Uncertainty > Risk: Lessons for Legal Thought from the Insurance Runoff Market

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Insurance ideas inform legal thought: from tort law, to health law, to theories of distributive justice. Within legal thought, insurance is often conceived as an ideal type in which insurers distribute determinable risks through contracts that fix the parties’ obligations in advance. This ideal type has normative appeal, among other reasons because it explains how tort law might achieve in practice the objectives of tort theory. Significantly for tort theory, this ideal type supports a restrictive vision of liability-based regulation, on the grounds that uncertainty poses an existential threat to insurance markets.

Prior work has criticized this restrictive vision on normative grounds. This article criticizes that vision on empirical grounds. The article describes an emerging secondary insurance market – the insurance runoff market – that transfers liabilities under insurance policies issued many years in the past. Having started with old asbestos and hazardous waste liabilities, the market now extends to other liabilities that have not worked out well for the companies that insured them, including workers compensation, savings-linked life insurance, pension and annuity guarantees, and long term care insurance.

Runoff specialists reprice these legacy insurance liabilities with hindsight, consolidate them, and take calculated risks that encourage capital to enter the runoff market. That market transforms the uncertainties of the past into today’s tradeable risks, bringing into the open a dynamic that pervades insurance markets: namely, the promises that are made in all insurance policies get bundled and reconceptualized into sets of liabilities that are valued and revalued, further combined and redefined over time.

Through the lens of the runoff market we can see many ways that insurance organizations manage uncertainty, revealing the resilience in insurance markets and the flexibility and innovation that produce that resilience. The runoff market counsels us to give much less weight to arguments that expanding liability will undermine insurance markets. Insurance already involves so much uncertainty, and insurers have so many ways to manage it, that the most likely result will always be that they will continue to muddle through.
Insurance ideas, practices, and metaphors inform legal thought. From the loss spreading that powered the expansion of tort liability, to the moral hazard that haunts financial services regulation, to the adverse selection that lies behind the design of the Affordable Care Act, and even to theories of distributive justice, an insurance idea or metaphor often lies at the core of the analysis.2 Scholars in fields as diverse as civil procedure, torts, corporations, contracts, and employment law use insurance practices as a window on the law in action.3 Legal historians study private insurance to learn about the origins of the welfare state.4 And recent legal scholarship reveals insurers to be, among other things, soft-law makers extraordinaire, private regulators of public police, and enablers of securities fraud.5

Despite this widespread use of insurance ideas, metaphors, and practices in legal thought, the dominant image of

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insurance that appears in legal writing is a caricature. Almost without exception, the insurance that appears in legal scholarship is an ideal type that involves the fixed-in-advance distribution of determinable risks — in which insurance companies sell protection against defined categories of losses whose total cost can be accurately predicted and, therefore, priced with confidence when insurance is sold.6

As any torts scholar can attest, this ideal type has great normative appeal. If insurers can accurately assess risk and price insurance on that basis, then liability insurance allows tort law to achieve in practice the deterrence and compensation objectives of tort theory. Risk-based pricing serves as the cost-internalization mechanism for ordinary people and organizations that provided the classic deterrence justification for strict products liability; and the liability insurance claims process provides the compensation, assessing and paying for tort losses and then feeding those payments back into the risk assessment and pricing process. The appeal of this ideal type extends beyond tort law, however. If insurance companies sell protection against defined categories of loss whose cost can be accurately predicted and, therefore, priced with confidence when insurance is sold, then risk-based pricing is not only efficient, it is, at least in most circumstances, fair: those prices accurately represent the expected value of the insurance to the people who buy it, such that

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6 See, e.g., Dworkin, supra note 1, at 73 et seq (discussing the “value of insurance” in ways that imply a fixed in advance distribution of determinable risks); Priest, supra note 1, at 1539-40 (“Insurance . . . requires that the loss be probabilistic, either as to whether or not it occurs at all (for example, whether one’s house burns down) or as to when the loss occurs (for example, whether one dies before or after full life expectancy).”); Calabresi, supra note 1, at 529-530 (unforeseeable risks that would be shifted by strict liability cannot be priced in market insurance and would among the “uninsurable risks” that entrepreneurs would assume under a strict liability regime); Kenneth Abraham, Environmental Liability and the Limits of Insurance, 88 Colum. L. Rev. 942, 946-47 (1988) (“Insurance operates most comfortably with stochastic events, in which the probability of the frequency and magnitude of insured losses that will be suffered by policyholders is highly predictable”); John Wade, On the Effect in Product Liability of Knowledge Unavailable Prior to Pargeting, 58 N.Y.U. L. Rev. 734, 755 (1983) (“How does one spread the loss of an unknowable hazard? How can insurance premiums be calculated for this purpose? Indeed, will insurance be available at all?”). Cf. Henry Hansmann, The Organization of Insurance Companies: Mutual versus Stock, 1 J. L., Econ., & Org. 125 (1985) (treating the fixed-in-advance, distribution of determinable risks as the ideal type for commercial insurance and explaining that the inability to satisfy this ideal type for certain risks helps to explain the presence of the mutual form of insurance organization).
private insurance arrangements satisfy in practice the principles of what Travis Pantin refers to as “preservative redistribution.”

Legal scholars recognize that the classic “information problems” of adverse selection and moral hazard complicate insurers’ ability to achieve that ideal type, but those problems typically are understood as (manageable) constraints on insurers’ ability to price and select risks with precision, not as a challenge to this fundamental conception of insurance. Indeed, so well established is the fixed-in-advance, determinable-risk conception of insurance as, not only a normative ideal, but also an accurate description of how insurance actually works, that George Priest’s Yale Law Journal article about the 1980’s liability insurance crisis (which remains one of the boldest efforts to use insurance ideas to shape legal doctrine) could call for the restoration of pre-1960 product liability law on the grounds that strict liability had destabilized insurance markets by undermining insurers’ ability to predict their risks. His recent challenge to the Restatement of the Law Liability Insurance makes similar arguments about the potential impact of that project on insurance markets.

Scholars have persuasively criticized Professor Priest’s efforts on multiple grounds, but none of those critiques took issue

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7 See Travis Pantin, Toward a Political Theory of Risk and Insurance (working paper 2019). Cf., KENNETH ABRAHAM, DISTRIBUTING RISK (1986) (on fairness and efficiency in insurance pricing); and Deborah Stone, The Struggle for the Soul of Health Insurance, 18 J. Health Policy Politics & L. 287 (1993) (criticizing the “actuarial fairness” vision of insurance that is similar to, but less developed than, Pantin’s preservative redistribution).
8 See, e.g., Siegelman, supra note --- (explaining that adverse selection is “an exaggerated threat”); Baker, Genealogy, supra note -- (describing tools that insurers can use to manage moral hazard). Put another way, the concern that moral hazard and adverse selection make insurance “reactive” and, thus, difficult to price typically operates under an assumption that there is some underlying determinable risk that can be fixed in advance if the problems of moral hazard and adverse selection can be addressed.
9 See Priest, supra note 1, at 1561-3, 1574-78 (asserting that the expansion of product liability had increased the variance in liability insurance pools, relative to manufacturers’ ability to predict their risk, so that manufacturers now had greater private information about their risk than before, destabilizing the insurance market in the long term through an adverse selection unravelling of the liability insurance market). Following Hansmann, supra note 5, Priest used the mid-1980s expansion of mutual liability insurance organizations as evidence supporting his thesis. Cf., Abraham, supra note 6 at XX (suggesting changes in environmental liability law to reduce uncertainty and promote insurance markets).
with the underlying description of the insurance market, which remains the implicit consensus in legal writing. Even scholars who would recruit insurance markets to achieve redistributive or corrective justice ends in ways that Priest and the other “Yale lawyers” would surely regard as misguided share their description of insurance as, fundamentally, a market that sets prices for, and then distributes, determinable risks. So, too, for example, does the California Supreme Court.

There is just one field of research that seriously questions this description of insurance. Researchers in a branch of sociology initiated in the early 1990’s by students of Michel Foucault have gone into the field and discovered insurance practices that are more varied and multi-faceted than simple loss distribution. Legal scholarship has incorporated, and even extended, one of the

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12 Stapleton, supra note – at 837 (“Yale lawyers” is her term for George Priest, Alan Schwarz, and Richard Epstein). See also id (“the “tort-as-insurance argument also generates a reform strategy which is radically redistributitional whereby business is enriched and injured individuals are stripped of protection”).


14 See Anderson v. Owens-Corning Fiberglas Corp., 810 P. 2d 549 (Cal. 1991) (adopting a knowability standard for liability for failure on, inter alia, insurability grounds, quoting from Wade, supra note 6: “How does one spread the potential loss of an unknowable hazard? How can insurance premiums be figured for this purpose?”).

central findings of this research: insurers often serve as private regulators of the people and entities that they insure, as illustrated most prominently in recent legal scholarship by John Rappaport’s investigation of how private insurers regulate public police.\textsuperscript{16} This “insurance as governance” idea fits easily in legal scholarship because it gives shape to the moral hazard management function of liability insurance posited in Steven Shavell’s influential early work on tort law and economics, and it helps explains how tort law’s noisy deterrence signals translate into loss prevention efforts on the ground.\textsuperscript{17}

Legal scholarship has not yet adequately acknowledged, however, let alone incorporated, a second major finding from this branch of sociological research: the ideal type of a fixed-in-advance, distribution of determinable risks does not match the reality of insurance markets – not even in life insurance, which would be expected to be the paradigmatic example of this ideal type in action because of the availability of public and private mortality data going back hundreds of years.\textsuperscript{18} Everywhere they looked, the sociologists found insurance practices that deviated from this ideal type: insurance that went beyond the data, potential insured losses that could easily swamp the available assets of the industry, insured losses that defied prediction, and on-the-fly, after-the-sale adjustments to unforeseen circumstance.\textsuperscript{19}

This Article brings this second finding, and the challenge it poses, into legal scholarship while also extending the underlying qualitative empirical research, by investigating, for the first time in the scholarly literature in any field, the rise of


\textsuperscript{19} Id. See also Stapleton, supra note 11. For an insightful, insurance-industry-insider account of the uncertainty that permeates the insurance business, see Sean M. Fitzpatrick, Fear is the Key: A Behavioral Guide to Underwriting Cycles, 10 Conn. Ins. L. J. 255 (2004).
insurance runoff, a thriving sector of the insurance market whose raison d’être has been managing losses that proved to be indeterminable. In combination with the sociological research just described, the research reported in this article challenges the descriptive accuracy of the prevailing insurance ideal type, as well as the legal and policy conclusions that depend on that descriptive accuracy, such as recommendations to cut back on certain aspects of tort law so that liability and damages are more predictable and more recent suggestions to expand cyber liability so that insurance prices will encourage people or businesses to engage in efficient loss prevention. Insurers may well try to price based on their best assessment of the frequency and severity of future losses, but the sociological research provides so many reasons why insurers so rarely hit that pricing nail on the head that legal scholars should stop thinking and acting as if insurers regularly could do so. Instead, we should start learning


21 For the former, see, e.g., Priest supra note 2. For the latter, see, e.g. James C. Cooper and Bruce H. Kobayashi, An Unreasonable Solution: Rethinking the FTC’s Current Approach to Data Security (working paper 2019) (calling for strict liability for data breaches so that insurers can function as private regulators of cyber security.)


23 For examples of legal scholarship that treat tort law rules that make hitting that nail on the head more difficult as a problem that suggests lawmakers should do something, see, e.g., Priest, supra note 1; Mark Geistfeld, Legal Ambiguity, Liability Insurance, and Tort Reform, 60 DePaul L. Rev. 539, 549 (2011) (describing the insurance underwriting cycle as the product of “forecasting errors” attributable to “legal ambiguity” and arguing that “the protection of individual tort rights in mass markets has led to a marked increase in legal ambiguity”); and, arguably, Tom Baker, Insuring Liability Risks, 29 Geneva Papers on Risk and Insurance - Issues and Practice 128 142-43 (2004) (describing how legal uncertainty poses a threat to the insurability of liability risks).
more about how insurers manage the uncertainty that the research reveals.

