Risk Aversion, Insurance Insurance, and the Limits of Regulation

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The heart of insurance—what enables insurance to function—is risk aversion. Insurance transactions occur because policyholders prefer the certainty of suffering a small loss—the amount of an insurance premium—to the risk of suffering a larger loss.[1] They are therefore willing to pay premiums that exceed the expected value of the individual risks that they pose. Insurers undertake to cover these risks and,

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1. KENNETH S. ABRAHAM & DANIEL SCHWARCZ, INSURANCE LAW & REGULATION 3 (6th ed. 2015).

through diversification and the law of averages, the whole risk is smaller than the sum of its parts.

It follows from the fact that potential policyholders are risk averse that sometimes they are also averse to the risk that insurance covering loss will not be available or, even if insurance is available, will not be reliable. Potential policyholders could rationally be willing to pay a premium to ensure that insurance against risks to which they are averse is available and that any insurance that is available is reliable. The guaranteed renewal protection and prohibitions on medical underwriting embodied in the Affordable Care Act (ACA),[2] for example, can be understood to provide precisely this kind of insurance. I will call the protection that may be obtained by paying a premium, or an additional premium, to enhance the availability or reliability of coverage "insurance insurance."[3]

As I will show below, administrative and judicial regulation is sometimes directed at providing this additional protection. It makes sense, therefore, to think of administrative and judicial regulation as—among other things—providing insurance insurance. Regulation, however, is not costless, but often raises the price of insurance. The increased premiums, if any, that policyholders are charged as a result of this form of regulation are what they pay for insurance insurance.

Because demand for insurance is elastic, however, whether it is possible for regulation to generate insurance insurance depends on the interaction of two factors: the magnitude of potential policyholders' risk aversion and the amount of the additional "premium" that must be paid for the insurance insurance that regulation generates. In addition, regulation may increase the risk of adverse selection and moral hazard, thereby further increasing costs and the resulting gap between potential policyholders' risk aversion and the price that insurers must charge for insurance insurance.

In this Article I engage in something of a mental experiment in order to see where this way of thinking about the potential insurance insurance features of the regulation of insurance might take us. For purposes of the Article, the notion of insurance insurance is more nearly a heuristic than a theory about insurance coverage or insurance regulation. I use the notion as a lens through which to bring certain inherent limits on the regulatory enterprise from the background to the foreground. If this results in a richer understanding of the subject, then the mental experiment will have been a success.

Part I briefly sets the stage by discussing the role of insurance within the set of mechanisms that may be used to handle the risk of loss. Part II identifies and analyzes a variety of different forms of existing regulation, seeking to show how

2. *See* 42 U.S.C. §§ 300gg, 300gg-4 (2012).

3. I first saw this phrase in a cartoon by Jack Ziegler—"And, for what we don't cover, there's insurance insurance." *See* Nathan Heller, *Bay Watched*, THE NEW YORKER (Oct. 14, 2013), http://www.newyorker.com/magazine/2013/10/14/bay-watched; Jack Ziegler, *New Yorker Cartoon*, CONDÉ NAST COLLECTION, http://www.condenaststore.com/-sp/And-for-what-we-don-t-cover-there-s-insurance-insurance-New-Yorker-Cartoon-Prints_i9896618_.htm (last visited Mar. 26, 2015).

they can be understood to generate insurance insurance. Part III then turns to five aspects of the availability and reliability of insurance about which policyholders also are risk averse and for which insurance insurance would therefore in principle be desirable. This Part shows why these aspects of insurance insurance are more difficult for administrative and judicial regulation to address, analyzing how and why this is the case.

I. THE PLACE OF INSURANCE INSURANCE IN THE RISK-MANAGING UNIVERSE

Risk—the possibility of suffering a loss—is pervasive. A wide variety of devices "manage" risk.[4] I use this term because it reflects the fact that these devices not only take different forms, but also that the devices operate in different ways. Some reduce risk or avoid it.[5] Others, including insurance, transfer or spread risk.[6]

The paradox of insurance is that, by reducing the loss that may be suffered by any given insured party, insurance may increase the actual risk of loss. This is the familiar moral hazard that can be created by insurance.[7] Insurance and risk reduction can be complements rather than substitutes, however, when insurance is devised so as to combat moral hazard.[8] In a perfect world, insurance would cover only those risks that could not be cost-effectively eliminated through other means. Then insureds would have optimal incentives to eliminate risk, and insurance would be available only for the residue of risk that remained.

Three factors, cutting in different directions, render this ideal impossible to achieve. First, insurance is able, only imperfectly, to combat moral hazard. Some losses that might otherwise have been cost-effectively avoided, therefore, occur nonetheless. Insurance then costs more than it would cost if it could perfectly combat moral hazard. As a result, there is less demand for insurance than there would be in the absence of moral hazard, and less insurance is purchased.

Second, potential insureds posing higher than average risk may disproportionately seek insurance. If insurers cannot identify and charge these applicants accordingly, then adverse selection may occur and lower risk insureds may disproportionately decline to purchase insurance.[9] This too reduces demand for insurance.

Third, however, insureds are risk averse. They are therefore willing to pay premiums that exceed the expected value of the risk they pose. This means that there is more demand for insurance than there would be in the absence of risk aversion. As a consequence, the reduction in demand resulting from moral hazard and adverse selection may be completely or partially offset by risk aversion.

All this may affect insurance insurance in the following ways. On the one hand,

4. *See* ALEXANDER J. MCNEIL ET AL., QUANTITATIVE RISK MANAGEMENT 471–93 (2005).
5. *See id.*
6. *See id.*
7. *See* ABRAHAM & SCHWARCZ, *supra* note 1, at 7.
8. Steven Shavell, *On Moral Hazard and Insurance*, 93 Q. J. ECON. 541 (1979).
9. *See* ABRAHAM & SCHWARCZ, *supra* note 1, at 6–7.

regulatory efforts to make insurance more available or reliable may sometimes increase moral hazard and adverse selection, thereby undermining existing insurance and making risk reduction, or risk spreading through other means, more attractive than they would otherwise be. For example, those who might otherwise have insured may hedge,[10] increase their risk of bankruptcy,[11] or rely more heavily on publicly provided insurance or risk protection instead of private insurance.[12] There is even some very limited express insurance insurance sold in the market.[13]

On the other hand, risk aversion may be sufficient to partially or completely overcome the moral hazard and adverse selection generated by a particular form of regulation, thereby making insurance in the face of such regulation feasible, despite the increased risk of moral hazard and adverse selection. The question will then be whether these effects are worth tolerating in order to generate insurance insurance.

II. FORMS OF INSURANCE INSURANCE

A variety of administrative and judicial forms of regulation can be understood as directed at assuring the availability[14] or reliability of insurance.

A. Administrative Regulation

In a sense, much administrative regulation is a form of insurance. Regulation of the securities markets, public utilities, and consumer products, for example, helps to assure the availability and reliability of these objects of regulation. Regulation is likely to raise the cost of the products in question. This increased cost, often paid

10. A hedge is a transaction that creates the possibility that a gain will be produced whenever a loss occurs. If the price of wheat rises whenever there is a flood, then the risk of flood damage can be hedged by purchasing wheat futures. A hedge of this sort does not literally reduce the probability that a loss will occur, but it does reduce the net economic effect when the loss occurs. In this sense, hedging resembles both risk reduction and risk spreading.

