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# Introduction

*Daniel Schwarcz and Peter Siegelman*

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Insurance law and insurance economics each have long and distinguished scholarly histories, but participants in the two disciplines have not always communicated well across academic silos. As a result, legal analysis of insurance tends to ignore or simplify the economic implications of doctrinal rules and regulatory approaches. For example, the use of behavioral economics to understand anomalies in insurance demand has generated important insights that legal scholars and regulators are only beginning to assimilate. Meanwhile, economic models of insurance are often too divorced from legal realities and institutional details to offer clear policy guidance. Thus, careful study of different companies' homeowner's insurance policies reveal significant variations that present challenges for economic models of competition in insurance markets.

This *Research Handbook on the Economics of Insurance Law* seeks to bridge the historical divide between insurance economists and insurance law scholars. By bringing together original and accessible contributions by many of the top thinkers in each domain, the *Handbook* provides a uniquely robust perspective on the many ways in which insurance law, regulation, and policy are impacted by insurance economics, as well as the many ways in which the economics of insurance is structured by law, regulation, and policy. In doing so, the *Handbook's* broader goal is to encourage more policy-relevant insurance economics scholarship and more economically sophisticated legal scholarship by promoting conversation across the two disciplines.

The contributions to this volume are divided into four parts. The first set of chapters focuses on issues surrounding how and why individuals purchase insurance. Topics examined in this part include the legal and regulatory relevance of pervasive behavioral anomalies in insurance supply and demand, and individuals' motivations for purchasing health insurance. The second group of contributions examines the role of the state in insurance markets, asking when government insurance programs or extensive insurance regulation are sensible and how they should be structured. Specific chapters examine topics ranging from the definition of social insurance to the role of the state in facilitating the provision of catastrophe insurance. In Part III, several chapters focus on insurance regulatory topics, including the regulation of risk classification, and

the long-standing debate between state and federal regulation in insurance. The final cluster of chapters addresses insurance law in the courts, tackling subjects such as the distinction between mandatory and default terms in insurance law and liability insurers' duties to defend and settle. Collectively, the *Handbook* will help scholars across disciplinary categories integrate the new insights of insurance economics with the flourishing body of research in insurance law, so that each discipline can recognize and build on the contributions of the other.

## PART I: WHY AND HOW DO INDIVIDUALS PURCHASE INSURANCE?

Much insurance law and regulation is deeply impacted by questions regarding how and why individuals purchase insurance. Howard Kunreuther and Mark Pauly have been pioneers in this arena, focusing on the impact of behavioral anomalies in insurance markets. In 'Behavioral Economics and Insurance: Principles and Solutions', they contrast the empirical evidence about how consumers (and, importantly, insurance companies) actually behave with the predictions of standard rational actor theories. The match between theory and practice can charitably be characterized as poor. Consumers routinely fail to purchase insurance for low-probability/high-cost events for which theory predicts robust demand. And insurers respond to new risks (such as terrorism) with 'intuitive' or 'rule-of-thumb' behavior, often over-reacting by eliminating coverage altogether. In keeping with their assessment of the weakness of individual and firm decision-making on insurance matters, the authors propose four key principles that should govern the regulation of insurance markets: (1) insurance against rare but catastrophic risks should be required for all individuals; (2) premiums should be set so as to reflect risk, thereby providing incentives for mitigation; (3) access and affordability issues should be paid for with lump-sum transfers, rather than by artificially lowering premiums; and (4) longer-term/multi-period coverage should be used to the greatest extent feasible, so as to avoid classification risk and mitigate irrational non-renewal of policies by consumers when risks fail to materialize.

Regardless of why individuals purchase insurance, they often do so through an intermediary. Such intermediaries may supply policyholders with valuable information, advice, and services. But insurance intermediaries' commission-based compensation arrangements also create the risk that they will provide customers with biased advice. Daniel Schwarcz and Peter Siegelman's chapter ('Insurance Agents in the Twenty-first Century:

The Problem of Biased Advice’) assesses this risk, in the context of insurance markets for consumers and small businesses. They conclude that available evidence about the pervasiveness of biased advice is less robust than might be expected, but generally suggests that the risk is indeed substantial. Schwarcz and Siegelman also argue that the legal and regulatory tools directed at limiting biased advice are themselves limited in their effectiveness. Ultimately, they suggest that institutional-cum-technological developments present new opportunities for limiting the frequency and harm of biased advice, but also pose new risks of potential consumer harm.