The Article begins in Part I with an etymology of the word “runoff” as used in the insurance context to refer to the practice of winding down – running off – insurers’ obligations under their old insurance policies. Then, in Part II the Article describes a thriving new market in those old obligations that first developed in the years following the most famous insurance runoff transaction in modern times: Lloyd’s Reconstruction and Renewal. This 1996 transaction reinsured all of Lloyd’s obligations under non-life policies issued before 1993 – most significantly asbestos, pollution and other toxic tort liabilities – into a newly formed entity, Equitas, designed to honor those obligations as they became due over the next fifty (or more) years, allowing Lloyd’s to continue as a major force in insurance markets.24

Together with a set of similar transactions that took place at about the same time on this side of the Atlantic,25 the Reconstruction and Renewal set the stage for the consolidation of problematic, legacy insurance obligations in entities that do not sell new insurance policies. More recently, this insurance runoff market has expanded beyond liability insurance to include other long-duration insurance products that have not worked out well for the insurance companies that sold them – workers compensation, savings-linked life insurance with guaranteed minimum returns, pension and annuity guarantees, financial guaranty insurance, and, most recently and tentatively, long-term-care insurance – none of which, with the possible exception of long term care insurance, are in trouble because of the classic information problems of moral hazard or adverse selection.26


The companies that assume and manage these legacy obligations serve as what we might call “uncertainty sinks,” extending a metaphor used by sociologists Richard Ericson and Aaron Doyle in their important monograph, *The Uncertain Business.*

Using Knight’s distinction between risk and uncertainty, Ericson and Doyle showed how the limits of knowledge and the competitive nature of the insurance business push insurers beyond the domain of risk (where uncertain individual losses become predictable in the aggregate) into the domain of uncertainty (where losses are not predictable even in the aggregate).

Insurance runoff transactions typically involve losses that, we now know, were uncertain in this larger, aggregate sense at the time the original insurance policies were sold. The insurance runoff market transforms those past uncertainties into today’s tradeable risks and transfers them to specialists – the uncertainty sinks – to manage.

Part III of this Article describes how that transformation takes place. This requires delving into some unavoidably technical subjects – runoff underwriting, policy management, asset management, and finance – that are the subject of the first half of Part III, which represents the first serious effort to explain the insurance runoff market to a general audience. Understanding the runoff market also, and perhaps more importantly, requires developing an appreciation for the role of rhetoric and organizational structure in this process. Prior research has documented that “[i]n insurance companies tell two different sets of stories about insurance at two distinct points in...”
the insurance relationship” and that insurance companies minimize the potential for these “sales” and “claims” stories to come into direct conflict by separating the organizational responsibility for their narration. The sales stories stress the dependence of policyholders and the protection that insurance provides; the claims stories stress the contractual nature of the relationship and the limits of that insurance protection. As the second half of Part III describes for the first time, the runoff market features another set of stories, told by people in another organizational location.

These runoff stories stress the burden that unforeseeable liabilities have placed on insurers, who were paid too little for accepting these obligations, and the need to relieve the insurance market from the drag on performance that otherwise would result. The runoff stories valorize finality, compromise, and innovation over the protection, dependence, and contract of the sales and claims stories. If the sales stories help sell an important product that not enough people otherwise would buy, and the claims stories help people accept that insurance protection must have limits, then these runoff stories help people understand that insurance markets need room for after-the-fact accommodation and adjustment, and that there can be circumstances in which the insurance industry’s ordinary approach to promise and contract can be suspended, precisely to permit that ordinary approach to be maintained more generally.

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31 *Id.* at 1416-17.
32 Compare *Id.* at 1404-05 (themes of dependency and trust) with *id.* at 1409 (themes of insurance as contract and the need to protect the insurance fund for the future and from fraudulent claims). Note that there is another reason for separating the claims and underwriting departments that cuts in the other direction: underwriting could pressure the claims department to delay or deny certain claims in order to improve the underwriting ratio on a book of business. Thank you to Sean Fitzpatrick for this observation.
33 I am simply reporting the runoff stories at this point, not evaluating them. There is an obvious alternative framing to the “paid too little” story. Namely, the insurance company made a bad bet, and the policyholder did get what it paid for. When the results work out the other way, and policyholders paid much more in premiums than the insurance company had to pay out, insurers do not offer to return the “extra” premiums.
The research reported in this Article provides significant new insight into how insurers use the runoff market to manage uncertainty. Nevertheless, as I emphasize in Part IV, it is important not to exoticize insurance runoff transactions. The dynamic that produced the insurance runoff market is as old as the insurance business. Insurers have always extended protection against losses whose frequency and magnitude were unknown, whether by engaging in the obviously innovative act of creating a new insurance product to cover a new set of risks (happening with cyber and digital asset insurance today\(^{34}\)), by revising a standard-form insurance policy, or, even, by continuing to sell exactly the same insurance policies in the real-world insurance market. As Ericson and Doyle have shown, even selling a tried and true insurance policy into a well-established market can be a voyage into uncertainty, because of the dynamism of insurance markets and insured risks.\(^{35}\) Competition among insurers changes the shape of the insurance market, the creative destruction of the underlying insured activity changes the risks transferred in that market, and there is always the possibility of change in the governing legal rules.\(^{36}\) In practice,

\(^{34}\) See, e.g., Tom Baker, Back to the Future of Cyber Insurance, Q3 2019 PLUS Journal 4, 5 (2019) (providing preliminary answers to the question, “How have insurers managed for over twenty years to sell insurance against cyber risks that their underwriters don’t (and can’t) fully understand”); Adam Zuckerman [placeholder for his ms in progress on digital asset insurance]. Cf. Ericson & Doyle, supra note – at – (describing how the insurance industry responded to the radically increased scale of potential terrorism losses revealed by 9/11); Dwight Jaffee and Thomas Russell, Catastrophe Insurance, Capital Markets, and Uninsurable Risks, 64 J. Risk & Ins. 205, 207 (1997) (describing how marine insurers historically addressed large, uncertain losses). Jaffee and Russell’s accounts of how insurance markets manage uncertainty shows a more nuanced understanding of insurance than typically reflected in the law and economics literature. See also Dwight Jaffee, Monoline Restrictions, with Applications to Mortgage Insurance and Title Insurance, 28 Rev. Indus. Org. 83 (2006) (explaining that monoline insurance manages cases of extreme loss through insolvency and that legal rules requiring certain kinds of insurance to be conducted through monoline insurance protect the larger insurance pool from that risk of extreme loss).

\(^{35}\) Ericson & Doyle, supra note xx at 47 (“beneath the veneer of certainty, life insurance is a very uncertain business”).

there is no such thing as the fixed-in-advance distribution of fully determinable risks. It is time for legal thought to update its insurance ideas and metaphors, and its use of insurance practices, to this more realistic understanding of insurance. Insurance markets always and everywhere trade in uncertainty, and insurance markets always and everywhere develop ways to transform that uncertainty into manageable risk. With this more realistic understanding of insurance, legal thought can lessen its concern about the impact of legal change on insurance markets, even if we regard those markets as essential, because we can be more confident that those markets will manage through legal change.

The rise of insurance runoff suggests that we may have learned exactly the wrong lesson from the insurance industry’s harrowing asbestos and environmental liability experience. That experience involved retroactive, strict liability for activities undertaken on a widespread basis for decades. For asbestos miners and manufacturers, the unanticipated liabilities came from common law innovations in the 1960’s and 1970’s that made them liable for activities dating back to at least the 1940’s. For hazardous waste producers and transporters and for the owners of hazardous waste sites, the unanticipated liabilities came from statutory liabilities adopted in the early 1980’s that made them liable for activities that dated back even longer. These liabilities landed on liability insurers through the promises they made in insurance policies they sold to asbestos miners and manufacturers, hazardous wastes producers and transporters, and property owners dating back to the 1940’s – promises that

37 See Sean Fitzpatrick, Fear is the Key: A Behavioral Guide to Underwriting Cycles, 10 Conn. Ins. L. J. 255, 260 (2004) (“the bottom line is that pricing uncertainty [is] … built into the very nature of insurance”).
38 Ericson & Doyle, supra note xx.
39 Cf., Anderson v. Owens-Corning Fiberglas Corp., 810 P.2d 549, xxx (Cal. 1991) (explicitly structuring the warning defect aspect of product liability law so that it “rings of negligence” because truly strict liability would not be insurable, with a partial dissent from the last remaining justice from the Traynor era, Justice Stanley Mosk).
41 See, e.g., Borel v. Fiebreboard Paper Products, Corp., 493 F. 2d 1076 (5th Cir. 1973).
could not be repriced and for which the insurance industry had not anticipated anything like the extensive losses that resulted.\textsuperscript{43} Those unanticipated insurance liabilities lead to massive losses for the leading liability insurance companies and, eventually, one of the most significant innovations in the liability insurance market in the 20\textsuperscript{th} Century: the rise of insurance runoff.

The right lesson to draw from this experience is not that insurance markets need legal certainty,\textsuperscript{44} but rather that insurance markets are resilient and innovative enough to handle even extreme legal uncertainties. If the liability insurance market can absorb widespread, retroactive, and truly strict liability for asbestos injuries and the costs of cleaning up hazardous waste, then legal scholars, judges, and legislators can safely focus more on identifying the just distribution of legal rights and obligations and less on the destabilizing impact that moving toward that distribution might have on insurance markets. Perhaps ironically, this more realistic understanding of insurance markets may hold the greatest promise within legal thought for scholars whose ideas least take markets into account, because they already have discounted any concerns that adopting their ideas would destabilize insurance markets.

\section*{I. An Etymology of Insurance Runoff}

The insurance usage of “runoff” can be traced back at least as far as the 17\textsuperscript{th} century marine insurance market at Lloyd’s coffee shop.\textsuperscript{45} At Lloyd’s, individual merchants agreed to underwrite a share of the risks of a voyage, in return for a share of the insurance premium. They earned their share as soon as they “ran the risk,” meaning that the ship sailed.\textsuperscript{46} Once the voyage was over and any claims paid, the risk was fully “run” and

\begin{itemize}
\item \textsuperscript{43} See, e.g., Stempel, supra n. xx.
\item \textsuperscript{44} Cf. Baker, supra note --; Abraham, supra note XX at 946-47; Geistfeld supra note --.
\item \textsuperscript{45} CHARLES WRIGHT & C. ERNEST PYLE, A HISTORY OF LLOYD’S (1928)
\item \textsuperscript{46} James A. Park, A system of the law of marine insurances: with three chapters, at 368 (“The principle upon which the whole of this doctrine depends, is simple and plain, admitting of no doubt or ambiguity. The risk or peril is the consideration for which the premium is to be paid: if the risk be not run, the consideration of the premium fails.”)
\end{itemize}
the potential liability came “off” the portion of the merchant’s ledger book that listed liabilities, with the difference between the premium and any claim payments recorded as profit or loss.\textsuperscript{47} This accounting process became known as “running off” the risk, a feature of insurance accounting that continues today.\textsuperscript{48}

Over time, the underwriters working at Lloyd’s organized syndicates that underwrote risks for their members (including passive investors, known as Names) for a period of one year. At the end of three years (the year in which policies were sold plus two years), a syndicate would close by reinsuring with a new syndicate all the risks that had not already run off and declaring and distributing the profit (or loss) to its members.\textsuperscript{49} This process became known as “reinsurance to close,” and the new syndicate that offered the reinsurance to close often included some or all of the same underwriters and names as the closing syndicate.\textsuperscript{50} The original syndicate retained a formal contractual relationship with the merchants it insured, but the reinsurance-to-close transaction assigned all the responsibilities for that relationship to the new syndicate.\textsuperscript{51} As long as that new syndicate fulfilled those responsibilities, the merchants who purchased insurance from Lloyd’s syndicates could safely remain oblivious to the opening and closing of the syndicates that issued the policies sold at Lloyd’s.