11. In effect, a party that becomes insolvent because it suffers a loss or losses spreads the loss among its creditors. Each creditor who is unable to recover the full amount of the debt owed to it (including tort creditors) bears a share of the shortfall that results from the loss. Unlike other forms of risk transfer or spreading, however, which occur pre-loss, transfer or spreading through bankruptcy occurs post-loss.

12. The form of spreading that takes place through this approach varies. If benefits—for example, provided by FEMA in the event of disaster—are paid out of general revenues, then the loss is spread among all taxpayers. On the other hand, if those provided benefits have paid premiums for government insurance—as in the case of Medicare, for example—then risk is spread among all premium payers, though not necessarily in proportion to premiums paid, because premium structures themselves may anticipate some intergenerational spreading.

13. Insurance broker Swett & Crawford offers "Claims Dispute Insurance" on behalf of NAS Insurance Services and Lloyd's of London. Susanne Sclafane, *New Product Tackles Uninsured Risk of Coverage Denial*, PROPERTY CASUALTY 360° (June 30, 2008), http://www.propertycasualty360.com/2008/06/30/new-product-tackles-uninsured-risk-of-coverage-denials. "We know that wrongful coverage denials occur in our industry," said Swett & Crawford managing director Jason White. *Id.* Insurance against wrongful denials is needed because businesses that are wrongfully denied coverage by their insurers often cannot find lawyers to take their cases; even simple cases can cost $50,000 to litigate and complicated cases twice that, making litigation financially impractical. *Id.*

14. Because affordability may be considered an aspect of availability, I do not consider affordability separately in what follows.

by purchasers in the form of a higher price, is effectively an insurance premium designed to render these products more available or reliable.

Similarly, much administrative regulation of insurance is designed at some level to ensure the availability or reliability of insurance. This occurs in three ways. First, regulation may directly mandate that insurance be available. Statutorily created residual market mechanisms, such as auto liability insurance assigned risk plans and joint underwriting associations in a number of different fields, help to fill gaps in market-provided insurance, typically subject to premium ceilings.[15] At the federal level, the ACA requires health insurers selling coverage on insurance exchanges to accept all applications, places severe limits on medical underwriting, and mandates guaranteed renewability.[16] All of these devices provide insurance insurance, not simply by making insurance available in the first instance, but also by protecting insureds against the risk that there will be changes in their insurability after their insurance policies expire.

Second, regulation may provide insurance insurance indirectly by setting standards or threatening fines or penalties in a manner that increases the probability that insurance will be available or reliable. For example, solvency regulation makes it more likely that insurers will have the resources to pay valid claims.[17] State-enacted versions of the Model Unfair Insurance Practices Act enable the imposition of penalties on insurers that engage in a pattern of misleading marketing or claims processing conduct.[18] The threat of penalties creates incentives for insurers to process claims fairly. Statutes awarding extracontractual damages to individual claimants for "bad faith" claims handling have the same effect.[19]

Third, regulation may provide for an alternative source of payment in the event that insurance does not pay a valid claim. State insurance guaranty funds, for example, ensure that insurance provided even by an insolvent insurer is secure, up to a statutory maximum per claim, by providing claimants payment out of the fund.[20]

B. Common Law Judicial Regulation

The common law of insurance consists of a vast body of doctrines. I do not contend that the purpose of a substantial percentage of these doctrines is to provide insurance insurance. Nonetheless, there are important doctrines that have precisely this effect. I will discuss four such doctrines here.

The first three doctrines create insurance insurance indirectly by threatening insurers with liability in a manner that makes insurance more reliable. For example,

15. *See* ABRAHAM & SCHWARCZ, *supra* note 1, at 149–50.
16. 42 U.S.C. §§ 300gg, 300gg-1, -4 (2012).
17. *See* ABRAHAM & SCHWARCZ, *supra* note 1, at 113–16.
18. *Id.* at 147.
19. *See* ROBERT H. JERRY II & DOUGLAS R. RICHMOND, UNDERSTANDING INSURANCE LAW 170 (5th ed. 2012).
20. *See* ABRAHAM & SCHWARCZ, *supra* note 1, at 122–23.

the imposition of liability for extracontractual damages on insurers for bad faith denial of claims creates an incentive for insurers to ensure that they do not wrongfully deny coverage claims.[21] This makes insurance more reliable. Indeed, because liability for a multiple of the amount due under a policy may be imposed in a bad faith suit, insurers probably pay some marginal claims that are not in fact covered. The result of this doctrine therefore is not only to provide a version of insurance insurance but in doing so also to extend what amounts to coverage to some noncovered claims.

A second doctrine that has the effect of ensuring the reliability of coverage is the rule—adopted in a series of jurisdictions—that breach of the duty to defend estops the insurer from denying coverage of claims that should have been defended.[22] The threat that the insurer will have to pay uncovered claims if it wrongfully refuses to defend surely induces insurers to defend some claims that they would not otherwise defend. The effect of the rule is therefore to ensure that the defense insurance provided by liability insurance policies is actually available.

A third doctrine that promotes reliable insurance is the liability insurer's duty to settle. Under this doctrine, a liability insurer that rejects a reasonable offer to settle for a sum that falls within the limits of liability of its policy is liable for the full amount of any ensuing judgment against its insured, including any portion of the judgment that exceeds the policy's limits of liability.[23] The threat of above-limits liability surely induces insurers to accept some offers to settle that they would not otherwise accept, thus making the insurance against liability that it provides more reliable.

My fourth example is a doctrine that directly helps to assure the availability of insurance. This is *contra proferentem*, a canon of construction mandating that ambiguous insurance policy language be interpreted against the drafter. Since the drafter of insurance policies is almost always the insurer, for practical purposes this means that ambiguous policy language is construed in favor of coverage.[24] The obvious consequence of the doctrine is to make coverage more secure whenever it is reasonably debatable whether the policy provides it. This is, in effect, insurance insurance.

I have provided this selective list of features of administrative and judicial regulation of insurance in order to demonstrate that these forms of regulation—and probably others that I have not identified—can readily be understood to create, or attempt to create, insurance insurance. Proper assessment of this positive thesis regarding the phenomenon of insurance insurance, however, also requires an understanding of the limits of regulation designed to provide insurance insurance. In the following Part, I make a start at providing such an understanding by

21. *Id.* at 93.
22. *Id.* at 586–87.
23. *Id.* at 614–15.
24. *Id.* at 41.

identifying five respects in which there are severe limits of the possibility of insurance insurance.

III. FIVE LIMITS ON INSURANCE INSURANCE

The insight behind the notion of insurance insurance is that, because insureds are risk averse, they are averse to the risk that insurance they seek may be unavailable or unreliable. They may therefore wish insurance of their insurance, not only in the ways I identified in Part I, but in other ways as well. In this Part, I analyze five ways that insureds may be risk averse about insurance, but which generate challenges that make providing insurance insurance difficult or impossible. Such difficulties make regulation designed to generate these forms of insurance insurance difficult as well.