John Nyman’s contribution to this volume, ‘Moral and Other Hazards of Economic Analysis of Health Insurance’, also examines issues surrounding individuals’ motivations for purchasing coverage, focusing on the specific context of health insurance. Building on his earlier work that developed a new theory of the demand for health insurance, Nyman emphasizes that health insurance allows individuals to demand more medical services when they become ill. Economists have long characterized insurance-induced demand for health care as moral hazard, and have concluded that it is unambiguously welfare reducing. Nyman questions this conclusion, however. In his model, insurance is actually a way to provide additional income to those who are sick, which in turn enables them to purchase expensive medical care that would be beyond their reach in its absence. For instance, few if any kidney transplants would be demanded by uninsured consumers whose kidneys have failed (given that the cost is so high and few private financing options are available); and few if any kidney transplants would be demanded by insured consumers whose kidneys are healthy, even if the price of such a procedure had dropped to zero. As a result, even though all who are insured face a low price for such a procedure, the low price would only be effective in increasing demand by those who are actually ill. Therefore, the increase in demand that has typically been seen as moral hazard is really due to a transfer of income from those who purchase insurance and remain healthy to those who purchase insurance and become ill. Nyman’s analysis has various significant and counter-intuitive policy implications, such as suggesting that cost-sharing should be reduced for many types of health care services, and that the general strategy of controlling health care costs by reducing the amount of care consumed is seriously misguided.

Ronen Avraham’s chapter also focuses on the nature of consumers’ demand for insurance, asking: ‘Does the Theory of Insurance Support Awarding Pain and Suffering Damages in Torts?’ The answer, according to Avraham, is an unequivocal ‘Yes’. Many commentators have argued that individuals do not (and should not) demand insurance for non-monetary losses that do not lower their marginal utility of wealth.

From this perspective, tort laws that provide victims with compensation for pain and suffering effectively force them to purchase insurance that they don't value. Avraham disputes this logic on several levels. First, he suggests that so-called 'pure non-monetary losses' are exceedingly rare in practice, and are difficult to define even in theory. Moreover, non-monetary losses are likely to be correlated with monetary losses, and this correlation generates a demand for insurance covering both types of losses even under the traditional model used by law and economics scholars. Coverage of non-monetary losses can also be demanded under many plausible alternatives to expected utility theory. Avraham also takes issue with the empirical evidence that some have interpreted as suggesting a lack of demand for coverage of non-monetary losses. Finally, and most provocatively, he suggests that future advances in neuroscience may make it possible to accurately measure mental states associated with pain and suffering, obviating the need for the subjective testimony that introduces so much noise into the assessment of these damages.

## PART II: THE ROLE OF THE STATE IN INSURANCE MARKETS

Whether through direct government programs or through an extensive regulatory regime, the state plays a vital role in most insurance markets. This is perhaps most obvious in the context of the robust social insurance programs that exist in most Western countries: in the US, for example, Social Security and Medicare alone comprise almost 9 percent of Gross Domestic Product (GDP). In "'Social Insurance", Risk Spreading, and Redistribution', James Kwak asks a fundamental question about such programs: Are they really insurance, or are they simply covert tax-and-transfer schemes that redistribute income? The question is of enormous political importance, since framing these programs as insurance makes them substantially more popular than if they are described as transfers from rich to poor. Kwak proposes a novel answer to the ontological question: The balance between risk spreading and redistribution varies with the information that participants have and the time frame under consideration. This year's Medicare payments are transfers from the currently young and healthy to those who are already old and sick. But over a longer horizon – say 50 years – we do not know who will ultimately be (old and) sick, so that the risk of future illness is real, albeit not yet realized. Since there is no single 'correct' time frame, there is no 'essence' of social insurance, which means that there is always room for policy disagreements about how to define the category.