Occasionally, a syndicate would be unable to reinsure to close, presumably because the underwriters and names were unwilling (or unable) to form a new syndicate that would reinsure the old syndicate to close, and they were unwilling (or unable) to pay the reinsurance-to-close premium demanded by other

\textsuperscript{47} \textit{JOSEPH MARRYAT, ESQ. M.P., OBSERVATIONS UPON THE REPORT OF THE COMMITTEE ON MARINE INSURANCE}, 50-51, 90 (1810).
\textsuperscript{49} NAIC \textit{REPORT ON LLOYD’S} at 5.
\textsuperscript{50} \textit{Id.} at 5, 18, 22-23 (describing the three-year accounting system, reinsurance-to-close, and the security of tenure of Names in their respective syndicate). To be clear, there would be no dollar limit on the reinsurance to close.
\textsuperscript{51} \textit{Id.}
syndicates.\textsuperscript{52} Such syndicates remained “open,” and they could not close until all the risks had run off or they found a syndicate willing to reinsure to close at a price that the members were able and willing to pay.\textsuperscript{53} The only business of a syndicate that remained open after three years, then, was running off the risks and seeking reinsurance to close. The open syndicate was said to be “in runoff,” a use of that term that continues through today.\textsuperscript{54}

By at least the 19\textsuperscript{th} century, the concept of runoff and its association with reinsurance were accepted aspects of insurance market practice generally, not just at Lloyds.\textsuperscript{55} Like the open syndicates at Lloyd’s, insurers that stopped underwriting entirely were said to be in runoff, and when an insurer stopped underwriting in a market, whether defined geographically or by type of insurance, that part of the insurer’s business was said to be in runoff as well. As at Lloyd’s, one insurance company might agree to take over the business of another through a reinsurance transaction in which the acquiring insurer reinsured the risks in runoff.\textsuperscript{56}

\section*{II. The Lloyd’s Renewal and Reconstruction}

Lloyd’s continued to operate on this traditional basis into the mid-1990s.\textsuperscript{57} As a formal matter, Lloyd’s became a membership organization whose members participated in syndicates that issued insurance policies.\textsuperscript{58} Neither Lloyd’s itself

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\item \textsuperscript{52} For example, a member of the syndicate who has declared bankruptcy or is insolvent would have no interest in paying additional premiums to close a syndicate. And since the other members are liable only for their shares, they wouldn’t have the same incentive to reinsure to close that they would have if they had full liability.
\item \textsuperscript{53} Carolyn Aldred, \textit{Lloyd’s to Make First Claim on Central Fund’s Cover; Claim will Exhaust Reinsurance Program’s Annual Limit}, \textit{Bus. Insider.}, Aug. 12, 2002, at 17 (describing a “surge” in open years at Lloyd’s following the September 11 attacks).
\item \textsuperscript{54} See, e.g., Wright and Fayle, \textit{supra} note \textsuperscript{xx}. NAIC \textit{REPORT ON LLOYD’S} at 5.
\item \textsuperscript{55} See, e.g., \textit{City of London Marine Insurance Corporation, Limited, Reports of Meetings}, 56 \textit{The Money Market Review}, 266, 266 (1888) (reporting amounts underwritten, “run off or reinsured,” and remaining liabilities).
\item \textsuperscript{56} Lee R. Steeneck, \textit{Loss Portfolios: Financial Reinsurance}, 72 \textit{PROCEEDINGS OF THE CASUALTY ACTUARIAL SOCIETY}, 154, 156 (1985) (providing history of loss portfolio transfers and describing a 16\textsuperscript{th} century transaction).
\item \textsuperscript{57} NAIC \textit{REPORT ON LLOYD’S} at 7.
\item \textsuperscript{58} \textit{Id.} As described in Wright & Fayle, supra note \textsuperscript{xx} at 422-23, it was not until the incorporation of Lloyds in 1871 that Lloyd’s formally adopted different rules for members
\end{itemize}
nor any other corporate entity was financially responsible for the payment of claims. Instead, Lloyd’s was a central administrative apparatus that managed claims but had no formal financial obligation for those claims. In form, the Lloyd’s administration simply connected policyholders with the syndicates, which were composed of individuals, that issued their policies. The “Names” in the syndicates had unlimited liability, but only for their share of the obligations of their syndicates, not for the syndicate as a whole.

Traditionally, the Lloyd’s administration managed that unlimited liability through the reinsurance-to-close transaction just described. Because of mounting asbestos and environmental liability and catastrophic property losses on policies written in the 1980s and earlier, however, an increasing number of syndicates faltered in the 1980s and were unable to find a newer syndicate to reinsure their obligations, thus remaining open syndicates. Names, many of whom only recently participated in Lloyd’s for the first time as Lloyd’s broadened its membership starting in the late 1970s, were hit with severe losses, in many cases several times their initial investment. Names began to default in mass (de facto if not de jure), undermining confidence in the Lloyd’s market. Warren Buffett colorfully described this process as follows in his 2006 Letter to Shareholders:

Eventually, the names came to include many thousands of people from around the world, who joined expecting to pick up some extra change without effort or serious risk. True, prospective

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who directly engaged in underwriting and the “Names” who were passive members of the syndicate and interacted with Lloyd’s through an agent. supplied capital but

59 Id. at 4 (“Lloyd’s is a market, not an insurer.”).
60 Id. at 5, 19-22.
61 Id. at 8.
62 Id. at 5.
64 Ingrassia & Milbank, supra note --.
65 Id.
names were always solemnly told that they would have unlimited and everlasting liability for the consequences of their syndicate’s underwriting — “down to the last cufflink,” as the quaint description went. But that warning came to be viewed as perfunctory. Three hundred years of retained cufflinks acted as a powerful sedative to the names poised to sign up.

Then came asbestos. When its prospective costs were added to the tidal wave of environmental and product claims that surfaced in the 1980s, Lloyd’s began to implode. Policies written decades earlier – and largely forgotten about – were developing huge losses. No one could intelligently estimate their total, but it was certain to be many tens of billions of dollars. The specter of unending and unlimited losses terrified existing names and scared away prospects. Many names opted for bankruptcy; some even chose suicide.

From these shambles, there came a desperate effort to resuscitate Lloyd’s. In 1996, the powers that be at the institution allotted £11.1 billion to a new company, Equitas, and made it responsible for paying all claims on policies written before 1993. In effect, this plan pooled the misery of the many syndicates in trouble. Of course, the money allotted could prove to be insufficient – and if that happened, the names remained liable for the shortfall.66

This “desperate effort” was known as Lloyd’s Reconstruction and Renewal.67 Through a series of transactions scrutinized and then approved by the UK Department of Trade and Industry and acquiesced in by U.S. regulators, underwriters, Names and their agents paid a reinsurance premium, and Equitas agreed to receive, process, and pay any claims on the reinsured legacy business, subject only to the terms and

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conditions of the original insurance policies and without regard to the total costs that Equitas might be obligated to pay.68 In effect, Equitas issued a massive reinsurance-to-close policy covering obligations under all policies issued before 1993.

By reinsuring all old business into Equitas (except for life insurance, which could not be reinsured as Equitas did not qualify as a life insurer under English law), Lloyd’s effectively created Equitas to function as an “old Lloyd’s” comprised of all pre-1993 business. Equitas was separate from the “new Lloyd’s,” which would house the on-going and active syndicates for years 1993 and beyond.69 The Lloyd’s restructuring separated the legacy business from Lloyd’s ongoing business, improving the syndicates’ ability to continue selling insurance.

To the extent that Equitas simply reinsured the old, open syndicates to close, Lloyd’s Reconstruction and Renewal could be seen to differ from Lloyd’s traditional runoff arrangements only in scale. Yet it also differed significantly in kind. First, by reinsuring to close all the open syndicates into a single entity, Equitas facilitated a broader socialization of losses among the Names than the individualized, syndicate-by-syndicate reinsurance-to-close process. Second, Equitas did not simply reinsure to close all the old open syndicates. Equitas also reinsured the pre-1993 liabilities of the syndicates that had been able to reinsure to close, thereby taking those legacy liabilities off the books of any active syndicates.70 This meant that the Equitas

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68 NAIC REPORT ON LLOYD’S 10, 51-54; Lisa S. Howard, *Lutine Bell Tolls Relief for Lloyd’s*, NAT’L UNDERWRITER, Sept. 9, 1996, at 1 (stating that the NYID had approved the transfer of $5.5 billion from the LATF into Equitas).
69 *Equitas Receives Go-Ahead*, BUS. WIRE, Sept. 4, 1996. The contractual mechanism by which policies were reinsured into Equitas defined and separated every existing syndicate’s policy liabilities into two groups based upon whether the policy which could incur a liability was written during or before the 1992 year of account. See Reinsurance and Run-off Contract between Equitas Reinsurance, Ltd., Additional Underwriting Agencies (No. 9), Ltd., The Names, The Closed Year Names, The Society of Lloyd’s, Equitas, Ltd., The Managing Agent’s Trustees, and Equitas Policyholders Trustee, Ltd., at § 3.2, pp. 5-6, Schedule 2, p. 55 (Sept. 3, 1996). [comment – link?]
70 Disappointed policyholders that previously had been protected by reinsurance to close could not proceed against those active syndicates, because Lloyd’s reinsurance to close transactions (like reinsurance generally) oblige the reinsuring syndicate to manage the liabilities for the benefit of the original syndicate; they do not give the policyholder of the original syndicate any rights directly against a syndicate that provided reinsurance to close.
transaction split the liabilities of the 1993 and later syndicates, many of which carried liabilities for pre-1993 policies that had been reinsured-to-close. Finally, unlike the prior entities that had offered reinsurance to close, Equitas went into runoff at inception, so there was never a possibility that profits from the active business could help pay claims under the old policies.

As Buffett’s letter described, the Lloyd’s/Equitas transaction did not, as a formal matter, legally separate the legacy obligations from the ongoing business. Policyholders could still legally proceed against the original syndicates and, if the syndicates did not pay, assess the names individually for any deficiency not paid by Equitas. Yet, because of the unique form of Lloyd’s business – in which the contractual obligations of the syndicates that issued the insurance policies reduce to pro rata obligations of the individual members of the syndicates rather than an insurance company with a permanent life – it was understood that collecting from the syndicates at some uncertain point in the future would be unlikely. Many Names in the older syndicates already were deceased, with their estates already probated, and, thus, no longer a potential source of funds, and many more would be deceased by the time that Equitas ran out of money (if it ever did). Moreover, the Names that remained at that time would be living all over the world and, in many if not most cases, out of reach without the cooperation of the Lloyd’s administration, which appears to have decided that, with respect to the liabilities of the names who participated in Equitas, it has done everything necessary to protect policyholders by creating Equitas. This de facto legal separation became de jure when

71 Responsibility for managing the claims of policyholders insured under old policies that had already been reinsured-to-close into post-1992 syndicates were transferred to Equitas while policyholders insured under new policies covered by those same post-1992 syndicates remained under Lloyd’s direct care. See Reinsurance and Run-off Contract, supra note xx at xx.

72 NAIC REPORT ON LLOYD’S at 53-54; David L. Foster, Equitas and the New Lloyd’s: Practical Implications for Policyholders, Brokers, and Reinsurers, METRO. CORP. COUNSEL, May 1997, at 10.

73 NAIC REPORT ON LLOYD’S 53-54; Stacy Shapiro, Policyholders Called Key to Lloyd’s Future, BUS. INSIDER., June 5, 1995, at 42.

74 Cf. Stephanie Strom, The Financial Safety Net Is Almost Spread Beneath Lloyd’s; But Questions Persist on Risks of Reinsurance, N.Y. TIMES, Aug. 22, 1996, at D1 (“If Equitas cannot ultimately fulfill a claim, a policyholder would have to sue each of the
subsequently enacted legislation pre-empted contract law in this case and permitted the transfer of liabilities from the issuing syndicates to Equitas without the acquiescence of policyholders, provided that the U.K. High Court of Justice approved the transaction.\textsuperscript{75} The High Court did so in 2009, completing the legal separation of the obligations under the pre-1993 Lloyd’s policies from the syndicates that issued or reinsured them.\textsuperscript{76}

Along with a set of similar insurance company restructuring transactions that took place in the U.S. at about the same time, Lloyd’s Reconstruction and Renewal paved the way for runoff to become a distinct sector of the insurance market.\textsuperscript{77} These U.S. transactions included: the restructuring of the property and casualty business of CIGNA through a series of transactions that culminated in the formation of a runoff entity known as Brandywine in 1995; the restructuring of the Crum & Forster Group in 1993 that facilitated the exit of Crum & Forster’s then parent, Xerox, from the insurance business; the restructuring of ITT-Hartford in 1992 that placed several Hartford subsidiaries into runoff and facilitated the exit of ITT from the insurance business; and the 1994 restructuring and eventual winding down of The Home, pursuant to which Zurich Insurance Group acquired the valuable parts of The Home’s business.\textsuperscript{78}

These transactions became known as the asbestos, pollution, and health hazard (“APH”) liability-based restructurings.\textsuperscript{79} They paved the way for a broader separation of legacy APH obligations from the active parts of the property and casualty insurance industry. Since the 1990s, an increasingly

\textsuperscript{75} Financial Services and Markets Act 2000, Title VII, §111
\textsuperscript{76} In the matter of The Names at Lloyd’s for the 1992 and Prior Years of Account, represented by Equitas Limited and In the matter of Equitas Insurance Limited (Formerly known as Speyford Limited) and In the matter of Part VII of The Financial Services and Markets Act 2000, [2009] EWHC 1595 (Ch).
\textsuperscript{77} NAIC LPT White Paper, supra note xx.
\textsuperscript{78} Id. at Appendix 1. See also, Jonathan Rosen, The Home Insurance Company – A Brief History of Time, AIRROC MATTERS Summer 2011 at 6.
\textsuperscript{79} NAIC WHITE PAPER, Part I.
large percentage of legacy APH obligations have come to be managed by runoff specialists, most prominently by Berkshire Hathaway’s National Indemnity Company (commonly known as NICO).\textsuperscript{80} NICO reinsured all of Equitas’s liabilities in 2006 in return for acquiring all of Equitas’s assets (hence, Buffett’s discussion of Lloyd’s in his 2006 letter), and it reinsured APH obligations of, among other insurance groups, INA (now part of Chubb), CNA, AIG, Liberty Mutual, and The Hartford through conceptually similar transactions.\textsuperscript{81} Other active runoff specialists with significant stakes in APH obligations as of 2019 include Armour, Catalina, Enstar, CompRe, and Randall & Quilter.\textsuperscript{82} The insurance industry’s asbestos and environmental liability experience is not over, but the center of gravity has shifted decidedly toward the runoff specialists, and the share of liability insurers’ reserves represented by asbestos and environmental liabilities is trending steadily down.\textsuperscript{83}

III. Insurance Runoff: Mechanics and Stories

With the growth of the APH insurance runoff market came a cadre of experienced managers of runoff businesses, trade associations, and practice groups in accounting and law firms that specialize in the acquisition and solvent runoff of legacy obligations of insurers, initially focusing on property casualty


\textsuperscript{81} See, e.g., Chairman’s Letter to Shareholders, supra note --. Berkshire Hathaway’s insurance investments include a huge stake in insurance runoff. See Nebraska Department of Insurance Financial Examination Report, supra note --. Cf., Mark Roe, Foundations of Corporate Finance: The 1906 Pacification of the Insurance Industry, 93 Colum L. Rev. 684 (1993).