A. Unpredictable Risk

Insurance thrives on statistical predictability. Risks whose frequency and severity are unpredictable therefore are more difficult to insure than predictable risks. Yet potential insureds are likely to be at least as averse to unpredictable as to predictable risks. Consequently, in theory, insurance against the risk that a risk may be unpredictable and therefore difficult to insure might be desirable.

Risks that may be unpredictable to individual insured parties can be insured when insurers can predict the aggregate risk of loss posed by those in their insurance pools. In the absence of data regarding total risk, selling insurance is more like gambling than insuring. In principle, however, even comparatively unpredictable risks should be insurable, as long as insureds are sufficiently more averse to them than insurers, whose capacity to diversify risk should make them less averse to unpredictable risk than any individual insured.

It is precisely because of policyholders' risk aversion, however, that this is not necessarily or always the case. Insurers who cover an unpredictable risk are vulnerable to insolvency. And policyholders naturally are risk averse regarding the possibility of an insurer's insolvency. The more unpredictable the risk an insurer might be willing to cover, the less attractive that insurance will be to policyholders because of the insurer's insolvency risk.

Insurers might include an unpredictability surcharge in their premiums in order to reduce their risk of insolvency, but this cuts two ways. On the one hand, the additional assets produced by the surcharge reduce the risk of insolvency. On the other hand, coverage will be less attractive to policyholders to the extent that premiums are higher because they include an unpredictability surcharge. Unpredictability may therefore create a gap between the premiums insurers must charge and the premiums policyholders are willing to pay, thus rendering unpredictable risks uninsurable in practice. Voluntarily offered insurance of unpredictable risks may therefore not be workable. For the same reason, mandating that insurers offer insurance against a risk or risks that are unpredictable will not necessarily mean that policyholders will purchase that coverage.

In contrast, although mandating both that insurers offer and policyholders

purchase coverage will result in the sale of coverage, such a mandate may have undesirable side effects. First, potential policyholders may violate the purchase mandate, either escaping enforcement or paying whatever fine or penalty is imposed for violation. Some car owners do not purchase liability insurance, despite a requirement that they do so. The ACA expressly permits paying a tax penalty for noncompliance with the individual mandate to purchase health insurance.[25] Second, insurers may be permitted or attempt to charge sufficiently high premiums that policyholders balk at paying them and demand rate regulation that artificially depresses premiums, thus increasing insolvency risk. Alternatively, premiums may be permitted to rise, and policyholders may decrease their involvement in activities that are subject to coverage in order to minimize or avoid paying the premiums in question. Obstetricians required by hospitals to purchase malpractice insurance may cease delivering babies, for example.

The foregoing analysis assumes that the risk of insurer insolvency is not cushioned by the prospect of financial backup. In theory, financial backup might make it more feasible for insurers to cover unpredictable risks because of the assurance that the prospect of such backup would provide to policyholders purchasing the coverage. But in practice that has been the case only to a limited extent. There is a system of state-based guaranty funds to which solvent insurers contribute in the event of an insurer's insolvency.[26] The fund then pays the claims of the insolvent insurer. But these funds have limited application and comparatively low limits on the amount of a claim that is payable by the fund.[27] The result is that risk-averse potential policyholders are not guaranteed that insurance of unpredictable risks will be fully paid in the event that the insurer covering the risk becomes insolvent.

The backup protection provided by guaranty funds could be expanded so as to reduce policyholders' concern about the solvency of individual insurers that covered unpredictable risks. But this very expansion would increase the exposure of insurers that did not cover unpredictable risks to the possibility of insolvency. Guaranty fund protection puts the assets of noninsolvent insurers behind insolvent insurers. The effect of expanding guaranty fund protection, therefore, would be to diversify the risk of insolvency resulting from individual insurers covering unpredictable risks across the entire market. But to the extent that all insurers covered the same unpredictable risk or risks, these risks would likely be correlated and diversification would be defeated.

Reinsurance is an alternative method of spreading the risk of any given insurer's insolvency to the global financial markets. But reinsurance is almost always incomplete. No reinsurer will cover all of a particular risk. Rather, reinsurance typically covers a quota share (percentage) of an insurer's exposure under a policy

25. 26 U.S.C. § 5000A(b)(3) (2012).

26. *The National Conference of Insurance Guaranty Funds: Supporting a System of Policyholder Protection*, NCIGF, http://ncigf.org/ [http://perma.cc/3TA3-5CKP] (last visited July 12, 2015).

27. *See* ABRAHAM & SCHWARCZ, *supra* note 1, at 122–23.

or set of policies, or it covers all exposure excess of a particular monetary exposure under a policy or set of policies, up to a specified limit of liability.[28] The result is that all unpredictable risk under a particular policy or set of policies usually cannot and could not be reinsured. Reinsurance therefore cannot eliminate the risk of an insurer's insolvency. In any event, reinsurers themselves face the risk of insolvency when they reinsure unpredictable risks. Policyholders of fully reinsured insurers therefore cannot count on the solvency of reinsurers, though the more broadly an insurer's coverage responsibility is spread among a succession or reinsurance and retrocession, the more diversified is the risk of insolvency. If all insurers cover unpredictable risk and reinsure a significant portion of that risk, however, then the risk of insolvency is likely to be correlated, and the assurance that the presence of reinsurance would otherwise provide policyholder would be diminished or eliminated.

Perhaps more importantly, reinsurance can provide policyholders with reassurance that insurers have diversified their risk of insolvency only if information regarding the availability of reinsurance of the risk to particular insurers is publicly available. Without the information necessary to reassure prospective policyholders, they will still be reluctant to pay the premiums that insurers would have to charge in order to cover unpredictable risk. Some reinsurance information is publicly available in the form of submissions of financial information made by individual insurers to state insurance commissioners.[29] But this tends to be insufficiently detailed for this purpose. It is available at most by line of insurance, without the level of particularity that would be necessary to reassure individual potential policyholders. In my experience, individual insurers otherwise guard reinsurance information fairly closely in order to shield the information from litigants in coverage disputes. The result is that the assurance that might be provided by more transparent reinsurance information is absent.

Finally, insurance of unpredictable risks can be securitized through devices such as catastrophe bonds.[30] Insurers covering a risk can sell bonds that pay investors unless loss exceeding an index or other proxy for a specified level of insured loss occurs. If there are enough such bonds sold covering different, uncorrelated losses, then investors should be able to diversify their "coverage" of these unpredictable but uncorrelated risks.[31] In this way, the risk of unpredictable loss can be spread through the global financial markets.

This possibility suggests how far it could be necessary to go in order to cover a substantial amount of unpredictable risk. Compared to its multitrillion dollar

28. DANIEL W. GERBER ET AL., 7 NEW APPLEMAN ON INSURANCE LAW LIBRARY EDITION § 71.02[4] (2014).

29. *See, e.g.*, *Reinsurance*, INS. INFO. INST. (Nov. 2014), http://web.archive.org/web/20150423071225/http://www.iii.org/issue-update/reinsurance [http://perma.cc/L7DJ-AUKB].