Catastrophe insurance is another arena in which the state almost invariably plays an important role. Any line of insurance in which large numbers of claims are likely to be highly correlated across individual policies can be labeled ‘catastrophe insurance’. As Dwight Jaffee explains in ‘Catastrophe Insurance’, private insurers are often unwilling or unable to supply robust insurance of this type to the public. Doing so requires the insurer to maintain large amounts of readily-available capital, a practice which is difficult due to various tax and investment issues. Even with appropriate capital, catastrophe insurance inevitably poses magnified insolvency risk to an offering company. Moreover, mechanisms such as private reinsurance, catastrophe-linked securities, and monoline coverage are each limited in their ability to facilitate the private provision of catastrophe insurance. For these reasons, many catastrophe insurance markets have become government-dominated in recent decades, with the government either directly providing coverage or reinsuring coverage initiated by private insurers. Reviewing each of the major US catastrophe insurance programs, Jaffee observes that most of them have difficulty setting risk-based premiums in practice, which also tends to undermine their ability to induce policyholders to adopt efficient risk-mitigation strategies. Moreover, these programs tend to crowd out private market alternatives. Echoing some of Kunreuther and Pauly’s suggestions, Jaffee suggests that government involvement in catastrophe insurance markets should be reformed to encourage risk-based premiums and avoid subsidies.

Scott Harrington’s chapter (‘US Health Care Reform’) on the Affordable Care Act (the ‘ACA’ or ‘Obamacare’) focuses on the unique difficulties arising from the interaction of public and private forces in the provision of health insurance. Harrington begins by noting many of the criticisms of health insurance and health care markets prior to reform, including the high number of uninsured, the persistently large increases in the cost of public and private health insurance, and private insurers’ discrimination against less healthy potential policyholders. In response, the ACA fundamentally reformed health insurance markets by (among other things) expanding the availability of public insurance through Medicaid, creating a host of new regulations and requirements for private insurers, and establishing both new subsidies and penalties designed to encourage the purchase of private coverage. After thoroughly reviewing many of the details of these changes, Harrington urges caution and patience in assessing their effects. While the evidence is generally favorable regarding Massachusetts’ parallel reforms in 2006, distinctive features of Massachusetts’ pre-reform environment make it hard to know to what extent the ACA’s national impact will be similar. Meanwhile, trends in potential adverse selection, rate changes, subsidy levels, and participation rates in the insurance

exchanges are still unclear, as are the various direct and indirect effects that the Act might have on employer-sponsored insurance.

### PART III: INSURANCE REGULATION

As suggested above, regulation plays a dominant role in the contexts of health insurance and catastrophe insurance. But regulation is fundamental to all insurance markets. The central goal of such regulation is to ensure that insurers have the financial capacity to pay policyholders' claims. This is the subject of Elizabeth Brown and Robert Klein's chapter, 'Insurance Solvency Regulation: A New World Order?' Brown and Klein begin by briefly laying out the economic rationales for solvency regulation, which include information asymmetries, principal agent problems, and negative externalities. They also provide an overview of the political economy of solvency regulation, which is deeply influenced by its lack of salience to the general public and the clear compliance costs such regulation creates for the industry. From this base, they focus their attention on competing models of solvency regulation across the globe. Such analysis is vital, they suggest, given the increasing globalization of insurance and financial services markets. Their broad-ranging analysis describes regulatory initiatives in the National Association of Insurance Commissioners' Solvency Modernization Initiative, the European Union's Solvency II project, and the International Association of Insurance Supervisors' 'soft law' projects. With respect to each initiative, Brown and Klein provide an in-depth look at proposed and adopted changes to three core tools of solvency regulation: capital requirements, group supervision, and corporate governance.