\textsuperscript{83} See Best’s Market Segment Report, No Slowdown in Asbestos and Environmental Claims, (November 28, 2018) at p. 3, and Exhibit 6 (“The P/C insurance industry’s A&E reserve has declined steadily since 2005”) and Best’s Aggregate and Averages (Property Casualty Edition) 2019 (reporting consistent increases in the P/C insurance industry’s overall liability insurance reserves).
lines of insurance but then expanding to life and health insurance lines. There had long been a need for insurance transactions and procedures that facilitate the, relatively infrequent, runoff of insolvent insurance companies. What was new was the extension and expansion of that transactional practice into the much larger field of solvent insurance runoff.

Prior field research on the insurance business has focused on the “determinable risks” aspect of the prevailing ideal type, showing that life, disability, property, and liability insurers regularly provide insurance against uncertain risks. That research has not, however, addressed the “fixed in advance” aspect of the ideal type, except to note that insolvency produces an (extreme) after-the-fact adjustment of what was sold as fixed-in-advance risk distribution. Selling insurance for uncertain risks requires some room for such adjustments, and prior research by insurance economists has identified some important methods, such as mutual insurance arrangements that permit post-loss assessments and organizing particularly uncertain risks into monoline insurers that are designed to go insolvent when an extreme event occurs. This study reveals another, more widely applicable method for making after-the-fact adjustments that operates outside of insolvency and without post loss assessments.

In this section I describe the mechanics of runoff transactions, with a focus on how the insurance runoff process transforms uncertain losses into tradable risks. I first explain how runoff transactions are structured. Then I explain at a very high level the underwriting process through which these transactions are priced, the policy management process through which the liabilities are run off, and some key features of the finance and asset management functions of insurance runoff.

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86 See, e.g., Ericson & Doyle, supra note xx; Baker, Cyber Insurance, supra note XX.

87 See, e.g., Ericson & Doyle, supra note 5 at 180 (discussing the potential insolvency of the British Columbia earthquake fund in the case of a major event)

88 See Hannsman, supra note 6 (on monoline insurance); Jaffee & Thomas, supra note xx (on monoline insurers).
specialists. With those mechanics explained, I turn to the runoff stories that the specialists use to explain and justify the separation of legacy liabilities from the active side of an insurer's business and the tough bargaining that can be a feature of running off these legacy liabilities.

Before diving in, there are three important caveats.

First, although the description that follows is drawn from insurance trade literature and other public sources whenever possible, it also draws on confidential interviews and email exchanges with participants in the runoff insurance market (actuaries, underwriters, consultants, claims professionals, lawyers, and industry analysts) and observation in a variety of runoff-related events that I cannot describe publicly, other than to note that they included off-the-record industry workshops. Because of the small, tight network of participants in the runoff insurance market, providing more detailed descriptions of the people I interviewed or observed would reveal their identities. As with all qualitative research, this Article cannot provide conclusive evidence regarding the prevalence or extent of the practices observed, though it can help motivate and frame quantitative research that may provide that evidence.\(^\text{89}\) In the meantime, the persuasive power of this research depends, like traditional doctrinal and policy arguments, on the reader's response to the coherence and plausibility of the analysis.\(^\text{90}\)

Second, because the insurance runoff business is so technical, any reasonably accurate explanation of the mechanics...
of insurance runoff may be tough going for readers without a background or strong interest in insurance finance or mergers and acquisitions. Those readers who do not have that interest or experience may want to skip ahead to the section on insurance runoff stories, which begins with a brief summary of what really matters about runoff mechanics.

Third, this Article focuses on the runoff market as it developed to manage what some in the runoff business would describe as “failures” – liabilities under legacy policies that turned out to vastly exceed what underwriters had expected. Increasingly, the runoff market includes transactions in policies that did not turn out to be so unsuccessful for the underwriters, but the parties to the transactions believe, for whatever reason, that these policies are better managed by a different insurer than the one that issued them. Reasons include the issuing insurer’s decision to focus its business in one region rather than another, one type of insurance rather than another, or one category of customer rather than another, perhaps in response to change in management of the insurance company or the legal or regulatory environment. I focus in this Article on the runoff of the failures because those transactions best evidence the resilience of insurance markets and the mechanism for transforming uncertainty into tradeable risk.

A. Insurance runoff mechanics

The starting point for understanding the structure of insurance runoff transactions is the legal rule that one insurer may not assign an insurance policy to another insurer (or anyone else) without the consent of the policyholder. One insurer may

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91 Charles Ehrlich, Why Are We Here?, AIRROC MATTERS, Summer 2015 at 20
92 See June 24, 2019 email
93 Id.
contract with another insurer to fulfill the first insurer’s obligations under an insurance policy, but the obligation to perform remains that of the first insurer, unless the policyholder consents to transfer that obligation to the second insurer. If the second insurer fails to perform, the policyholder sues the first insurer, not the second (assuming, as is almost always the case in the property casualty insurance context, that there was not a consensual transfer). This insurance law rule contrasts with the legal rule governing credit contracts, which are freely assignable.95

Because policyholder consent to transfer is difficult to obtain, especially at scale, an insurance group in in the property casualty sector in the United States can terminate its obligations under a set of insurance policies as a practical matter only if (a) it sold the policies through a separately incorporated subsidiary that it now can sell to another insurance group, or (b) it can divide the entity that sold the policies into two or more legally separate parts and sell the part of that entity that holds the policies in question.96 The latter option is not available in most U.S. states, and, because of the regulatory scrutiny required, it is not widely used in those jurisdictions in which it is available (e.g. Pennsylvania).97 When there is a separately incorporated entity, the contractual relationship is between the policyholders and that entity, not the corporate group under whose brand the entity operated and, thus, the entity can be sold without violating the insurance law rule against assigning insurance policies. Once approved by the regulatory authority with jurisdiction over the entity, the sale gives the buyer complete control over that entity.

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95 See, e.g. MICHAEL S. BARR, HOWELL E. JACKSON, MARGARET E. TAHYAR, FINANCIAL REGULATION LAW AND POLICY
96 See Bailey & Butcher, supra note 20.
97 See, Gendron, supra note 94.
subject only to compliance with legal requirements, and it gives the seller a “clean exit” from the liabilities of that entity.  

Life and health insurers have greater opportunity to transfer a set of policies from one company to another, using a transaction known as “assumption reinsurance” (a confusing term for what amounts to the sale of a block of policies with the “consent” – sometimes constructive – of each policyholder). Typically, policyholders in the life insurance sector have an ongoing obligation to pay premiums and, thus, an ongoing relationship with their insurance company. After the sale of the assumption reinsurance to the insurer that issued the policies, the assuming reinsurer (in substance, the purchaser of the block of policies) obtains consent from the policyholders to the transfer of the policies to the reinsurer through the process of collecting premiums on renewal or, in some states, through a special notice procedure in which policyholders are deemed to consent if they do not object. 

All other runoff market transactions involving policies issued in the U.S. must use reinsurance that is similar to the reinsurance-to-close used at Lloyd’s. This reinsurance does not terminate the insurer’s obligations under the policies that are the subject of the transaction. At most, it provides the insurer with financial protection from its liabilities under those policies, and

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98 Catalina, https://www.catalinare.com/market-issues-and-why-to-sell/ (last visited February 1, 2020) (“Selling to Catalina allows businesses to refocus on core activities, unlock capital, reduce costs and have a clean exit from liabilities.”). Note that there may remain some uncertainty about whether all future courts will honor the legal distinction between the subsidiary that issued the insurance and the parent that later sold the subsidiary.

99 John E. Tiller and Denise Fagerberg Tiller, Life, Health and Annuity Reinsurance (4th ed.) 437 (2015). A cynic might conclude that the practitioners refer to the transaction as “reinsurance” to obscure the fact that the transaction terminates the original insurer’s legal obligation.

100 Id. Tiller & Tiller note that the legal rules regarding assumption reinsurance are sufficiently uncertain, and the prospect that at least some policyholders will object sufficiently likely, that assumption reinsurance transactions typically are structured in the alternative as indemnity coinsurance transactions. As a result, the practical differences between the runoff transaction structures that are possible in the life insurance sector and in the property casualty sector are less that would appear in theory.
the degree of that protection varies considerably depending on the terms of the deal.

The most common form of reinsurance-based runoff market transaction in the property casualty sector is called a “loss portfolio transfer,” or LPT. An LPT has two main parts: (1) a retroactive reinsurance contract in which the original insurer pays a large premium in return for the runoff specialist’s agreement to pay claims under a designated set of legacy insurance policies, up to a total dollar amount known as the reinsurance limit; and (2) a management contract in which the runoff specialist agrees to manage these policies on the original insurer’s behalf, unless and until the losses incurred under the policies exceed the reinsurance limit. If the losses paid under those policies exceed that reinsurance limit, the responsibility for paying claims and otherwise managing the legacy policies reverts to the original insurer, as has occurred in the case of a transaction involving Berkshire Hathaway’s NICO and the oldest continuously operating property casualty company in the U.S.: the Insurance Company of North America, later known as “INA” and now owned by the Chubb insurance group. This residual liability distinguishes an LPT from the “insurance portfolio transfer” permitted in Europe (under close regulatory

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102 See Bruce et al, supra note --

103 See Sallie B. Kraus, Looking Back and Forward on Asbestos Claims, 27 ENV. CLAIMS J. 149 (2015) (reporting that the NICO-Brandywine agreement was exhausted on an incurred basis in 2002 and on a paid basis in 2013).

Because an LPT does not legally separate the runoff book from the rest of the original insurer’s assets and liabilities, this form of insurance runoff transaction leaves the original insurer exposed to two kinds of risk that are not present when an insurance group sells a legally separate entity: counterparty credit risk (the risk that the reinsurer will go insolvent) and the risk that the total liabilities will exceed the limit of reinsurance. The original insurer can mitigate the latter risk by also purchasing another form of reinsurance known as “adverse development cover,” which provides additional reinsurance in the event that the loss portfolio transfer reinsurance limit is exhausted.\footnote{Eleni Iacovides, The Legacy Market, AIRROC MATTERS, Spring 2017, at 16. Note that property casualty insurers also can purchase adverse development cover instead of an LPT. In that case, the insurer retains day to day responsibility for the runoff, and the adverse development cover simply provides protection (up to the limit of the cover) from liabilities that exceed the insurer’s reserves.} Of course, that adverse development cover is subject to its own credit risk and the risk that the limit will be exhausted.

