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Tom Baker

University of Connecticut, tbaker@law.uconn.edu

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Containing the Promise of Insurance: Adverse Selection and Risk Classification

Tom Baker ¹

University of Connecticut School of Law

Insurance, therefore, takes from all a contribution; from those who will not need it said, as well as from those who will; for it is as certain that some will not, as that some will. But as it is uncertain who will, and who will not, it demands this tribute from all to the uncertainty of fate. And it is precisely the money thus given away by some, and the loss only, which supply the fund out of which the misfortune of those whose bad luck it is that their money has not been thrown away, are repaired. The afflicted find his money spent to some purpose; and only the fortunate part with it for nothing. From this point of view the whole beauty of the system of insurance is seen. It is from this point of view that it presents society a union for mutual aid, of the fortunate and unfortunate, where those only who need it receive aid, and those only who can afford it are put to expense. Thus, while the aggregate of human suffering and calamity remains undiminished, thus, while the uncertainty of their visitation remains unremoved, human ingenuity and cooperation equalize the distribution of this fearful aggregate, and alleviate the terrors of uncertainty.

... By a system of mutual insurance thus generally established, embracing all callings, a great fund, as it were, for the benefit of society, would be created; a fund to which none could be said to contribute gratuitously, from which none but the needy should be aided; a great reserve fund, held in readiness for the uncertain case of want. We thus have the mechanic, the laborer, and the merchant, joined hand in hand in mutual protection against the risks of their callings; we have the masses, above all, shielded from the most blighting evil of the inequality of human condition, the danger of destitution; we have society united on the basis of mutual insurance.

Jacques (1849).

Written by an American lawyer and insurance entrepreneur, this mid-19th century text offered insurance as a solution to at least some of the contradictions of capitalism. Accepting the inequality that resulted from capitalist modes of production, the author presented insurance as a technology for protecting people from what the sociologist Joseph Schumpeter would later call the "creative destruction" of capitalism. Against Marx (or, more likely, against the mid-19th century French socialists who influenced Marx), Jacques offered a less radical vision. Instead of

¹Thank you to Aaron Doyle and Marianne Sadowski for helpful comments on an earlier draft and to participants at the Risk and Morality conference for stimulating discussion.

collective ownership of the means of production, there would be collective protection against misfortune. Not quite "to each according to his need and from each according to his ability," but rather "society united on the basis of mutual insurance."

Looking back from our position on the far side of the 20th century, it is easy to say who held the better crystal ball. The technology and form are not precisely as Jacques predicted, but insurance has become nearly as central a social institution as he imagined. Yet, along with the expansion of insurance, has come a better sense of the limits of insurance as an engine of social solidarity. Notwithstanding the ubiquity of insurance, the "unity" it produces is much less complete than Jacques' utopian imagery suggests.

Two reasons commonly given for the limits on the promise of insurance are the problems of moral hazard and adverse selection. "Moral hazard" refers to the change in incentives that can result from insurance protection. The problem of moral hazard has received significant attention in the sociology of risk and insurance. (Heimer 1985, Baker 1996 & 2000, Ericson & Stone 2002). Although the rhetoric of moral hazard can be misused to disguise the politics of self-interest, there is little dispute that protection against harm can increase what Jacques called the "aggregate of human suffering and calamity." (Baker 1996) For this reason, all successful insurance institutions take measures to align individual incentives with the common goal of minimizing the frequency and extent of insured losses. (Heimer 1985)

The problem of moral hazard contains (in the sense of *limits*) the promise of insurance by requiring insurance institutions to balance protection and control. The more that a particular risk lays within the control of the insured, the less confidently insurance institutions can insure that risk. To address the problem of moral hazard, insurers require either that the insured relinquish control or reinsure some risk ("coinsurance" in the literature). Taking control away from insureds as a liability insurers commonly do with respect to the defense and settlement of insured claims has costs. Where control is particularly expensive, even the most risk averse insured prefers some coinsurance rather than pay the price of full insurance, creating what Carol Heimer has termed a "community of fate" between insurer and insured. (Heimer 1985) Risks that pose a very high degree of moral hazard typically are not insurable at all – for example, intentional harm, which almost always is excluded from insurance coverage.