In 'Classification Risk and Its Regulation', Kenneth Abraham and Pierre-André Chiappori address another fundamental, albeit oft-neglected, element of insurance regulation: The regulation of insurers' risk classification practices. Much has been written on the degree to which insurers should be allowed to charge higher premiums to certain groups or individuals who are at higher risk of loss than others. Abraham and Chiappori usefully decompose policyholder risk into two components – the risk of suffering a loss, and the risk of being classified by an insurer as high risk. In a world where everyone pays the same premium for coverage, there is no classification risk, only 'occurrence' risk (e.g., the risk that you develop a given illness). But where policyholders are classified into groups and charged different premiums (that reflect group average risks of developing that illness), things look different. The overall risk of loss now has two components: the risk of winding up in a high-risk group (and paying a higher premium as a result) and the risk of actually experiencing

a loss, *given* that one is in the high-risk group. Abraham and Chiappori explain why classification risk is likely to be significant for many kinds of risk we face, and demonstrate that – unlike pure ‘loss’ risk – it is essentially impossible to insure against in an unregulated competitive insurance market, which will thus fail to spread risk optimally. Viewed in this light, the authors point out, the ACA’s combination of mandated coverage and severe restriction on the variables that can be used to price insurance essentially eliminates classification risk for health insurance. But it does so at the potential cost of unleashing significant adverse selection problems. The severity of these problems depends on a variety of theoretical and empirical unknowns (such as the covariance of riskiness and risk-aversion in the population, and the nature of the equilibrium in competitive insurance markets).

Instead of tackling specific regulatory topics such as solvency or risk classification regulation, Martin Grace’s chapter, ‘Economics of State versus Federal Regulation’, examines what level of government should actually conduct insurance regulation. The chapter’s central premise is that the unit of government best able to internalize the costs and benefits of insurance regulation should be charged with conducting that regulation. Applying this principle to a range of insurance regulatory functions, Grace suggests that some types of insurance regulation (such as market conduct regulation) may be best conducted at the state level, because they are substantially impacted by local tastes and preferences. For other types of insurance regulation (such as solvency regulation), the federal government may be the optimal regulator because the quality of that regulation has a nation-wide impact or because regulation itself enjoys large economies of scale. Throughout, Grace emphasizes that these issues turn on empirical data regarding the costs and benefits of regulation, which are not always clear or comprehensive enough to definitively resolve the question of what level of government is best suited to conduct insurance regulation.

## PART IV: COURTS AND INSURANCE

Courts play a vital role in regulating insurance markets. Tom Baker and Kyle Logue’s chapter, ‘Mandatory Rules and Default Rules in Insurance Contracts’, examines a fundamental, though surprisingly under-addressed, question regarding such regulation: When should insurers be able to alter judicially constructed insurance rules through policy language? As a descriptive matter, the answer is often unclear, as courts are frequently silent about whether a given insurance contract rule such as *contra proferentem* is actually a default (which parties can change as

they see fit), or a mandatory rule (which cannot be varied, even if the parties would prefer to do so). From a normative perspective, Baker and Logue conclude that the answer depends on at least two factors. The first is whether we can trust the contracting parties to fully incorporate all of the socially relevant effects of the rule they choose to adopt. For instance, a rule that generates negative externalities for third parties – as is rarely the case in ordinary contracts, but is often true in insurance – should not be within the powers of the parties to alter. Second, we also might not trust the parties – in particular, unsophisticated consumers – to fully take account of the consequences of rules choices for *themselves*. This is particularly the case given that behavioral frailties in insurance demand (see Kunreuther and Pauly, Chapter 1 in this volume) have long been recognized as particularly acute. But where parties are sophisticated enough to avoid such frailties, and where their behavior generates no significant externalities, they should be free to design their insurance contracts precisely as they wish. The authors conclude by discussing the crucial role played by administrative regulation of insurance contracts, explaining why courts should give deference to regulators' choices of which rules are defaults and which are mandatory.

Another central question regarding the role of courts in regulating insurance markets is what damages should be available when insurers are deemed to have violated their contractual obligations. In many states, a policyholder who believes her insurer has failed to pay a claim in full and on time may seek emotional distress and/or punitive damages based on a theory of insurer bad faith. In 'The Law and Economics of Insurance Bad Faith Liability', Danial Asmat and Sharon Tennyson examine the economic justification for this kind of liability. Imperfectly competitive insurance markets permit insurers to behave opportunistically by taking longer to settle claims and by paying less than the full amount due, without significant harm to their reputations. Liability for bad faith may be justifiable to prevent this kind of behavior. Whether bad faith liability is in fact justified, however, depends on a series of further conditions, especially the way that courts and legislatures craft the legal rules governing such liability. The authors consider the growing empirical literature on bad faith liability to determine the effect of these rules on the volume of insurance claims, settlements, and formal disputes. Their conclusion is that the presence of bad faith liability has increased settlement amounts and reduced the underpayment of claims, but it has failed to reduce the volume or cost of litigation for disputed claims in court.