30. J. David Cummins & Mary A. Weiss, *Convergence of Insurance and Financial Markets: Hybrid and Securitized Risk-Transfer Solutions*, 76 J. RISK & INS. 493, 494 (2009).

31. *Id.*

potential, the market for catastrophe bonds, which has gotten off the ground only in recent decades, has been minuscule.[32] Whether at some point it will more substantially address unpredictable risk is an open question. In the meantime, however, providing insurance insurance in this area will pose a very significant challenge.

B. Reclassification Risk

One of the risks that insurance purchasers face is that their risk of loss, and therefore premiums for future coverage, will increase. Risk-averse parties could wish to insure against this "reclassification risk,"[33] perhaps in the form of guaranteed renewable insurance. For example, manufacturers with products liability insurance might want to insure against the risk that a product they market will turn out to cause a disease that the product previously was not known to cause, thereby increasing their risk levels. Drivers with auto liability insurance might want to insure against the risk that the incidence of auto accidents in the area where they live will increase—perhaps because of increased population density—thereby increasing their risk levels. And homeowners might want to insure against the risk that climate change will increase their risk of incurring damage from hurricane-force wind.

Three forms of insurance currently cover reclassification risk in this fashion through what amounts to guaranty renewability. Life insurers and long-term care insurers commit to renewing policies for specified, extended periods—often twenty or more years—as long as the policyholder pays predetermined premiums. In doing so, the policyholder shifts to the insurer the risk that his or her health status—and therefore his or her risk of dying or of needing long-term care—will change during the period of guaranteed renewability.

In health insurance, as I noted in Part I, the ACA mandates guaranteed renewal of health insurance.[34] In addition, the ACA prohibits medical underwriting—with the exception of basing premiums on age, territory of residence, tobacco use, and participation in a "wellness program"—and risk classification based on health status.[35] As a consequence, health insurers bear virtually all the risk that a policyholder's health status will change over time. This was far from the case, however, prior to the enactment of the ACA.[36] It might even

32. *Id.* at 516–17.

33. Kenneth S. Abraham & Pierre-André Chiappori, *Classification Risk and Its Regulation*, *in* LAW AND ECONOMICS OF INSURANCE (Daniel Schwarcz & Peter Siegelman eds., forthcoming 2015).

34. *See* 42 U.S.C. §§ 300gg, 300gg-4 (2012).

35. 42 U.S.C. §§ 300gg-1, -4.

36. HIPPA required health insurers to renew policies that were subject to this law, but imposed no limits on what insures could charge for renewals. *See, e.g.*, 42 U.S.C. § 300gg-41. And there were few restrictions on medical underwriting or risk classification based on health status. It was my observation that some state laws were more restrictive, and some health insurers voluntarily guaranteed renewal, but at most there was a patchwork quilt of protections that did not amount to general, guaranteed renewability.

be said that one of the principal purposes of the ACA is to ensure that health insurance covers reclassification risk.

In other lines of insurance, however, the challenge of offering coverage of reclassification risk, or of legally requiring coverage of reclassification risk, is substantial. A series of factors places limits on the insurability of reclassification risk.

1. Moral Hazard

Some of the risks that insurance covers are partly within the control of policyholders. A driver can influence his propensity to cause accidents by exercising greater care, by driving fewer miles, or by doing both. A homeowner with a leaky roof can influence the risk that his home will be damaged by fire by replacing the roof with fire-resistant material. It would not be in the interest of policyholders or insurers to insure the risk that these, and the many other risks that are wholly or partly within the control of policyholders, will change. There would be too much moral hazard associated with such insurance.

But increase in some risks is either against the interest of policyholders or largely beyond their control. The most obvious example is change in health status. Becoming injured or sick is not in the interest of policyholders. Some people are more careful with their health than others, but in general people try to avoid injury and illness. Moreover, many health risks are not in people's control at all. The risk that I will develop a brain tumor is outside my control. It is no surprise then that reclassification risk is covered by life insurance, long-term care insurance, and health insurance subject to the ACA. The question is why insurers have not identified other risks that are not subject to moral hazard and offered coverage of reclassification risk in connection with these risks. Additional explanations are therefore necessary.

2. Unpredictability

In the previous Section, I noted the difficulties associated with insuring against unpredictable risks. The magnitude of the risk changes that could be involved in insuring reclassification risk would sometimes be extremely difficult to predict. Moreover, the longer the period of time over which renewability was guaranteed, the greater the prediction difficulties insurers would encounter. Without a workable means of determining what premium to charge for covering this risk, insurers would be taking a shot in the dark. The more reclassification risk they covered, or—what amounts to nearly the same thing—the longer the period of time during which they covered reclassification risk, the more they would be risking severe unprofitability or insolvency.

As in covering unpredictable risks generally, the tendency of insurers covering reclassification risk, especially long term reclassification risk, would therefore be to add a surcharge to premiums to cushion them against unpredictable contingency. The higher the premiums charged, however, the more averse to unpredictable risk potential insureds must be in order to find insurance attractive.

The situations in which reclassification risk is covered help to bear out these

points. In life insurance there is only one risk insured—the risk of death. Insurers' long experience with and detailed statistics regarding mortality rates make the predictions necessary to provide guaranteed life insurance to an individual over a period of decades completely feasible. And guaranteed renewability of health insurance under the ACA is feasible because, as I indicated earlier, this legislation prohibits most risk classification.[37] With virtually no risk classification permitted, there is virtually no reclassification risk and therefore little or no unpredictability of operationally relevant risk changes.

Other lines of insurance do not fit the life or health insurance patterns. For example, physicians, attorneys, and other professionals face career-long liability insurance reclassification risk. Malpractice insurance was once dominated by occurrence coverage, under which coverage is "triggered," or activated, by the occurrence of bodily injury or property damage during the policy period, no matter when a suit alleging liability for this injury or damage is brought.[38] This provided coverage of "long-tail" liability.[39] In providing such coverage, the insurer effectively undertook to cover the risk of long-term change in the incidence and magnitude of malpractice liability. For practical purposes, this was insurance against reclassification risk based on difficult-to-predict legal and economic change.

As soon as the rate of legal and economic change became less predictable in the mid-1970s, malpractice insurers shifted from occurrence to claims-made coverage, which insures liability only for claims made during the policy period.[40] The move to claims made thereby shifted back to policyholders most of the reclassification risk that occurrence policies had previously covered. For analogous reasons—the difficulty of predicting the magnitude and rate of change in long-tail toxic tort, products, and pollution liability, the same phenomenon occurred in Commercial General Liability (CGL) insurance in the mid-1980s.[41] Through policy revisions, insurers have attempted to curtail the amount of long-tail liability covered by CGL insurance policies.[42]

3. Correlated Risk

A third reason that insurers do not offer—and insurance law cannot effectively mandate that insurance of reclassification risk be offered—is that much such risk is correlated. There are any number of correlated reclassification risks; some examples include changes in the scope of tort liability, climate change, and increased auto accident rates in a particular territory or among a particular class of policyholders. Change in mortality rates is also correlated and therefore a potential threat to life

37. *See* 42 U.S.C. § 300gg-41a.