Adverse Selection

The sociology of risk and insurance has paid considerably less attention to adverse selection. "Adverse selection" (sometimes called "anti-selection" in the insurance trade literature) refers to the theoretical tendency for low risk individuals to avoid or drop out of voluntary insurance pools, with the result that, absent countervailing efforts by administrators, insurance pools can be expected to contain a disproportionate percentage of high-risk individuals. (Rothschild & Stiglitz 1976). For example, adverse selection is said to explain the disparity in prices between group and individual health insurance in the United States. With group health insurance, an employer signs up employees as a group, so the insurer gets both the low and the high risks. With individual health insurance, people decide on their own whether to purchase insurance, and those who need it the most are the most likely to purchase it (assuming they have the financial means), with the result that insurers end up with more of the high risks in the pool and less of the low risks.

The phenomenon of adverse selection appears to have been given this name in the life insurance industry in the 19th century. In order to decrease the odds of paying a premature death claim, early life insurers (like those today) commonly selected among lives according to the

health of the applicant. With the development of mortality tables that represented the average rate of death within the population, insurers began using the table to price their policies on a "scientific" basis. (Amringe 1873). By pricing on the basis of average mortality, building in a margin for expenses and profit, and then selecting to be at the average, insurers were sure to turn a comfortable profit, or at least so insurance theorists reasoned. In practice, insurers were confounded to find that the mortality experience of insured lives matched, and in some cases suffered by comparison to, the mortality experience of the general population. (King 1877). If they were selecting on the basis of health status, the mortality experience of insured lives should be much better than that of the general population!

The answer, actuaries reasoned, was another force at work, *adverse* to their selection efforts. For life insurers, there were two components to this "adverse" selection. "The first operated at the inception of the insurance relationship: 'if the medical examiner did not stand at the entrance gate, the weakest and least desirable lives would be sure and soonest to come in.'" (Lippincott 1905 p. 200) The second was the discovery of ill health by those who already had purchased insurance, with the resulting decline in the average health status of the insured population. The people who decided to discontinue their policies were disproportionately the healthy. Even if "the lives at starting are a very select class, they not only lose this advantage, but degenerate till they are on average worse than the general population." (King 1877, p. 397) The answer was renewed attention to selection (classification) at the entrance door and the design of insurance contracts that inhibited healthy lives from leaving through the exit. (Id.; Lippincott 1905).

These two strategies of the 19th century life insurers illustrate the two paradigmatic responses to the problem of adverse selection: risk classification and binding risks to the insurance pool. The choice between these responses echoes the choice between the responses to moral hazard: coinsurance and control. Like coinsurance, classification leaves individuals exposed to more risk. Like control, binding risks to the insurance pool constrains (at least some aspects of) the autonomy of the participants in the pool.

Insurance Risk Classification

Insurance risk classification is the process of sorting insurance applicants into categories believed to correspond to differences in expected risk. Common examples include sorting life insurance applicants by age, health insurance applicants by health status, workers compensation insurance applicants by type of industry, and property insurance applicants by the nature of the construction of the property to be insured (e.g., wood versus brick).

Risk classification highlights the distributive nature of insurance. Insurance is predicated on the existence of a large percentage of fortunate members of the insurance pool, whose premium dollars go to pay the losses of the unfortunate members. The excerpt from Jacques at the outset presents a "share and share alike" vision of this distribution. All of society is included in the pool: "the mechanic, the laborer, and the merchant, joined hand in hand in mutual protection against the risks of their calling." In this utopian vision, insurance serves only to preserve the status quo, maintaining the economic and social status of members as it stands before misfortune strikes.

The presence of risk classification complicates this picture. Some people have to pay more than others to enter the pool, and others cannot enter at any price. Thus, insurance institutions not only maintain status, they also assign it. For example, the children of a parent refused life or disability insurance maintain a more tenuous grasp on their position as a result of

the insurers having classified their parent as a high risk. Should the parent die or become disabled, the children's resulting loss of social position results not only from the death or disability, but also from the insurer's risk classification. Because of that classification, there will be no insurance payment to offset the loss of the parent's income.

In a world of competitive, voluntary insurance organizations, it is easy to see why insurers classify applicants according to risk. Risk classification is one of the most potent competitive tools. Eliminating the most risky from an insurance pool reduces the average cost of insuring the members of the pool, allowing the insurer to offer a lower price and, possibly, obtain a greater profit. An insurer that discovers a new way to identify and exclude high risks improves its competitive position in two ways: it lowers its average risk and, assuming the people it rejects go elsewhere, it increases the average risk of its competitors. This competitive power of risk classification produces a "classification arms race," in which insurers either maintain their classification edge or face the loss of low risks to the competition and the migration of the high risks to their insurer rolls.