The equivalent transaction in the life sector is called “indemnity coinsurance.”\footnote{For a description of indemnity coinsurance, see Jeremy Starr, Use of Reinsurance in Mergers and Acquisitions, 25 RECORD OF PROCEEDINGS OF THE SOCIETY OF ACTUARIES No. 1, \url{https://www.soa.org/globalassets/assets/library/proceedings/record-of-the-society-of-actuaries/1990-99/1999/january/rs99v25n171pd.pdf}. See Maryann Taylor, The Life Deal Market, AIRROC Matters, Winter 2018-19, at 29 (noting that indemnity coinsurance is the most common form of life runoff transaction). For a description of the various forms of reinsurance-based life runoff structures see TILLER AND TILLER, supra note XX at 175-92} Key differences between a typical indemnity coinsurance transaction and a typical LPT transaction include the following: indemnity coinsurance often leaves the original insurer with an identified share of the risk, twenty percent being typical; indemnity coinsurance rarely sets a limit on the reinsurance company’s exposure for its share of the risk.
that is reinsured; and the original insurer more often retains the responsibility for administering the policies.\textsuperscript{107}

In whatever way a runoff specialist acquires the runoff liabilities – by buying entities or through an LPT or insurance portfolio transfer or through the life insurance equivalents – the specialist’s core business consists of four activities that are part of any insurance enterprise but have special features in the runoff context: underwriting, policy management, asset management, and finance. The sections that follow provide a basic description of these activities and their role in making uncertainty tradeable.

1. \textit{Underwriting}.

Underwriting is the process of deciding whether to offer (re)insurance and, if so, at what price. Underwriting the runoff of a book of insurance policies differs from underwriting the initial sale or prospective reinsurance of insurance policies in both the nature of the information on which the transaction is based and the scale of the transaction. A runoff transaction represents a wholesale repricing of an entire book of legacy business with the benefit of hindsight – i.e., all the information about the liabilities covered by the policies learned in the years since the policies initially were sold.

The runoff underwriting process consists of estimating inputs to a valuation formula:

(1) a projection of cash outflows for the book of policies;
(2) a projection of offsetting cash inflows from any reinsurance that the insurer previously purchased to support that book and, in the case of life and health products, cash inflows from any premiums and

\textsuperscript{107} Interview (May 18, 2019). Indemnity coinsurance in which the ceding insurer retains the administrative responsibility is more similar to what is called adverse development cover in the property casualty context, with the key difference being the way that the risk is shared. Indemnity coinsurance is a quota share transaction, with the reinsurer taking 100% of the designated share; adverse development cover is an excess of loss transaction with a cap that leaves the extreme right tail risk with the ceding insurer.
contributions that will be made for the policies while they are being run off;

(3) an evaluation of the adequacy of the reserves that the insurer has posted for the book of policies and the value of the assets it holds to offset those reserves; and

(4) a projection of investment returns from the assets that the runoff specialist plans to hold to offset the reserves that it will carry on its balance sheet for the reinsurance.  

Because the original insurer has been managing the book for years, as have other insurers who sold similar policies covering similar losses in the past, the quality of the information available to estimate the potential losses and offsetting cash flows is greater than when the underlying policies were sold. In addition, the passage of time means that investment returns need to be projected less far into the future. This hindsight is a key part of what transforms the uncertainties of the past into the tradeable risks of today.

With these inputs, a runoff specialist can provide a quote for the runoff transaction. For the sale of a separately incorporated entity, the quote is simply a price for the purchase of that entity. If the entity is poorly reserved, the quote may be a negative number: the “dowry” of capital that the parent of the entity (typically a holding company in the insurance group) will have to put into the entity for the specialist to be willing to buy it.  

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108 See Frederick J. Pomerantz & Connie D. O’Mara, Rx for Run Off: Four Experts Expound, AIRROC MATTERS Summer 2015, at 6, 9 (describing important aspects of runoff underwriting and observing, “Basically when you look at value it’s just a time value of money equation. So there’s really two things that matter on the income side: premiums and investment income and on the liability side it’s payments and timing of those payments.”). Note that when underwriting a “buy to kill” transaction, the acquirer also needs to assess the value of any renewal rights that it plans to sell before putting the company into runoff.

109 Because of differences in the accounting rules that apply, life insurance transactions (a category that includes long term care and pension products) are more likely to require a dowry than property casualty insurance transactions. The key accounting difference concerns the ability to discount future payments to present value. Unlike life insurance accounting, property casualty insurance accounting typically does not permit such discounting when setting reserves for future liabilities and, thus, property casualty companies are less likely to be under reserved, at least on a present value basis.
For a reinsurance-based transaction, the quote will consist of two key numbers: (1) the reinsurance limit, which is the maximum amount that the runoff acquirer is obligated to pay out on the book over the course of the runoff, after which responsibility for managing the runoff reverts to the original insurer (this number can include policy management expenses or not, depending on the deal); and (2) the additional premium that the underwriter will charge, if any, on top of taking all the assets that presently support the liabilities that the insurer has set as the reserves for the book. The higher the total limit of the reinsurance that the runoff underwriter offers (or the ceding insurer demands), the higher the premium will be (all other things being equal), with the premium to be still higher if the underwriter agrees to assume the issuing insurer’s liabilities for the book without limit (in which case the transaction would be equivalent to the reinsurance-to-close transactions used at Lloyds). Similarly, the more adequately reserved the underwriter judges the book of policies to be, the lower the premium charged on top of those assets will be. A poorly reserved insurer might still be able to do a loss portfolio transfer without paying any premium beyond the transfer of the assets currently offsetting the reserves for the book, but the reinsurance limit would almost certainly be too low to provide the insurer with much confidence that the liabilities were gone for good.

2. Policy management.

The runoff underwriting process can be understood as a technical exercise that reflects the increasingly predictable and therefore tradeable nature of past uncertainties that almost always occurs with the simple passage of time. This understanding would be too simplistic, among other reasons because no liabilities are tradeable until there is a buyer prepared to treat them as such, but it is not entirely wrong. By contrast, it would be entirely wrong to understand runoff policy management in similarly passive terms. Runoff policy management actively shapes the activities that produce the cashflows that determine
whether the predictions underlying runoff transactions come to pass.

The day-to-day activity of running off insurance policies differs according to the type of insurance policies involved. For liability and property insurance runoffs, policy management means handling and paying claims, computing and collecting any retrospective premiums, recovering any reinsurance that is owed, and, importantly, negotiating commutations. A “commutation” is a modification of a (re)insurance contract in which the (re)insurer agrees to pay the policyholder/insurer a sum certain in return for the policyholder/insurer agreeing that this sum certain satisfies all of the (re)insurer’s obligations under the policy. A commutation is a “buy back” of the policy from the perspective of the reinsurer and a “sell back” of the policy from the perspective of the insurer.

Commutations are an important part of the runoff policy management story for two reasons. First, commutations provide the best evidence that runoff policy management differs from active policy management. While commutations sometimes take place in an active insurance business, for example to resolve a

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110 A retrospective premium is additional premium that is paid on an ex post basis, when claim payments exceed negotiated amounts.

111 Michael T. Walsh & Maryann Taylor, Commutations: A Road to Finality, AIRROC MATTERS, Summer 2007, at 1 (“Commutations are indeed one of the most vital tools to the strategic plans of run-off operations.”).

112 For a hypothetical example of a commutation, consider the following. Asbestos Manufacturer is insured by Trustworthy Insurance Company. Trustworthy agrees to pay the $20 million limits of its policy to fund the defense costs and settlements of a group of asbestos claims against Manufacturer. Trustworthy demands that Great Reinsurance Company pay $5 million of that amount, under a treaty that promised to pay 25% of Trustworthy’s 1985 accident year general liability losses (above a $10 million level that was long ago reached), subject to a reinsurance treaty limit of $50 million (of which $40 million has been paid). Great recently was sold to a runoff specialist. Great’s new claims manager tells Trustworthy that it has conducted a thorough review of Great’s pre-1990 treaties and determined that Great has been paying claims to Trustworthy and others that it was not legally obligated to pay. Great offers to pay $5.5 million today to commute the treaty, meaning that Trustworthy would be unable to collect any money under the treaty in the future and that Great would be unable to reopen any prior payments.

113 See David Whear and Bob Haken, Closing books of business: the challenge of fairness and finality, in RESEARCH HANDBOOK ON INTERNATIONAL INSURANCE LAW AND REGULATION 167, 168-69; Stephen Carter, Bernadette Bailey, Tobey Butcher, Exit Strategies in the Run-Off Market, 56 FDCC QUARTERLY 219, 221 (“A commutation is in effect, an underwriting exercise where the reinsured is paid to take back the risk that it had laid off”)
dispute over a large commercial insurance claim, the aggressive pursuit of commutations is not part of the ordinary strategy of an active insurance business. By contrast, property casualty runoff specialists advertise their skill and experience with commutations, and their U.S. trade association actively facilitates commutations.

Second, commutations can play a key role in transforming uncertainty into tradeable risk. At the transaction level, a commutation transfers any remaining uncertainty regarding the losses that would have been covered by the (re)insurance contract back to the counterparty who accepted a payment in satisfaction of that contract. At the market level, the availability of commutations makes runoff specialists more willing to do runoff deals, because they know that they can use commutations – “the chosen weapon of many in the legacy sector in their quest to find the Holy Grail of ‘finality’ to their liabilities” – to reduce the uncertainty involved in runoff transactions.

At a very high level, property casualty runoff specialists follow two approaches to managing the runoff after the acquisition: “slow” and “accelerated.” A slow runoff manages the policies in much the same way that an active insurance company manages its obligations under old policies that remain part of the insurer’s active business: paying claims as they come due and collecting on any reinsurance for those claims on the same timetable, perhaps with less urgency and greater attention to coverage defenses than would be the case if the insurer was interested in selling new policies to existing customers. This

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114 For example, a senior policyholder coverage lawyer explained to me that a number of asbestos or environmental defendants have commuted some or all of their historical general liability insurance policies as a way to resolve coverage litigation with their insurers.

115 See, e.g., Enstar Annual Report (commutations); AIRROC’s website articulates its mission and vision to include “AIRROC’s VISION is to be the most valued (re)insurance industry educator and network provider for issue resolution and creation of optimal exit strategies.” [https://www.airroc.org/mission-statement](https://www.airroc.org/mission-statement).

116 See Julius Bannister, *Bygone Companies*, AIRROC MATTERS, Summer 2015 15-16 (providing a summary of “a major listing of commutations, the chosen weapon of many in the legacy sector in their quest to find the Holy Grail of ‘finality’ to their liabilities.”)

117 See, *AIRROC Roundtable Discussion – March 5, 2008*, AIRROC MATTERS Spring 2008 at 19 (“In other situations the goal of the runoff operation is to delay the payment of claims”). I describe below the critique that slow runoffs are much slower than ordinary. *Cf.*, JAY M. FEINMAN, *DELAY, DENY, DEFEND: WHY INSURANCE COMPANIES DON’T PAY*
kind of runoff is slow because it takes a long time for all the obligations under the policies to mature and be satisfied in the ordinary course.

An accelerated runoff speeds up the process by reaching out to the original insurer’s counter parties and offering to commute their legacy insurance policies and reinsurance contracts. Because commutations are voluntary on both ends, negotiating commutations is a core expertise of an accelerated runoff specialist. Accelerated runoffs are most common when running off an inactive reinsurance company, because the counterparties are insurance companies. Reinsurance contracts tend to involve enough money to make the commutation process worth doing, and insurance companies have become increasingly comfortable with commuting their reinsurance. While the commutation indisputably shifts some risk back to the insurer, that risk is just more of the same risk that the insurer already faces, and, thus, already has on its balance sheet. Often, the runoff specialist can offer reinsurance commutation terms that improve the balance sheets of the insurance company counterparties. The exception is when the reinsurer being run off is in weak financial condition. In that circumstance, however, insurance company counterparties should be even more willing to commute their reinsurance contracts, because of the risk that they will later recover even less if the reinsurer becomes more financially impaired. As the latter point suggests, runoff

CLAIMS AND WHAT YOU CAN DO ABOUT IT (2010) (suggesting that difficulties in the claims process are not unique to the runoff market).

See AIRROC Roundtable Discussion, supra note xx at 19 (“there are many run-off entities that are looking for a resolution of all their claims in a short period of time”).

See Terry Kelaher, Claim Estimation, AIRROC MATTERS, Fall 2005, at 16 (contrasting the voluntary nature of commutation from “forced, non-contractual estimation and payment acceleration”). For a time, as discussed infra, the UK permitted the involuntary, wholesale commutation of policies and reinsurance contracts through a process that was known as a “solvent scheme of arrangement.” That process has for all practical purposes been shut down by the British courts and the Prudential Regulatory Authority [document in folder]. See In re British Aviation Insurance Company [2005] EWHC 1621 (Ch).

See Charles J. Widder, Commutation of Reinsurance Agreements, AIRROC MATTERS, Summer 2007 at 10 (“The ceding insurer may in fact have concluded that the reinsurance provided is no longer necessary and prefers to assume the liabilities back from the reinsurer along with a cash payment”)

118 See AIRROC Roundtable Discussion, supra note xx at 19 (“there are many run-off entities that are looking for a resolution of all their claims in a short period of time”).

