Evidence from Qui Tam Litigation*, 112 COLUM. L. REV. 1244 at note 216 (2007) (listing almost a dozen scholarly articles advocating *qui tam*-like mechanisms in other areas of law).

¹⁹² See *supra*, text accompanying notes 69-83.

¹⁹³ See generally Aaron S. Kesselheim & David M. Studdert, *Whistleblower-Initiated Enforcement Actions against Health Care Fraud and Abuse in the United States, 1996 to 2005*, 149 ANN. INTERN. MED. 342 (2008).

¹⁹⁴ See generally Robert D. Cooter & Daniel L. Rubinfeld, *Economic Analysis of Legal Disputes and Their Resolution*, 27 J. ECON. LIT. 1067 (1989). By contrast, it’s unclear what motivates *government* actors to go after fraud, but it seems plausible that they might not pursue it as vigorously as would be optimal.

claims of their insured and then go after those who caused the loss to recover for the amount paid. Given all that, it might seem as if there would be little reason to supplement ordinary liability by bringing in an additional class of plaintiffs (relators).

However, there are at least three problems with relying on insurers to go after third party loss-causers on their own. First, insurers don't necessarily want to prevent all losses, and may not zealously pursue loss-causers. The argument is complicated, but in its basic outline, the idea is that insurers will prefer losses to grow as long as it increases demand for insurance on the margin.¹⁹⁵

More generally, there is elegant theoretical work suggesting that insurance fraud is inherently an equilibrium phenomenon.¹⁹⁶ What this means is that under plausible conditions, there will always be some fraud that insurers will optimally *choose* not to uncover, leaving at least the possibility that others may be able and willing to do so. The game-theoretic logic of this insight is as follows. Suppose initially that 10 percent of all claims are fraudulent. Suppose further that at some cost, insurers could audit every claim and perfectly detect whether it is fraudulent. Even if such audits are profit-maximizing (that is, they cost less than the expected savings they generate) when 10 percent of claims are fraudulent, they will certainly not be profitable if *all* fraud has been successfully detected and deterred. At that point, of course, there will be no fraud left to detect, so there will be no justification for spending anything to detect it. And if insurers stop auditing altogether, fraudsters can go back to committing fraud, secure in the knowledge that they won't (all) be caught. The bottom line is that unless insurers can somehow commit themselves to auditing *even when auditing is unprofitable*—and this seems difficult if not impossible to do—there will necessarily be some fraud that goes unsanctioned. In turn, this implies that in equilibrium, there will be some “room” for private actors to uncover fraud (if they can do so at a lower cost than insurers) can.

Second, insurers may simply lack the information about whom to sue, because deliberate loss-causing is invariably covert. Even when the necessary information can be uncovered through audits or other techniques (and that is not always the case), these can be costly and difficult to undertake. But third party “insiders” already have exactly the information necessary to pursue such litigation—they know how such schemes are organized and implemented, including the tricks used to conceal them. So, they will

¹⁹⁵ See, Ronen Avraham & Ariel Porat, *Do Insurers Decrease or Increase Risks? Some Thoughts About the Conventional Wisdom* (April 2019) (unpublished ms. on file with the authors).

¹⁹⁶ See, Pierre Picard, *Auditing Claims in Insurance Markets with Fraud: The Credibility Issue* 63 J. PUBL. ECON 27, 28 (1996), or more generally, Pierre Picard, *Economic Analysis of Insurance Fraud* in HANDBOOK OF INSURANCE 337 (Georges Dionne ed. 2000).

operate with an informational advantage over insurers, and can find it worthwhile to pursue litigation that insurers would not find it cost effective to bring.

Finally, the problem is not simply that insurers are uninformed or under-zealous. Indeed, insurers are widely believed to be *over*-zealous—at least at times—for example, in denying claims of loss by their own policyholders.¹⁹⁷ Thus, simply strengthening insurers’ ability to go after third party loss-causers directly may lead to over-enforcement.

Therefore, we propose allowing other actors to supplement the enforcement efforts of insurance companies through a kind of bounty scheme. Going back to the three issues discussed earlier, an insurance qui tam system would get around the problem that insurers might not want to bring all of the claims they could. Our proposal would give non-insurance plaintiffs an incentive to crack down on third party loss-causers, independent of whatever insurers themselves decide to do.

Moreover, third party “defectors” will often have an important cost or informational advantage over insurers, because they themselves are or were insiders, already well-acquainted with the specifics of how loss-causing schemes operate. They may not need to investigate, audit, or detect anything, since their jobs are precisely to execute some aspect of whatever scheme is at issue. In other cases, relators may not have all the facts, but do possess detailed knowledge of how fraudulent activity is carried out in general, knowledge that outsiders lack.