38. KENNETH S. ABRAHAM, INSURANCE LAW & REGULATION 170–71 (5th ed. 2010).

39. *Id.*

40. *Id.*

41. ABRAHAM & SCHWARCZ, *supra* note 1, at 160.

42. In addition to selling claims-made policies, these include the "absolute" pollution exclusion and the "Montrose" clause, which attempts to preclude triggering multiple successive CGL insurance policies. *See* ABRAHAM & SCHWARCZ, *supra* note 1, at 439, sec. I(1)(c), at 441, sec. I(2)(f).

insurers. But over the past 150 years life expectancies have increased, so the correlation has benefitted life insurers, since the result has been that payouts have been extended beyond the time when the life insurers had predicted they would be due.

Consequently, if there was to be insurance against reclassification risk, it would have to be defined so as not to include correlated risks. General guaranteed renewal, however, would cover renewed insurance of all risks that might otherwise have been reclassified, whether correlated or not. For this reason, for any line of insurance subject to significantly correlated reclassification risk, guaranteed renewability would not be feasible. Rather, specification of which reclassification risks were and were not covered or guaranteed renewable would be necessary.

The extent to which this would be feasible, however, is unclear. Perhaps specifying and covering a few major reclassification risks would be feasible. But providing an extensive list of covered and excluded reclassification risks in standard-form insurance policies would be cumbersome and undesirable.

4. Adverse Selection

Efforts to insure reclassification risk also would be plagued by a particular sort of adverse selection. Policies that were guaranteed renewable across the board or that insured particular reclassification risks would be disproportionately purchased by those who believe they are at above-average risk of experiencing increased risk levels. And those who believe they are at below-average risk of experiencing increased risk levels, or believe that their risk levels will decline, would disproportionately decline to purchase reclassification coverage. Moreover, even if there were a mandate that coverage of reclassification risk be provided automatically, parties whose risk levels did not increase over time might be able to save money by switching insurers. These insurers would have to provide the parties reclassification coverage going forward but would not have to charge the parties the same premium rates that they had been paying their previous insurers.[43]

Life insurers face an analogous problem even though life insurance is guaranteed renewable.[44] In any given group of policyholders who purchase long-term life insurance, those who experience adverse changes in their health status are more likely to continue to pay for their life insurance each year, whereas those who remain healthy are less likely to continue to pay their annual insurance bills. Those in this latter group have "lapsed." The lapse rate is partly a reflection of this sort of adverse selection, and the prospect that lapses will occur is something life insurers must take into account in setting premiums for long-term insurance. Only the risk aversion of even healthy policyholders prevents life insurance from unraveling for this reason.

43. *See* Abraham & Chiappori, *supra* note 33, at 15.

44. *See* TOM BAKER & KYLE D. LOGUE, INSURANCE LAW AND POLICY 201–02 (3d ed. 2013).

5. Inadequate Risk Aversion and Consequent Insufficient Demand

Despite all the obstacles I have just discussed, in theory, there might nonetheless be possible gains in social utility if insurers rather than policyholders shouldered some reclassification risk. But for this to be the case, policyholder demand resulting from risk aversion would have to dominate insurers' reluctance and resulting increased premiums to insure that risk. The fact that most policyholders have not in their experience suffered enormously from reclassifications renders this unlikely as a general matter. In my experience, based on years of observation, large premium increases for policy renewals usually do not occur. Policyholders therefore probably are not willing to pay what insurers would charge to insure reclassification risk, or more such coverage would be offered. Most ordinary individuals probably are not sufficiently concerned about future increases in their auto or homeowners insurance premiums to want coverage against the risk that their increases would be substantial. Indeed, insurers typically sell only one-year policies, and policyholders seem to exhibit little or no demand for policies of longer duration. The inference that there is a gap between what policyholders would pay for longer-term coverage or for other some measure of protection against reclassification risk and what insurance would have to charge for such protection seems strong. This may not be an obstacle to covering reclassification risk in principle, but in practice it seems to have been a significant obstacle.

C. Coverage Uncertainty

A number of the regulatory devices discussed in Part I address the reliability of insurance coverage. A related concern for insureds is that the incapacity of language to perfectly convey meaning and intention results in uncertainty about the scope of coverage provided by insurance policies. One of the risks associated with buying insurance is therefore that particular losses will not be covered. Of course, there is a vast universe of risks that are not covered by any particular insurance policy. Homeowners insurance does not cover collision damage to a car; auto liability insurance does not cover medical malpractice liability.

On the other hand, in connection with any insurance policy there is a range of losses regarding whose coverage ordinary individuals, and sometimes even sophisticated businesses, would reasonably be uncertain. What kinds of water damage and tree damage does my homeowner's policy cover and exclude? If my child throws something out the window of my car while it is moving, is any resulting liability covered? If my company is ordered to contribute to the cost of cleaning up the local landfill, does my CGL insurance policy cover this cost?

The possibility that certain potentially insured losses actually are not covered by an insurance policy is itself something about which policyholders in the aggregate would naturally be risk averse. This should create an opportunity for insurance against the risk of not being insured against the set of risks whose coverage is uncertain.

Because the uncertainty problem arises from the infirmity of language,

however, uncertainty cannot be completely eliminated with additional language. Any insurance against the risk of noninsurance would itself be subject to an analogous sort of secondary uncertainty as to the scope of the coverage it provided and so on. To the extent that insurers are risk averse regarding coverage uncertainty, they can purchase reinsurance that partially protects them. Reinsurance typically circumvents some of the uncertainty problem by providing that the reinsurer shall "follow the fortunes" of the insurer. Such a provision requires that if the insurer pays the policyholder, then the reinsurer pays the insurer up to the amount of promised reinsurance. But of course reinsurance contracts are subject to some uncertainty risk themselves. This is a problem that neither insurance nor insurance law can solve directly, although the problem is mitigated by the doctrine of *contra proferentem*, as I described in Part I.

There is little reason to suppose that any individual judicial interpretation directly reduces policyholders' uncertainty about the scope of coverage they have. Insurance law surely does not translate into policyholder understandings in that way. But over time judicial decisions reduce the amount of coverage uncertainty on the part of the agents, brokers, and lawyers who communicate with policyholders about the scope of their coverage. And this process probably gives policyholders greater confidence that the scope of the coverage they have purchased is determinate, even if policyholders do not know exactly what the boundaries of coverage are in any given case. Moreover, the doctrine also has at least some effect on the drafting of policy language in the first instance. Because insurers can anticipate the application of *contra proferentem*, they have an incentive to draft provisions that are clearer than they might otherwise be in order to avoid application of the doctrine. This, too, reduces uncertainty.