119 See Terry Kelaher, Claim Estimation, AIRROC MATTERS, Fall 2005, at 16 (contrasting the voluntary nature of commutation from “forced, non-contractual estimation and payment acceleration”). For a time, as discussed infra, the UK permitted the involuntary, wholesale commutation of policies and reinsurance contracts through a process that was known as a “solvent scheme of arrangement.” That process has for all practical purposes been shut down by the British courts and the Prudential Regulatory Authority [document in folder]. See In re British Aviation Insurance Company [2005] EWHC 1621 (Ch).

120 See Charles J. Widder, Commutation of Reinsurance Agreements, AIRROC MATTERS, Summer 2007 at 10 (“The ceding insurer may in fact have concluded that the reinsurance provided is no longer necessary and prefers to assume the liabilities back from the reinsurer along with a cash payment”).
specialists are adept at turning financial weakness into a negotiating strength.\footnote{Susanne Sclafane, \textit{Adverse Development Covers on the Rise}, \textit{National Underwriter, Property \\ & Casualty/Risk \\ & Benefits Management Edition}, July 24, 2000 at S11: “Not only does an insurer need a great deal of manpower and runoff expertise to take ownership, but 'you need to be structured in a way that you don't mind squeezing cedent clients,' he [PSRE’s Mr. Mayer] said. Profitably running off claims might mean offering 20 cents on the dollar he said, suggesting that for a reinsurer to make runoff operations successful it needs to separate its ‘bad cop’ runoff experts from the remaining ‘good cops.’”}

The greater importance of commutations in reinsurance runoff points to another important difference between the runoff of insurance and reinsurance liabilities. Because reinsurers’ counterparties are insurance companies, any haircuts, delays, compromises or other variations from “normal” reinsurance market practice that are part of runoff have the effect of socializing losses among the insurance industry, similar in some ways to how Equitas socialized losses among the Names of the open syndicates. Especially because runoff market transactions frequently involve loss categories that the entire market underestimated,\footnote{For example, APH liabilities, construction defect litigation liabilities, workers compensation liabilities, and guaranteed minimum value life insurance policy liabilities.} reinsurance runoff can be understood as a process for sharing uncertainty across the broader insurance pool, based on the relative exposure of (re)insurers to the liabilities being run off. This process may not be as explicit or predictable as the market-share based assessments that fund the insurance guaranty funds that step in to pay claims when insurers become insolvent, but it is similar in kind.

Retail insurance runoff is very different in this regard. Any haircuts, delays, compromises or other variations from “normal” retail market practice that are part of runoff have the effect of de-socializing losses, by leaving a greater share of those losses with the people or organizations that purchased the insurance. This difference helps explain the much greater regulatory scrutiny given to the runoff of retail insurance operations than to reinsurance.\footnote{Interview (May 5, 2019).}
The life insurance runoff market grew somewhat later and in response to different developments than property casualty runoff. In life insurance, the problems that lead to runoff are more likely to come from the asset side of the balance sheet: returns on investments that turn out to be much lower than expected. Life insurance industry runoffs typically involve savings-linked insurance products that were priced based on overly optimistic assumptions about interest rates, which would of course affect what the company would be able to earn from the assets under investment: whole life insurance, annuities, pension guarantees, and long term care insurance. Among these, long term care insurance runoffs are unique in that they involve not only unrealistic assumptions about earnings from assets, but also problems on the liability side of the balance sheet: changes in the costs of, and demand for, long term care.

For all these life insurance product runoffs, policy management includes collecting premiums and contributions from policyholders whose policies remain in force, communicating with those policyholders, and related customer service activities, in addition to collecting reinsurance and handling and paying claims. Thus, life insurance runoff also differs from property casualty runoff in the nature of the ongoing relationship between the insurance company and its policyholders. In a property

126 Swiss Re described its life runoff business in a 2018 prospectus as follows:

We acquire portfolios through acquisition of entire lines of business (and a subsequent transfer of the business to us in the United Kingdom under Part VII of FSMA or the entire share capital of (or a majority stake in) life insurance companies, or through reinsurance. We typically assume responsibility for administering the underlying policies in such portfolios until they reach maturity, are surrendered or an insured event occurs resulting in the termination of the policies. In addition, we write a nominal amount of new business on a passive basis normally for existing customers that request “top-ups” of current contracts or who need to move to an alternative product type to access certain product features. Our strategy is centered around gross cash generation (excess capital available compared with the target capital position) and we seek to maximize our future expected profits through a combination of efficient management of existing policies, disciplined asset management, the acquisition of additional books of business and consolidation of new business
casualty insurance runoff, there are no premiums to be collected or policies to be renewed; the only ongoing relationship revolves around claims. The ongoing relationship in the life insurance segment makes it difficult to commute policies. Thus, life insurance runoff investors tend to be companies that have a long-term asset management focus.

As even this very general description makes plain, runoff policy management details differ greatly across insurance market segments, with each segment posing a different set of uncertainties to manage. Asbestos liabilities are similar in many, but not all, ways to environmental liabilities; both kinds of toxic tort liabilities differ significantly from medical malpractice, workers compensation, and municipal liabilities; these liabilities differ from sexual abuse and molestation claims; and natural catastrophe and mega property insurance claims differ significantly from liability insurance claims. On the life and health insurance side of the insurance business, life insurance presents policy management challenges that are similar to, but

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127 There are two kinds of life transactions that have a similar impact as a commutation: (1) companies managing an annuity runoff sometimes offer policyholders an “enhanced annuitization” option, that amounts to a buyout of the annuity (interview May 15, 2019) and (2) when companies managing a long term care runoff receive regulatory approval to increase rates for in force policies, they typically offer policyholders the option of selecting a shorter benefit period, which has the effect of reducing the right tail risk of the company (Interview May 5, 2019). An improper practice that would significantly limit the right tail risk of the runoff operation is inducing policyholders to lapse. See Jean Pinquet, Montserrat Guillen & Merceded Ayuso, Commitment and Lapse Behavior in Long-Term Insurance: A Case Study, 78 J. RISK AND INS. 983, 986-7 (2011) (describing the benefit to the insurer from policyholder lapses when insurance pricing is front-loaded, as is the case in long term care and some forms of life insurance). Cf. Andrew Harley and Ian Farr, How Can Life Insurers Improve the Performance of Their In-force Portfolios? W ILLIS TOWERS WATSTON INSIGHTS, September 2013, https://www.towerswatson.com/en-US/Insights/Newsletters/Global/emphasis/2013/how-can-life-insurers-improve-the-performance-of-their-in-force-portfolios (recommending that insurers “establish mechanisms to focus their retention management activities on higher-value customers” as an example of “smart customer handling — relates to treating customers differently depending on the underlying financial attractiveness of their policy to the insurer”)

significantly different from, annuities and pensions; and long-term care insurance presents its own distinct set of challenges.

Because of these differences among insurance market segments, the details of insurance runoff policy management resist easy generalization. The common thread that runs throughout runoff policy management is that intensive exposure to the legacy liabilities of each particular market segment leads to expertise and relationships that have the potential to reduce the costs of running off those liabilities.\(^\text{129}\) Through this exposure, the runoff specialists identify market-segment-specific opportunities to contain and manage the legacy liabilities. Here are two examples.

**Addressing the coverage litigation collective action problem and reducing legal spend in liability insurance runoff.** For technical reasons that are not important to understand in this context, any single significant asbestos liability defendant or hazardous waste site defendant may have dozens or even hundreds of individual liability insurance policies that provide coverage for all or part of its potential liabilities, issued by multiple insurance companies, over multiple decades.\(^\text{130}\) In this circumstance, a well-counseled commercial policyholder can take advantage of what amounts to a collective action problem among its many insurance companies. The consolidation of most of the

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\(^\text{129}\) See, e.g., Pomerantz & O’Mara, *supra* note xx at 7 (noting that one important aspect of runoff management is making accurate assumptions about reinsurance collectibles, which requires detailed knowledge about the current state of the market and observing that “if the company is going into runoff, it could change the assuming reinsurers’ view on the way that they are paying out because they’ve no longer got an ongoing relationship with that client.”); Charles Ehrlich, *Found Money or Unobtainium: Security Deposits and the Run-off Company*, AIRROC MATTERS, Winter 2006/2007, at 21 (describing ways to recover security postings, which can be an important source of capital). “People in the runoff side now could go back into the ongoing side and I think it will help control costs because people in the runoff side are always focusing on keeping costs low.” AIRROC, Thoughts on the Future, Vimeo (2017), https://vimeo.com/232113382. Connie D. O’Mara & Bina Dagar, *Marcus Doran: Marcus Opens Up About the Biz, Likes and Dislikes*, and AIRROC, AIRROC MATTERS, Fall 2014, at 24 (“In respect to the run-off market, I’ve learned that it is a relationship business. The issues are complex, and there is a great deal of history between trading partners. Therefore, it is imperative to establish relationships based on respect, trust, and integrity.”); Pomerantz & O’Mara, *supra* note XX [Rx for Run Off] at 8 (observing that different (re)insurers have different “appetite for commutation”; knowing that appetite allows you to better assess a potential runoff). An early special issue of AIRROC Matters devoted to commutations reveals some of the nuances and relationships of commutations. See generally, AIRROC MATTERS: SPECIAL EDITION – COMMUTATIONS, Summer 2007.

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\(^\text{130}\) See Stempel, *supra* note XX
asbestos and environmental runoff liabilities of some of the largest insurers into the hands of a very small number of runoff specialists has changed this negotiating dynamic and, because the insurers for whom the specialists are managing the runoff no longer each need their own lawyer for all purposes, reduced insurers' insurance coverage litigation costs. That consolidation may also have the potential to address a similar collective action problem that results when the underlying plaintiffs sue many defendants.

Rationalizing legacy information technology in life insurance runoff. Insurance companies are intensive users of information technology. The earliest “computers” were humans, many of whom worked for insurance companies, and the insurance industry has long been an important customer of information technology manufacturers.131 For the life insurance industry especially, the rapid change of information technology presents a challenge to the consistent, reliable maintenance of processes and customer relationships under contracts that can last decades.132 Each new life insurance product and each new feature in an existing life insurance product requires adjustments in information processing routines. Major updates in the core information technology of the life insurance company can require adjustments in hundreds, if not thousands, of policy management routines.133 In many cases it makes more sense, especially in the short run, to keep those routines running on older systems. Not surprisingly, life insurance companies are full of legacy information technologies running processes for legacy insurance products.134 A key selling point of life insurance runoff specialists is relief from the cost and headache of maintaining legacy information technology systems for an unprofitable and declining book of legacy policies.135 Life insurance runoff specialists have

133 Id.
134 Id.
135 See, e.g. Wilton Re, In Force Solutions ("Our Administrative Services solutions provide for operational efficiencies by reliably transferring insurance and annuity business to
become expert in converting multiple legacy life insurance books running on multiple legacy information systems to a common, more state-of-the-art information system,\textsuperscript{136} which is a concrete example of how the consolidation of insurance runoff reduces the marginal cost of managing the policies in runoff.

3. **Runoff finance and asset management.**

The finance and asset management functions of insurance runoff specialists differ from those of active insurers in ways that reflect the narrower focus of runoff operations and, like the policy management examples just described, support the claim that consolidation leads to more efficient runoff operations. Runoff finance is simpler than active insurance company finance because runoff companies have more focused operations and, hence, fewer expenses to project (and hold capital against): no salesforce, little to no marketing, few underwriters, and little brick and mortar.\textsuperscript{137} A property casualty runoff company is, essentially, an insurance mergers and acquisition fund with a claims management department.\textsuperscript{138} A life insurance runoff company needs to add a policyholder management function, but that function is highly automated, as explained in the life insurance policy management example above. Apart from these two management functions, a runoff company has more in common with acquisition vehicles, such as private equity funds, than an active insurance company.

\textsuperscript{136} Swiss Re, \textit{Life in-force management: improving customer value and long term profitability}, SIGMA 6/2017 at 35 (recommending “brining all operations onto a single modern IT platform”)

\textsuperscript{137} Interview (January 31, 2019).