Charles Silver's chapter ('Basic Economics of the Defense of Covered Claims') focuses on another knotty problem in insurance law: a liability insurer's duty to defend policyholders when they are sued. Silver notes

that all policies containing a duty to defend raise efficiency issues because the common law and policy language generally provide the insurer with exclusive control of the defense, but policyholders are impacted in numerous monetary and non-monetary ways by decisions regarding how much to invest in that defense. In some cases – such as when policyholders have a self-insured retention or substantial reputational concerns relating to liability – this problem can be addressed by granting policyholders more explicit control over the defense. But this solution raises its own difficulties, given the obvious consequences of an inadequate or excessively costly defense to insurers providing indemnity coverage. As Silver explores, liability insurers normally use a number of mechanisms to efficiently limit the costs of providing a defense to their policyholders. These include elevating the defending insurer to the status of a co-client, operating in-house staff counsel, maintaining specialized panel counsel, using litigation management guidelines and audits, and employing value-based fee arrangements.

Closely related to the duty to defend is liability insurers' duty to settle, which is the topic of Richard Squire's chapter ("The Artificial Collective-action Problem in Lawsuits against Insured Defendants"). As with the duty to defend, the law governing the duty to settle is principally motivated by the fact that liability insurance splits the consequences of liability between the insurer and the policyholder. In the duty to settle context, courts have historically focused on how limits on coverage create inadequate incentives for insurers to settle claims that might produce a judgment in excess of the underlying policy limit. The common law response to this risk is to permit insurers to maintain authority over settlement, but to penalize insurers who unreasonably refuse to settle. However, this solution generates both litigation costs and uncertainty. Scholarly proposals to hold insurers strictly liable for excess judgments have their own faults, Squire argues. In particular, they are problematic when policyholders have some say in settlement decisions, as when the policyholder is asked to contribute personally to a settlement or settles directly with the plaintiff and then seeks reimbursement from the carrier. In such cases, strict liability fails to respond to the fact that policyholders have excessive incentives to settle. Squire argues that all of these problems could be solved simply by allowing the defendant and each liability insurer to enter into separate settlements with the plaintiff, which cover only that party's segment of potential responsibility for damages. Unlike the common law or strict liability proposals, this solution, Squire demonstrates, would eliminate the source of the underlying conflict of interest. In advancing this novel argument, Squire convincingly addresses important criticisms of his proposal, including the fact that it would result in more frequent contributions from

policyholders and would raise questions of who would pay for the costs of continuing litigation expenses when the insurer has settled out of the case but the policyholder has not.

Instead of focusing on particular insurance law doctrines, Tom Baker and Peter Siegelman show how liability insurance itself profoundly impacts tort law. ‘The Law and Economics of Liability Insurance: A Theoretical and Empirical Review’<sup>1</sup> examines how liability insurance shapes who gets sued, for what, who wins, and how much (if any) is awarded in damages. Baker and Siegelman summarize and critique the extensive theoretical and empirical literature on the effects of liability insurance. Liability insurance will be welfare-enhancing if insurers can curtail the moral hazard problems it creates, and the authors suggest that this is probably true in most cases. Nevertheless, they point to some situations (in particular, *ex post* moral hazard, which describes the effects of insurance on claiming rates) that are not encompassed by the standard model and that may weaken or even overturn its conclusions.

## CONCLUSION

The chapters in this *Handbook* cover a wide range of topics. But every single chapter demonstrates the fundamental relationship between insurance law and regulation, on the one hand, and insurance economics, on the other. Just as insurance law and regulation must be informed by economics, so too must insurance economics appreciate the ways in which law and regulation structure and define insurance markets. Unfortunately, institutional and historical factors have created a substantial wall between insurance economists and scholars of insurance law and regulation. This *Handbook* seeks to help break down this wall by providing those interested in insurance across academic silos with accessible and integrative contributions from many of the top insurance economists and legal scholars.

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