Admittedly, it is not possible for an insurer drafting a policy, or the parties to a coverage dispute after the policy has been issued, to predict with certainty whether a particular policy provision will be considered ambiguous if the provision has not already been authoritatively interpreted. But this uncertainty over whether *contra proferentem* will be applied is no greater than the uncertainty about how an ambiguous provision would be interpreted in the absence of the doctrine. The doctrine does not eliminate all coverage uncertainty. But the net effect of the doctrine probably is to create greater rather than less certainty about the scope of coverage.

Nonetheless, an irreducible quantum of coverage uncertainty will always remain and will always be uninsurable. Insurance insurance cannot fully solve the problem.

D. Coverage Unavailability

One of the principal functions of markets is to satisfy preferences. But both the breadth and intensity of preferences influence which preferences markets can satisfy. Shoes are made in half sizes because, although some people's feet would fit better in shoes made in quarter sizes, there is not enough demand for quarter sizes. There are not enough people willing to pay enough to warrant the cost of mass

producing shoes in quarter sizes. Therefore, only those who can afford to pay $1000 or more for custom-made shoes can have them.

There are analogous barriers to satisfying preferences for insurance. One of the principal determinants of the demand for coverage is the degree of potential policyholders' risk aversion. If there is insufficient risk aversion, then insurance will not be available. That may be the case for a number of reasons. First, there may be insufficient risk aversion to support the sale of insurance either because of the underlying character or personality of individuals or because they have incomplete information about the risk in question.

Second, if the risk in question has never been insured before, then insurers may have limited or no actuarial data on which to base their premium calculations. In such situations insurers will add larger-than-usual contingency factors to premiums and may therefore charge higher premiums than they would charge if they had better data about the risk in question. But potential policyholders' risk aversion may be insufficient to yield demand for coverage at this higher price.

Third, there may not be enough risk-averse potential policyholders to support the development of insurance against a risk. When there are not enough people willing to purchase insurance of a particular risk to permit insurers to spread the risk across a large enough number of policyholders, risk-transfer transactions will not have all the characteristics of insurance. Under such circumstances, insuring the risk in question is more like entrepreneurship or venture capital investing than insuring. If there are only a few people or entities facing the risk of suffering a comparatively large risk, then the risk may be handled in one of those domains. On the other hand, when there is a fairly widespread risk of suffering a comparatively small loss, and there is a prospect that demand will eventually be substantial enough, insurers may begin to offer coverage anyway. That is how innovation in insurance often occurs.

When this does not occur and insurance against a risk is considered desirable as a matter of policy, insurance law has several options. The first is to mandate purchase of insurance against the risk in question. This approach is rare, but not unheard of. For example, most states require that registered owners of motor vehicles not only purchase liability insurance but also uninsured motorists (UM) insurance.[45] There is almost certainly sufficient independent demand for auto liability insurance, but that is probably not true of UM insurance. I doubt that most people have even heard of UM insurance.

A second approach to the problem of insufficient risk aversion is what in recent scholarship on incentive creation has been called a "nudge."[46] This approach provides insurance unless a potential policyholder opts out. For example, a few states require that UM insurance be provided to anyone who purchases auto liability

45. *See* ABRAHAM & SCHWARCZ, *supra* note 1, at 700.

46. *See generally* RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS (2008).

insurance unless the purchaser declines UM coverage.[47] A nudge of this sort helps to overcome the limit on insurability resulting from what would otherwise be insufficient risk aversion on the part of potential policyholders.

Another sort of nudge focuses on insurers rather than policyholders. Interestingly, the doctrine requiring that ambiguous policy provisions be interpreted in favor of coverage may be viewed as an effort to promote the satisfaction of diverse preferences by creating possible incentives for insurers to offer coverage alternatives. When a policy provision is held to be ambiguous, insurers have four choices. First, they can redraft the provision to provide unambiguously the broader coverage. Second, they can retain the provision in their policies. Even if insurers do not redraft the provision to provide unambiguously for the broader coverage, insurers acting in good faith should assess claims based on the judicially adopted interpretation. However, the ambiguous language of the provision may deter some insureds from making claims, as it may have done before the provision was held to be ambiguous. In any event, in both situations the preference of some policyholders, or potential policyholders, for the narrower coverage is not satisfied. All policyholders receive and pay for the broader coverage, even if some would prefer the narrower coverage.

Under a third approach, insurers can redraft the provision so that it unambiguously provides narrower coverage, possibly lowering premiums because of the clarification. In this situation as well, preference diversity is not served because the preference of policyholders or potential policyholders who prefer the broader coverage is not satisfied. All policyholders receive only the narrower coverage, although they may pay less than they were previously paying.

Finally, insurers can redraft and offer a choice between unambiguously broader and unambiguously narrower coverage. Only in such a situation is there greater satisfaction of preferences as a result of holding a policy provision ambiguous. But the question is how frequently insurers, or some of them, would adopt this approach. If insurers could have profited from offering policyholders a choice between broader and narrower coverage, then in a properly operating market they would already have been doing so. It follows either that one or more flaws in the market had been preventing this or that there are insufficiently diverse preferences for coverage to warrant providing a choice between broader and narrower coverage. It is possible, for example, that applicants had assumed they were receiving the broad coverage and were willing to pay premiums accordingly. A judicial decision that the policy provision in question is ambiguous, however, would not alter this state of affairs. Under such circumstances it would not be in the interest of insurers to dispel applicants' incorrect assumption. In the extreme case, insurers would redraft to provide (unambiguously) only the narrower coverage but continue to charge the same premiums.

It is true that in a properly operating market this could not occur, because

47. ABRAHAM & SCHWARCZ, *supra* note 1, at 700.

other insurers would inform applicants accurately, charge lower premiums for narrower coverage, and expand their market share. But we are assuming here that the market is not operating properly, for if it were then some insurers would have been taking the same steps even before a policy provision was declared ambiguous. It is costly to give applicants choices. The alternatives have to be explained, different premiums quoted, etc. If this had not been occurring before a judicial decision, then for the same reason it might not occur after a judicial decision, because it could still be too costly, given the additional profits (if any) that could be obtained by giving applicants a choice between broader and narrower coverage, to offer a choice. The additional profits that could be earned by offering a choice would depend not only on the cost of explaining the choice but also on the extent of some applicants' risk aversion. This would determine how much more at least some applicants were willing to pay for the broader coverage. If an insufficient percentage of applicants were willing to pay a sufficiently greater premium for the broader coverage, then a choice would not be offered.

We thus come up against the limits of the insurability of diverse coverage preferences. Even a judicial decision declaring a policy provision ambiguous will not necessarily—perhaps not even often—result in insurers offering policyholders a choice between unambiguously broader and unambiguously narrow coverage. Some policyholders who would prefer broader coverage, or some who prefer narrower coverage, may not be offered this choice.

All this makes the simple point that it is not possible to buy, and is extremely difficult for regulation to require, that insurance against certain risks be available. Only under certain demanding conditions will this be possible. It follows that regulation often will be unable to promote insurance against the risk that coverage will be unavailable.

E. Risk-Redistribution Risk

Insurance almost always involves risk classification: assessment of the magnitude of the risk of loss posed by an insured party and the pricing of premiums in proportion to this risk. In this connection potential insureds face two risks. The first is the risk of posing a high risk and therefore of being charged a high premium. The second is the risk of being charged higher premiums than would be actuarially warranted because of discrimination against the risk group of which one is a member. The former is distribution risk; the latter is redistribution risk.