\textsuperscript{138} Id. I once happened to be sitting on a train next to a senior lawyer who worked at a runoff company. It was obvious to me that this person was a lawyer, so we started chatting about law practice. When I asked what the lawyer did, the lawyer replied, “I’m an M&A lawyer,” figuring that there was no way that I would have heard of insurance runoff and that this more general title best described the role of a lawyer working at a runoff specialist.
Perhaps for that reason, private equity funds hold substantial stakes in runoff companies.\textsuperscript{139}

Companies that specialize in runoff also invest their assets differently than active insurance companies. Among those companies for which it is possible to obtain asset information, the runoff companies invest in higher risk securities that, on average, yield a higher return than the investments of a comparison set of generalist property casualty companies, and a much larger share of the assets are invested in illiquid alternative assets.\textsuperscript{140} My understanding from interviews is that this is true to an even greater extent for privately held runoff companies.\textsuperscript{141} My working hypothesis is that runoff specialists take greater risk on the asset side of the balance sheet than most insurance companies for four main reasons (recognizing that not all of these reasons apply equally well to all the runoff specialists). First, as reinsurance companies, they are less heavily regulated than insurance companies. Second, because they are already so deeply into the business of compromising their liabilities, the downside of taking risk on the asset side of their balance sheets does not threaten their business model, for example because running into trouble on the asset side of their balance sheet simply increases their “financial distress” leverage with counterparties. Third, the people who provide capital to the runoff specialists regard those specialists as high risk/high reward investments, and they are comfortable with the specialists taking risk on both sides of the balance sheets. Finally, to the extent that the runoff specialist is backed by private equity, the private equity owners may get an allocation of the assets to manage in their own funds, which will be recorded as (high risk) illiquid alternative assets on the runoff specialist’s balance sheet.\textsuperscript{142}

\textsuperscript{139} See, e.g., Catalina, Wilton Re, Athene, others
\textsuperscript{140} See Appendix A.
\textsuperscript{141} Cf. Divya Kirti and Natasha Sarin, Private Equity Investments in the Life Insurance Industry: Implications for Capital, Taxes, and Risk (working paper 2020) (analyzing investment portfolios of life insurers acquired by Athene, a subsidiary of Apollo Global Management). Apollo is one of the largest investors in Catalina, which is privately held.
\textsuperscript{142} Email from runoff market participant, June 24, 2019 (regarding PE asset allocation).
B. Rhetoric and Organizational Structure: The Runoff Stories

“We aren’t the glamour kids.... We are the ghosts of mistakes past, of the failures that had fathers when they were shiny new ideas but are now orphaned in dismal disappointment. No one ever says, ‘this book/program is a great success, let’s put it in run-off.’ So, by definition, we deal in failure.”

As just described, runoff underwriting reprices legacy liabilities with the benefit of hindsight; runoff policy management consolidates those liabilities, develops relevant expertise, and identifies and executes operational efficiencies; runoff asset management takes calculated risks that encourage additional providers of capital to enter the runoff market; and runoff finance facilitates lower cost planning for the process of the runoff. Runoff specialists undoubtedly do not execute any of these activities with perfection, but they have a decent claim to better execution than is possible inside an active insurance company, for which the liabilities in runoff are a dwindling and unpleasant reminder of the underwriting mistakes of the past.

Insurance runoff also operates through a rhetorical and organizational process that begins long before the runoff market transaction takes place. This process reconceptualizes a large, diverse number of individual insurance relationships into segregable books of legacy insurance liabilities that can be managed distinctly from those of the insurer’s active business.

This reconceptualization happens slowly. As the time when the insurer sold the policies recedes into the past, insurance company personnel increasingly understand and categorize the

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143 Charles Ehrlich, Why Are We Here?, AIRROC MATTERS, Summer 2015 at 20

144 To be clear, not all runoff transactions can fairly be characterized as “the ghosts of mistakes past” referred to in the quote above. While that characterization is fair for the APH transactions like Lloyd’s reconstruction and renewal, runoff market participants emphasize that some, more recent transactions simply reflect trades between insurers that wish to release the capital that they would otherwise have to hold against long term risks with runoff specialists that are looking to increase the assets that they manage. See, e.g. June 24, 2019 email.
policies in terms of the claims presented and the liabilities carried on the company’s financial statements, as opposed to the identities, activities, or other distinguishing features of individual policyholders that company underwriters considered during the sales process. Company actuaries track the financial results of the policies using statistics like the underwriting ratio, which compares the premiums collected for blocks of policies to the losses incurred under those blocks of policies. Gradually, the actuaries develop and propagate the understanding that a particular block of policies – understood as an aggregate – was a losing proposition for the company, and, therefore, that this group of policyholders got more than they paid for.

At some point in this process, company underwriters decide not to sell new policies into this market (or not to cover these kinds of risks on an ongoing basis), confirming what the people involved in managing the claims and reserves already knew: this book of policies is non-core, unwanted business that does not represent the future of the company. Indeed, this book of policies might even be a threat to the financial health of the company, making work on the book perilous to the careers of the people in the company who are responsible in the ordinary course for managing claims and setting reserves. Identifying the book

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145 For an explanation of the underwriting ratio, see Chairman’s Letter, supra note xx (explaining why he prefers a measure that takes the investment income into account).

146 See, e.g., John West, Managing the Past in the Future, AIRROC MATTERS, Fall 2013 at 12,13 (describing a typical runoff situation as follows: “There is no premium flow to offset the cost of those staff members. The loss ratio on the original business has long since exceeded 200%. Of the $20 million in outstanding reserves, investment income is currently generating about 3.5% per year. That equates to $700,000. Those 10 staff members and their associated costs could total $1.4 million per year. Just on the face of it, there is a huge disparity between the income and the outgo on this aged business!”). See note xx, supra (on the alternative framing of the “more than they paid for” aspect of runoff stories).

147 For a stylized parable of how this can happen, see Fitzpatrick, supra note xx at 270-73.

148 Luann M. Petrellis, Can U.S. Insurance Companies Afford Not to Restructure?, AIRROC MATTERS, Winter 2016-17 at 6 (“The pressure is now on all insurance carriers to manage their capital more efficiently.”) Eleni Iacovides, The Legacy Market, AIRROC MATTERS, Spring 2017 at 15:

Solvency II, the relatively new European regulatory framework, along with low investment returns, soft market and pressure on underwriting profit has forced insurers to focus, more than ever, on the cost of capital and consequently on capital efficiency, in addition to the need for optimization of internal resources and cost reduction. Reserves held for old, discontinued or non-core business have become more capital intensive, thereby restricting insurers’ ability to
as being “in runoff,” and shifting the management of that book to runoff specialists mitigates that career risk.\textsuperscript{149} The rhetoric and organizational logic of runoff normalizes that process:

Runoff is an organic, positive necessary part of a healthy (re)insurance industry. ... Businesses need to test new markets and products; often, the outcome is “run-off.” Ultimately, most relationships end. What happens? Run-off. Customer requirements and demands change. Results? Run-off. Specialists and dedicated professionals are needed to deal with the most volatile – and therefore the most important – of the insurance industry’s protections against catastrophe.\textsuperscript{150}

This transition to runoff is an extension of the process that routinely occurs in the insurance business, as policyholders transition from the sales side of the insurance relationship to the claims side of that relationship. As prior work has shown, insurers tell different sets of stories about insurance when communicating with policyholders during the sales and claims processes:

In the first set of stories – the sales stories – insurance companies promise complete protection from the risks addressed by any line of insurance. In the second set of stories – the claims stories – insurance companies explain why it is that “complete protection” sometimes amounts to a little less; why it is, in other words, that some risks are not shifted to the insurance company.\textsuperscript{151}

\textsuperscript{149} See Fitzpatrick, supra note –.

\textsuperscript{150} Andrew Maneval, Why We Work in “Run-Off,” AIRROC MATTERS, Fall 2014 at 9, 10.

\textsuperscript{151} See Baker, Sales Stories, Claims Stories, supra note xx at 1400
The sales stories highlight policyholders’ vulnerability and dependence, and they convey the message that insurers can be trusted to fulfill their promise to be there in time of need. By contrast, the claims stories stress the limits of the insurance contract, the insurance company’s responsibility to future claimants, and the need to protect the insurance pool from policyholders who take unfair advantage. Insurers reduce the opportunity for these two sets of stories to come directly into conflict “by separating the organizational responsibility for the narration of the two sets of stories.” The sales and marketing departments tell the sales stories; the claims department tells the claims stories. The sales stories help persuade people to buy insurance. The claims stories help people accept that there are limits on the protection that insurance provides.

The transition to runoff involves a third set of stories, told by people with yet another organizational responsibility: the runoff professionals. These runoff stories refer to “legacy liabilities” that represent a “drag” on insurance performance and that “trap capital” that could otherwise be put to better use. Unlike the individualized promises of the sales stories and the contractual obligations of the claims stories, legacy liabilities are actuarial representations of contingent future payments to an abstract collectivity. Unlike these promises and obligations, legacy liabilities can be accelerated and compromised, and, perhaps, delayed and denied. Compromising and accelerating those liabilities can be a fair thing to do, at least for large commercial policyholders and for reinsurance cedents (insurance companies that bought reinsurance), because, with the benefit of hindsight, it is clear that the policyholders/cedents who bought

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152 Id. at 1403-07.
153 Id. at 1407-13.
154 Id. at 1415-16.
155 See, e.g., RESOLUTION LIFE, OUR PURPOSE, https://resolutionlife.com/our-purpose/ (last visited 3/15/2019) (“We help global insurance groups to pursue growth and innovate new products by allowing them to release capital and remove cost stranded in their legacy insurance portfolios.”).
that (re)insurance got far more than they paid for.\textsuperscript{156} While each individual policyholder or cedent retains the contractual right to insist on the payment of its claims as they become due, the runoff administrators also have the right to revisit the prior process for paying claims on this legacy book of business to search for previously unrecognized or unasserted coverage defenses and for other ways to “manage expenses,” encouraging policyholders/cedents to recognize that compromise should be the normal, accepted practice in the runoff context for them as well.\textsuperscript{157}

The runoff stories posit several benefits that the runoff market provides to the broader insurance market. Runoff transactions unlock value by transferring legacy books of insurance policies to companies that value those books more highly, providing access to capital that the originating insurers can use to expand their core, active insurance business, “freeing them up to do the business that they want to do,” thereby increasing the availability of (re)insurance.\textsuperscript{158} Because runoff specialists administer legacy (re)insurance policies more efficiently, the runoff market lowers the cost, and hence the price, of insurance.\textsuperscript{159} Finally, the runoff market allows insurance groups to unwind their struggling subsidiaries outside of the cumbersome and expensive insurance insolvency process, reducing the drain that insurance guarantees impose on the active insurance market.\textsuperscript{160}

There are a number of obvious countervailing concerns that can and should inform an evaluation of the merits of any particular runoff transaction and the runoff market’s

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\textsuperscript{156} See note xx (on alternative framing). Note that the runoff trade literature and the runoff market participants that I interviewed exclusively employ this reasoning in relation to cedents and large commercial policyholders, not retail insurance customers.

\textsuperscript{157} E.g. Interview (May 7, 2019)

\textsuperscript{158} Interview with runoff market participant (May 6, 2019).

\textsuperscript{159} Eleni Iacovides, The Legacy Market, AIRROC MATTERS, Spring 2017 at 17:

[Runoff transactions] release capital, allow the [original insurer] to achieve higher ROE by investing released capital in more profitable and/or core business, reduce the insurer’s exposure to potentially long-tail and volatile business and reduce operational overheads. Employing these solutions also often receives support from the [original insurer’s] regulator as regulators are now more than ever, keen to support any steps taken by insurers which are likely to avoid failure.

\textsuperscript{160} See, e.g., Id.
contribution to social welfare more generally. I describe those concerns, so as not to leave the misimpression that I am unaware of them or that I have uncritically accepted the view of the world that the runoff stories reflect, but the evaluation of the social welfare of runoff lies outside the scope of this Article. Such an evaluation would require different methods than those I have employed here.

The most obvious countervailing concerns include the following. Runoff transactions could be used to move legacy obligations into, or leave those obligations in, entities without sufficient assets to support them.\(^{161}\) Even if the runoff entities are sufficiently capitalized, the runoff specialists may not have the same incentive as the originating (re)insurers to fulfill the underlying contractual obligations.\(^{162}\) Even if they do have, or can be made to have, the same incentives and capacity as the originating (re)insurers, those incentives do not necessarily favor policyholders and cedants, and the runoff specialists’ expertise in commutations and other ways of managing expenses may mean that policyholders and cedants take larger haircuts from runoff specialists than they would from (re)insurers running off their own risks.\(^{163}\) Moreover, even if most runoff specialists would like to pay claims responsibly, the existence of a few that are willing to flout customary insurance market norms places pressure on

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\(^{161}\) This is the insurance instantiation of the dynamic Lynn LoPucki described over twenty years ago. Lynn M. LoPucki, The Death of Liability, 106 YALE L.J. 54 (1996). The way to use a runoff transaction to leave legacy obligations in an underfunded entity is to enter into a transaction that transfers the “good” business and the assets that support it into a newly formed entity, while leaving the “bad” business in the originating entity. The administrative law challenge to the New York Department of Financial Service’s approval of the restructuring of MBIA during the Financial Crisis alleged that was the intended purpose of the restructuring. See [cite to appropriate court decision.]