By outsourcing enforcement, we also lessen the risks that insurers will have too much power or will be able to threaten not to pay claims because of suspected fraud. Furthermore, qui tam liability offers potential whistleblowers an incentive to “defect” by turning against their fellow miscreants.¹⁹⁸ In turn, that should make it more difficult for

¹⁹⁷ See Danial Asmat & Sharon Tennyson, *The law and economics of insurance bad faith liability*, in RESEARCH HANDBOOK ON THE ECONOMICS OF INSURANCE LAW, 413, 413 (Daniel Schwarcz & Peter Siegelman eds 2015) (pointing out that traditional contract doctrine places symmetric burdens on both parties to act in good faith, but that these doctrines “effectively placed a higher burden on the policyholder than on the insurer,” creating incentives for insurer misbehavior). *But see*, Alan O. Sykes, *Judicial Limitation on the Discretion of Liability Insurers to Settle or Litigate: An Economic Critique*, 72 TEX. L. REV. 1345 (1994) (suggesting that private contracting is sufficient to overcome insurers’ incentives for misbehavior).

¹⁹⁸ See Engstrom, *supra* note 190 at 1250 (distinguishing between “classic whistleblowing insiders with firsthand knowledge of fraud” vs “roving, outsider enforcers who develop fraud cases by other means” such as FOIA requests of government agencies).

conspiracies to form in the first place by weakening trust among conspirators, each of whom will have to worry that one of their partners might turn against them to collect the qui tam bounty.

We also call for the implementation of same safeguards used in the FCA to prevent over-enforcement¹⁹⁹ and agency problems:

the FCA aims to mitigate concern about private overenforcement by granting the Attorney General—and, by further delegation, the DOJ's Civil Fraud Section—substantial authority to oversee and control qui tam litigation. Thus, the DOJ may dismiss or settle a qui tam case out from under a private relator, subject only to a basic fairness hearing. In addition, the DOJ must consent to any private dismissal or settlement of a qui tam action.²⁰⁰

Just as the Federal government does, insurers should be a role in any qui tam litigation. Otherwise, relators could just initiate a lawsuit on their own and then settle the matter at a steep discount, precluding the insurer from litigating similar claims against the defendant.²⁰¹ Hence, we believe that insurers should have the power to oppose settlements that are detrimental to their interests. Only if the insurer declines to litigate the case would relators have the ability to proceed independently.

Finally, similarly to the FCA, we would also allow the insurer to intervene and “take control over the litigation, including limiting a relator's procedural rights,”²⁰² in appropriate cases in which third party moral hazard is especially damaging. A relator's award, under our proposal, would be comparable to those offered under FCA: 25 to 30 percent if the relator litigates alone and 10 to 15 percent if the insurer takes over. We believe that the use of qui tam litigation can significantly diminish instances of third party moral hazard.

CONCLUSION

¹⁹⁹ On overenforcement, *see generally* Alex Stein & Richard Bierschback, *Overenforcement*, 93 GEO. L. J. 1744 (2005).

²⁰⁰ Engstrom, *supra* note 190 at 1271-72.

²⁰¹ *Id.*

²⁰² *Id.*

Contrary to the conventional wisdom, this Article has established that insurance alters the behavior of third parties who interact with insureds in socially detrimental ways. Specifically, the desire of third parties to claim insurance payments often causes them to act illicitly or immorally. We termed this effect “third party moral hazard” and demonstrated that it arises in a myriad of insurance contexts. In certain instances, such as kidnap insurance, the presence of insurance can induce extreme antisocial behavior in the form of kidnaps. In others, such as automobile insurance, it can motivate third parties to feign injuries and file spurious claims against insureds. In other instances, such as health insurance, it may elicit “offensive medicine” that includes referral of patients to unnecessary tests and treatments. Insurance therefore gives rise to a paradox: it brings about the very risks and harms that insureds want to avoid.

Unlike standard first party moral hazard that can largely be managed by contractual design, third party moral hazard does not lend itself to contractual solutions. Insurers have no privity with third party loss-creators. Worse yet, the individuals whose actions insurance will influence cannot even be identified in advance. Hence, third party moral hazard presents a formidable challenge to insurance companies and policymakers alike. Yet, as we suggest, third party moral hazard can be significantly ameliorated via a combination of self-help measures, monitoring mechanisms, criminal enforcement and the use of *qui tam* suits.

We have also established that the aggregate social cost of third-party moral hazard is considerable. Although, given the current state of knowledge, it is impossible to approximate the aggregate social cost of third party moral hazard with any degree of precision, it is fair to assume that, in extreme cases, it may even render certain kinds of insurance socially undesirable. We hope that the foregoing analysis will inspire others to investigate this issue further, both theoretically and empirically. The phenomenon of third-party moral hazard is a fertile ground for scholarly research. Gaining better purchase on third party moral hazard would enable us to engage in a more accurate assessment of the virtues and vices of insurance and devise better policy responses to insurance abuse.