Both are risks against which insureds might rationally want insurance insurance. In fact, the reclassification risk that I discussed above is, in a sense, a subset of the broader category of distribution, or classification risk, which I have discussed elsewhere.[48] Consequently, here I will discuss redistribution risk.[49]

48. *See* Abraham & Chiappori, *supra* note 33.

49. In fact, when a risk class is being charged more for coverage than another risk class, eliminating the distinction between the classes is risk redistributional for both classes, though in

To analyze redistribution risk, we can begin with a baseline: what a particular group of policyholders would be charged for insurance in the absence of regulatory intervention. Of course, insurance is at least minimally redistributional even when not compared to a baseline of nonregulated risk classification. This is because of the cost and resulting imprecision of classification. For practical purposes, those who pose a similar but not identical risk are placed in the same class. Within the class, however, there is always a range of risk posed by different policyholders.[50] In such a situation, risk is redistributed from those at the high end of the risk range to those whose risk levels are lower. To use an oversimplified and stylized example, if everyone who poses between a 1 in 100,000 and 1.25 in 100,000 chance of suffering a loss is charged the same premium, then risk is partially redistributed from those in the latter group to those in the former group.

Risk redistribution of this sort is a side effect of the economics of risk classification. Risk classification is cost effective only up to the point at which its economic benefit to the insurer of further classification is greater than its cost. Beyond this point, further refinement of risk classes and decreased variance within classes are not worth the cost involved in achieving them. The result is at least some risk redistribution with risk classification categories.[51]

In contrast to these usually modest risk-redistributional side effects of risk classification undertaken by insurers, insurance law and regulation sometime prohibit certain forms of risk classification and thereby redistribute risk. State insurance commissioners have the authority to ensure that rates are not "unfairly discriminatory," and state statutes often prohibit the use of specific variables in pricing insurance.[52] Some states, for example, prohibit risk classification based on race or religion.[53] It is likely that, before such classification was prohibited, it did not have actuarial support and, when it did occur, it occurred because of prejudice. Prohibiting such classifications simply changes the distribution of risk in that the prohibitions help to more closely align classification with the probability of loss.

On the other hand, some classifications are prohibited despite their actuarial soundness, precisely in order to accomplish risk redistribution. A Hawaii statute, for example, prohibits basing rates for auto insurance in whole or in part—among other things—on length of driving.[54] To the extent that those with limited driving experience are nevertheless at greater risk of accident involvement, the result is risk redistribution from those with limited driving experience to those with more

different directions. In the absence of other regulation, the premiums charged one class rise while the premiums charged the other class fall. We can therefore talk about these two risks together.

50. KENNETH S. ABRAHAM, DISTRIBUTING RISK: INSURANCE, LEGAL THEORY, AND PUBLIC POLICY 74–75 (1986).

51. *Id.* at 73.

52. *See* ABRAHAM & SCHWARCZ, *supra* note 1, at 111, 133–35.

53. *See* Ronen Avraham et al., *Understanding Insurance Antidiscrimination Laws*, 87 S. CAL. L. REV. 195, 239 (2014) ("[O]nly ten states have forbidden the use of race, national origin, and religion across all lines of insurance.").

54. HAW. REV. STAT. § 431:10C-207 (West 2008).

experience. Similarly, some states prohibit auto insurers from risk classifying based on gender.[55] To the extent that women have fewer accidents than men, such a prohibition redistributes risk from men to women. Regulatory attempts to accomplish risk redistribution, however, can be undermined by adverse selection, moral hazard, and—in an especially interesting way—interactions between the two.

1. Risk Redistribution and Adverse Selection

Ordinarily, adverse selection is the result of asymmetric information. A similar effect can be produced even when there is symmetric information about risk levels or insurers possess more information than applicants, however, if insurers are precluded from using the information they do possess. When a particular risk classification would accurately reflect policyholders' risk levels but insurers are prohibited from using that classification in setting premiums, then applicants whose premiums would be higher in the absence of the prohibition may disproportionately seek insurance coverage.[56] And those whose premiums would be lower in the absence of the prohibition may disproportionately not seek coverage.

Insurance law's capacity to accomplish risk redistribution is thus limited by the potential for attempts at redistribution to promote adverse selection. The amount of adverse selection that occurs will be a function of several factors. The first factor is the degree to which information about risk levels is asymmetric. Obviously, the more risk-related information insurers are able to obtain about potential policyholders, the greater insurers' capacity to identify the risk levels posed by individual parties, and the greater insurers' ability to combat adverse selection through accurate risk classification and pricing.

The second factor is the degree of different policyholders' risk aversion. The less risk averse high risk parties are, the less likely they are to disproportionately seek insurance, even when the insurance is underpriced given their actual risk levels. Conversely, the more risk averse low-risk parties are, the more likely they are to seek insurance even when it is overpriced given their actual risk levels. Indeed, to the extent that risk aversion is part of a cluster of consistent characteristics, it is possible that high-risk parties will be less risk averse than low-risk parties. The former's comparatively lower concern with risk may be part of what makes them pose higher risk, whereas the latter's comparatively greater concern with risk may be what makes them pose lower risk.[57] Intuitively, it is plausible that those who are careful behave

55. Avraham et al., *supra* note 53, at 241, 245.

56. For reasons I noted earlier in discussing classification based on race and religion, the converse is also the case. When insurers use a classification that does not have actuarial support, prohibiting use of this classification will result in less adverse selection. Why might insurers engage in this economically irrational practice? Prejudice is one explanation. For example, hypothetically, insurers might classify on the basis of race or sexual orientation, either because of animus or because of the mistaken belief that racial minorities or gays and lesbians pose higher risk than whites or straights. Prohibiting classification on this basis would tend to neutralize any adverse selection that had been occurring because of these classification practices.

57. David M. Cutler et al., *Preference Heterogeneity and Insurance Markets: Explaining a Puzzle of*

with greater care than others because they are risk averse and that as a result they have fewer accidents. Similarly, it is intuitively plausible that those who are careless are less concerned with the possibility of suffering loss and that they therefore have more accidents. These same greater or lesser degrees of aversion to risk would cause the former group to seek insurance more than might otherwise be expected and the latter group to seek insurance less than might otherwise be expected, and for these differences to partially neutralize any adverse selection that might otherwise have occurred because of insurers' inability to identify those in each group.

The third factor affecting adverse selection is the capacity of insurers to offer coverage choices that may neutralize the selection effect by separating those who are and are not at high risk of suffering a loss. For example, by offering high and low deductible alternatives, insurers may be able to differentiate those who are at greater risk of suffering loss from those who choose the low deductible alternative.[58]

In view of the capacity of adverse selection to undermine efforts at risk redistribution, other things being equal we should expect risk-redistributional regulation to be more feasible in lines of insurance where there is comparatively less asymmetric information, and—because of risk aversion—demand for coverage is inelastic. Correspondingly, other things being equal we should expect risk-redistributional regulation to be less feasible where there is comparatively more asymmetric information, and demand for coverage is elastic because there is, in general, less risk aversion.