\(^{162}\) See, e.g., John M. Sylvester and Max Louik, Policyholder Litigation Challenging the Claims-Handling Conduct of Resolute Management, 28 ENV. CLAIMS J. 97, 98 (2016) (“Once Resolute takes control of claims handling for the ceding insurer, Resolute has been known to pursue very aggressive strategies to reduce and delay the payout of coverage dollars to policyholders, the payment of attorneys fees to defense counsel, and the offering and payment of settlement amounts to underlying claimants’) (note that Mr. Sylvester was at the time of this writing actively engaged in litigation against Resolute).

\(^{163}\) According to market participants I interviewed, this is a widely shared belief among insurance company personnel responsible for collecting reinsurance. Whether this is a selection effect or a causal explanation is knowable absent the kind of well-designed empirical research that is highly unlikely ever to be done.
the others to do likewise.\textsuperscript{164} Finally, dividing or unwinding troubled (re)insurers outside of the insolvency process shifts risks to policyholders from shareholders, who are supposed to be the first to come up short when assets are insufficient to cover liabilities.\textsuperscript{165}

Runoff boosters have answers to these concerns that I report here, once again without assessing their merits. Above all, the boosters point to contract law and insurance regulation. When a runoff transaction involves reinsurance, the originating insurers remain legally responsible for their policies, and, thus, the transaction should not affect the amount of assets available to honor the liabilities or the incentives of the originating insurer.\textsuperscript{166} When the transaction involves the sale of an entire entity that is in runoff, the transaction cannot take place unless the insurance regulator in the state of domicile approves, and regulators are not supposed to approve runoff transactions that put or leave insurance liabilities in entities without sufficient assets.\textsuperscript{167} Because runoff specialists need a constant supply of new transactions, they need to treat policyholders and cedants fairly on their old deals or they won’t get new reinsurance deals, and regulators won’t approve new acquisition deals.\textsuperscript{168} The focus and expertise of the runoff companies helps policyholders more than it hurts them, particularly in the later stages of the runoff, when the originating insurer would have lost or redeployed the most competent claims handlers.\textsuperscript{169} Finally, insolvency is a long,

\textsuperscript{164} One industry insider described the claims payment strategy of a certain runoff specialist as “Don’t answer the phone or, even better, don’t have a phone.” Interview (April 7, 2019).

\textsuperscript{165} See, e.g., Steven E. Sigalow and Richard E. Stewart, \textit{How Lloyd’s Saved Itself}, 37 \textit{The Insurance Forum} XX (February 2010) (contrasting the situation of troubled banks, whose shareholders “have been severely penalized or wiped out entirely,” with the treatment of Lloyd’s names, who were insulated from pre-1993 losses by Equitas).

\textsuperscript{166} Of course, if the transaction releases capital to the counterparty that is then paid out or used to fund ventures that don’t work, then there are fewer assets.

\textsuperscript{167} Eleni Iacovides, \textit{The Legacy Market}, AIRROC MATTERS/Winter 2017-18 at 11

\textsuperscript{168} Id. acovides, 11 (observing that a runoff acquirer is “keen to preserve its own reputation in order to gain more business from the same client, new clients, to grow”). One market participant described his company as follows: “[Company] is like a shark in the water. We have to get water over our gills via continually acquiring new portfolios.” Email (January 30, 2019).

\textsuperscript{169} Iacovides, \textit{supra} note xx
drawn-out, inefficient and expensive process (think Bleak House) that returns less to most policyholders than a private runoff, and policyholders who would receive more in receivership can always hold out for that result.  

IV. Conclusion: Lessons for Legal Thought

The rise of the runoff market has expanded insurers’ options for managing their legacy liabilities. Whether that development benefits policyholders and (re)insurance companies equally is an important question, but one that requires different research methods to answer with certainty than the qualitative methods I report in this Article. My conclusion is that the benefits to the insurance market are real, especially when it comes to the runoff of reinsurance treaty obligations, but there also are real countervailing concerns, especially for consumer and small to medium enterprise policyholders.

The kind of empirical research needed to provide conclusive evidence regarding the social welfare benefits of the runoff market has not been done, and most likely never will be done, among other reasons because of the limits of publicly available data. In my view, the benefits outweigh the costs for reinsurance treaty runoff; the benefits outweigh the costs for large commercial policy runoff, as long as there remains a meaningful bad faith remedy to encourage responsible claim payment practices; and there is a case to be made that the benefits outweigh the costs even for consumer and small business market runoff, provided that regulators remain vigilant and there are private enforcement tools sufficient to motivate high quality lawyers to bring actions that discourage bad apples. That is, however, just my view. The outcome of a careful weighing of the pros and cons of the insurance runoff market remains uncertain.

All that is certain, and all that this Article aspires to use the runoff market to demonstrate to legal theory, are the following three points. First, insurers are more actively involved

\[170\] Interview (May 7, 2019).
in managing uncertainty than the ideal type of the fixed-in-advance distribution of determinable risks would suggest. Second, insurance markets have the capacity to innovate in response to shocks: shocks from legal change, such as the asbestos and environmental liability experience that started the rise of runoff; shocks on the asset side of the balance sheet, such as the prolonged, extreme decline in interest rates that led to the rise of runoff in the life and pension business; and shocks from major changes in end of life care that, along with the decline in interest rates, may lead to a rise in the long term care runoff market, recognizing that careful analysis of long term care runoff awaits future work. Third, as a result of insurers’ experience managing uncertainty and insurance markets’ capacity to innovate, those markets are far more resilient in the face of legal change and other sources of uncertainty than the prevailing ideal type would suggest.

While no single qualitative study can prove that the prevailing insurance ideal type – the fixed-in-advance distribution of determinable risks – fails to capture the real-life operation of the insurance business, even one such study can demonstrate that insurance operates outside this ideal type. The accumulating weight of studies, to which the research on runoff reported in this Article contributes, suggests that the insurance industry so regularly operates in the realm of uncertainty that this ideal type should be abandoned as a model of how insurance generally works, even if it might continue to have some validity in some sectors of the insurance market and significant value in theoretical work.

In that regard, as I emphasized at the outset, it is important not to exoticize the insurance runoff transactions explored in this Article. The rise of runoff did not create insurers’ need or capacity to manage uncertainty. It simply helps bring that need into clearer view and provides another demonstration of that capacity. As early insurance accountants understood, every insurance policy goes into a kind of runoff the moment it is sold. The promises made in all insurance policies get bundled and reconceptualized into sets of liabilities that are valued and
revalued, further combined and recombined over time. Some sets of liabilities perform better than expected; others worse. Insurers use profits earned on the better performing sets to offset losses on the worse performing sets, and if too many sets perform too badly, insurers must raise prices on their new policies. Insurers back the promises and contractual obligations featured in their sales and claims stories with large, general accounts precisely so that they can make these kinds of adjustments across sets of liabilities and assets over time. Cross subsidies abound.

These post-underwriting adjustments take place not just for the long-term, legacy insurance obligations traded in the runoff insurance market. Even short-term insurance obligations like private passenger auto and homeowners policies face significant uncertainties, from factors such as changes in underwriting and risk classification technologies, new entries into the insurance market (think insuretech today), changes in legal rules regarding residual markets, changes in the mix or risk appetite of reinsurers in a market, changes in auto and home construction technology, and, of course, changes in the legal rules regarding liability or insurance. The runoff market targets longer term obligations, not because they are uniquely uncertain, but rather because their longer duration provides greater opportunities for specialists to earn a return through financial engineering or liability management.

Industry leaders understand that a precise match between the price charged for one set of insurance policies and the losses incurred in that set is rare. A precise match is the goal, however, and, thus, achieving it is not an accident. Nevertheless, there are too many moving parts to almost any insurance business and too much uncertainty for that goal to be achieved very often. There is no such thing in real-world insurance markets as the fixed-in-advance distribution of fully determinable risks. There is always some uncertainty, and the

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171 See generally, Baker, Insuring Liability Risks, supra note --.

172 See Ericson et al, supra note – at 158 (quoting an actuary as follows: "while actuarial science has all the trappings of science .... it is best seen as the framework for a 'guessing game' .... You know you're going to be wrong from the start."); Fitzpatrick, supra note --.
accumulating weight of research suggests that the extent of that uncertainty is quite substantial.

Nevertheless, that ideal type can be useful for insurers: as an aspiration for underwriters and actuaries, as an explanation for why claims managers should not make exceptions in needy cases, and as a justification for resisting or promoting legal change. Because of this utility, industry leaders use the ideal type to describe how insurance markets work to an extent that diverges from their private understanding. This is not dishonest. The ideal type is a legitimate aspiration, and there is nothing wrong with advocating for a legitimate aspiration. The wrong, if there is one, is on the part of observers who conflate advocacy and reality.

That ideal type also can be useful in legal thought, for example to explore such important topics as the potential impact of liability insurance on deterrence, the comparative advantages of public and private systems of compensation, and the consequences for health insurance markets of outlawing preexisting condition exclusions and health-based pricing. For those and other similar purposes, the ideal type can serve as useful, simple model of how insurance works, as long as the limits of the model remain firmly in mind.

Models, and theory more broadly, can help identify and perhaps even explain some of the problems and possibilities that exist in the world. But models also can misdiagnose problems and hide possibilities. When we act as if insurance markets require determinable risks whose distribution can be fixed in advance, we fail to see the many ways that insurance organizations manage uncertainty. We lose sight of the resilience in insurance markets and of the flexibility and innovation that produce that resilience. Keeping that resilience more firmly in mind, we should give less weight to theoretical arguments that this or that liability reform will undermine insurance markets. Insurance already involves

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173 See Shavell, supra note --
175 See Hoffman, supra note --
so much uncertainty, and insurers have so many ways to manage it, that the most likely result will always be that they will continue to muddle through.
## Investment Portfolio Benchmarking

*mm, unless otherwise noted*

*Note: alternative assets = hedge funds, private equity funds, debt funds, real estate, venture capital, etc.*

### Run-off Insurers

<table>
<thead>
<tr>
<th>Enstar (12/31/18)</th>
<th>Catalina (12/31/17)</th>
<th>R&amp;Q (12/13/17)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed maturities</strong></td>
<td>$8,698 77%</td>
<td>$1,827 77%</td>
</tr>
<tr>
<td><strong>Equities</strong></td>
<td>$367 3%</td>
<td>- 0%</td>
</tr>
<tr>
<td><strong>Alternative assets</strong></td>
<td>$2,177 19%</td>
<td>$561 23%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$11,242 100%</td>
<td>$2,388 100%</td>
</tr>
</tbody>
</table>

**Fixed maturities stats:**
- **Duration**: 4.9
- **Credit rating**: A2/A+

**Catalina (12/31/17) stats:**
- **Duration**: N/A
- **Credit rating**: N/A

**R&Q (12/13/17) stats:**
- **Duration**: N/A
- **Credit rating**: N/A

### Traditional Insurers w/ Run-off Liabilities

<table>
<thead>
<tr>
<th>Chubb (12/31/18)</th>
<th>Travelers (12/31/18)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed maturities</strong></td>
<td>$94,921 94%</td>
</tr>
<tr>
<td><strong>Equities</strong></td>
<td>$770 1%</td>
</tr>
<tr>
<td><strong>Alternative assets</strong></td>
<td>$5,277 5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$100,968 100%</td>
</tr>
</tbody>
</table>

**Chubb (12/31/18) stats:**
- **Duration**: 3.7
- **Credit rating**: Aa2/AA

**Travelers (12/31/18) stats:**
- **Duration**: 4.5
- **Credit rating**: Aa2/AA

### Traditional Insurers w/o Run-off Liabilities

<table>
<thead>
<tr>
<th>AIG (12/31/18)</th>
<th>Liberty Mutual (12/31/18)</th>
<th>CNA (12/31/18)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed maturities</strong></td>
<td>$293,615 93%</td>
<td>$59,853 86%</td>
</tr>
<tr>
<td><strong>Equities</strong></td>
<td>$1,253 0%</td>
<td>$3,511 5%</td>
</tr>
<tr>
<td><strong>Alternative assets</strong></td>
<td>$19,341 6%</td>
<td>$6,437 9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$314,209 100%</td>
<td>$69,801 100%</td>
</tr>
</tbody>
</table>

**AIG (12/31/18) stats:**
- **Duration**: 3.8
- **Credit rating**: N/A

**Liberty Mutual (12/31/18) stats:**
- **Duration**: 3.8
- **Credit rating**: N/A

**CNA (12/31/18) stats:**
- **Duration**: 6.0
- **Credit rating**: N/A