Regulatory practices confirm this. Auto insurers have considerable data about risk levels posed by drivers with different known characteristics. In contrast, in life insurance some individuals have private information about their mortality risk that it is more difficult or costly for life insurers to obtain. Further, the more nearly mandatory the purchase of a particular form of insurance is, the greater the amount of risk redistribution that can be accomplished within it because the mandate removes demand elasticity from the equation. Purchasing auto liability insurance is mandatory, whereas purchasing life insurance is optional. It is no surprise, therefore, that there is more risk redistributional regulation, in the form of prohibitions on certain forms of risk classification, in auto liability insurance than in life insurance.[59] Similarly, the ACA nominally mandates that virtually all individuals purchase insurance and effectively prohibits all forms of risk classification other those based on geography, tobacco use, and age, thus accomplishing very substantial risk redistribution.[60]

Insurance, AM. ECON. REV., May 2008, at 157, 160; Liran Einav & Amy Finkelstein, *Selection in Insurance Markets: Theory and Empirics in Pictures*, J. ECON. PERSPECTIVES, Winter 2011, at 115, 124.

58. This is one of the core insights of the seminal study by Michael Rothschild & Joseph Stiglitz, *Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information*, 90 Q. J. ECON. 629, 632, 634, 637–38 (1976).

59. *See* Avraham, et al., *supra* note 53, at 251.

60. Because there is a penalty for failing to purchase coverage that will ordinarily be less than the cost of coverage itself, it is expected that some low-income healthy people will prefer to pay the penalty and will purchase coverage only when there health declines.

Even when insurance is not mandatory and there is considerable risk aversion and demand elasticity, it may be worth tolerating adverse selection in order to achieve a particular redistribution of risk. Even if it were shown that race was highly correlated with risk in a particular line of insurance, I have no doubt that prohibitions on classification based on race would be maintained. On the other hand, where concerns about discriminatory classifications are less intense, or there is less value in a particular risk redistribution, the degree of adverse selection that could be expected if a particular prohibition were adopted may play a more important role in assessing the prohibition. After all, the effect of adverse selection is to produce less insurance for some people and entities than they would otherwise prefer to purchase. Other things being equal, that is undesirable. In any event, the potential for adverse selection in a line of insurance, and the degree to which adverse selection is undesirable, place a constraint on the capacity of insurance law to effectively promote risk redistribution.

2. Risk Redistribution and Moral Hazard

One of the devices that insurance uses to mitigate the moral hazard it creates is experience rating. Under this practice, premiums are geared, among other things, to a policyholder's past loss experience. The prospect that future premiums will be experience rated mitigates moral hazard by creating incentives for policyholders to avoid loss in the current policy period and thereby avoid paying experience-rated higher premiums in the future.[61]

When premiums are risk redistributional, however, the capacity of experience rating to mitigate moral hazard is reduced. Any given risk classification, whether or not redistributional, can also be experience rated. But when the base on which premium rates are built undercharges some policyholders because premiums are risk redistributional, then the mitigation of moral hazard that is the purpose of experience rating may be reduced.

The degree to which moral hazard is exacerbated by risk redistribution depends on the extent to which premiums are risk redistributional to begin with. To use a simplified example, we can think of future premiums as having two components—a risk-redistributional component and an experience-rated component. The smaller the proportion of future premiums that policyholders anticipate will be experience rated, the less mitigation of moral hazard that will occur. Conversely, the larger the proportion of future premiums that policyholders anticipate will be experience rated, the more mitigation of moral hazard that will occur.

How much room the threat of moral hazard leaves for regulatory risk redistribution depends on both how much moral hazard is generated by risk redistribution and how much concern there is about moral hazard. Experience rating can be increased in order to combat moral hazard, but doing so decreases the

61. ABRAHAM, *supra* note 50, at 75.

amount of risk redistribution that occurs. Alternatively, the degree to which premiums are risk redistributional can be kept constant, but the amount of policyholder self-insurance can be increased with larger deductibles, more coinsurance, or lower monetary limits of liability. Increased use of these devices, however, effectively decreases the amount of insurance provided to any given policyholder and therefore reduces the amount of risk redistribution that actually occurs.

Similarly, just as risk-redistributional considerations vary, so concern about moral hazard is not monolithic. We might be much more concerned about moral hazard that increased the risk of bodily injury, for example, than about moral hazard that increased the risk of property damage. The increased moral hazard that resulted from risk-redistibutional premiums in connection with the former might therefore be less acceptable than in connection with the latter.

In short, like adverse selection, the threat of moral hazard may operate as a constraint on the capacity of insurance regulation to promote risk redistribution. But the strength of the constraint depends on the significance of the concern about moral hazard in particular contexts.[62]

3. The Interaction of Adverse Selection and Moral Hazard

The adverse selection and moral hazard produced separately by risk-redistributional premiums may also operate synergistically. Potential policyholders who anticipate that they will incur losses that they could, but will not, avoid are more likely to seek coverage when premiums are risk redistributional than when they are not. Conversely, those potential policyholders who anticipate exercising more control over whether they incur losses than other potential policyholders are less likely to seek coverage when premiums are risk redistributional. The purchase of insurance based on moral hazard will thus produce adverse selection.[63]

Interestingly, however, the adverse selection that might otherwise be produced in this way by potential moral hazard may sometimes be completely or partially offset by another phenomenon. Some policyholders are more risk averse than others. As I indicated earlier, when a group of potential policyholders' being at low risk of suffering loss is correlated with their being comparatively risk averse, then there will be less adverse selection than would otherwise be expected, or even the reverse—proverse, or propitious selection. The intuition explaining this effect is that some people who are especially careful are also risk averse. Indeed, that may be part of the reason they are more careful than others. To the extent that this is the case, comparatively low-risk potential policyholders will tend disproportionately to purchase coverage. When this occurs, the space available for risk redistribution is greater than it would otherwise be, because those who would otherwise tend not to

62. *Id.*

63. *See generally* Liran Einav et al., *Selection on Moral Hazard in Health Insurance*, AM. ECON. REV., Feb. 2013, at 178.

purchase coverage because the redistribution raised their premiums will tend to do so anyway, and the adverse selection that would otherwise occur will be neutralized.

Similarly, it is possible that some parties who pose an above-average risk of loss also are comparatively less risk averse than others and therefore seek coverage at a below-average rate. The intuition explaining this effect is that some people who are comparatively careless are also less risk averse. To the extent that this is the case, comparatively high-risk potential policyholders will tend to adversely select less than might otherwise be expected. This effect would also create more room for risk redistribution.

In sum, risk redistribution may be undermined when moral hazard leads to adverse selection. But adverse selection may itself be partially or even wholly offset when risk averse parties also pose below-average risk, and when those who pose an above-average risk of loss seek coverage at a lower rate than might otherwise be expected. When either or both effects occur, potential moral hazard may not lead to significant adverse selection, and this possible negative effect of risk redistribution will be reduced or eliminated.