The use of risk classification to exclude applicants from the pool illustrates most starkly the obvious point that classification can reduce the degree to which insurance spreads risk.¹ Charging different prices or offering different contract terms on the basis of expected risk has a similar, if softened effect, as do other, more indirect, risk classification measures such as targeted marketing and designing insurance contracts to segregate applicants on the basis of risk.²

As this suggests, risk classification itself can create a kind of adverse selection. Risk classification in novations allows insurers to select risks in a manner that is adverse to the insurance pool, by reducing the ability of the insurance pool to spread risk. Calling this behavior by insurers "adverse selection" may seem like a play on words. But the dynamics of this insurer-side adverse selection are similar to those of the insured-side adverse selection that risk classification addresses. Both involve self-interested behavior based on the risk status of insureds. Both are collective action problems, in which individually rational actions produce a result that is contrary to the interests of the whole. And both inhibit the ability of insurance institutions to spread risk.

¹ A economist might take exception to this statement because, at least in theory, there are circumstances in which adverse selection by insureds is so strong that a market may not be possible without classification. (Rothschild & Stiglitz 1976) In such a circumstance, we might think of classification as "containing" the promise of insurance in the sense that a container makes it possible for water to be carried from one place to another.

² A decision to market insurance to a given target audience classifies that audience as being composed of members with favorable risk characteristics. For example, Medicare HMOs are prohibited from underwriting (i.e., turning away sick applicants), but they are free to design their marketing so that it appeals to healthy, active seniors. Billboards featuring 75-year-old mendoing gymnastics and free health club memberships are two ways to do this. As compared to risk-based pricing and underwriting, this is not as effective a way of separating a population into risk-based groups; nevertheless it can perform that function. Contract drafting can also serve a risk classification function. A decision to offer a given type of coverage as an "extra" rather than as a standard coverage provided by a broad form policy can reflect a judgment that the insurance company cannot identify (classify) individuals who are particularly risky with respect to that type of coverage. Thus, requesting that coverage amount to self-classification as being risky in that way. Two examples are offering mental health coverage as an extra in health insurance policies and offering sexual harassment coverage as an extra in liability insurance policy. Alternatively, offering a given type of coverage as an extra may reflect a judgment by the company that it is less expensive to ask people to self-classify. Coverage for home business pursuits under a homeowners' policy may well be an example.

The fact that risk classification can lead to a collective action problem means that even those who ordinarily trust or believe in the market cannot easily conclude that any particular risk classification is optimal from an efficiency or utilitarian perspective.³ Outside formal economic models, there are no purely technocratic, value-free answers to the question of who should pay how much to jump into the insurance pool.

Efforts to address adverse selection on one side share the reactivity of efforts to address moral hazard. (Baker 1996). Acting to prevent adverse selection on one side of an insurance relationship can promote adverse selection on the other. Thus, as with moral hazard, there is much to be gained in thinking of adverse selection as a “dual” problem that can affect both sides of an insurance relationship.⁴

Binding Risk to the Insurance Pool

A simple alternative solution to the problem of adverse selection is mandating universal insurance, to be provided through a single insurer. A universal insurer can charge everyone the same price without any fear of low risks dropping out or defecting to a competitor. Many forms of government-provided insurance work in this way. A leading example is the U.S. Social Security system, which provides nearly universal retirement, disability and life insurance to the employed population.

A second approach is to mandate (directly or indirectly) that everyone purchase insurance and prohibit insurers from charging prices or underwriting on the basis of risk (but to allow multiple insurers into the market). This is the ordinary practice in the U.S. for employment benefits within large companies,⁵ and it was the approach of the Clinton administration's universal health insurance proposal. (Limits on risk classification in auto insurance – which is mandatory in the U.S. and many other parts of the world – represent partial adoption of this approach.) This approach cannot completely eliminate adverse selection because individual insurers may have some ability to design or market their services in a way that appeals to low risks. (We can understand this as a form of insurer-side adverse selection that promotes insured-side adverse selection.) Nevertheless, it significantly improves the risk-spreading function of the affected insurance programs as compared to what is otherwise possible through the market.⁶

³ An additional reason pointed out by Kenneth Abraham is path dependence: insurers have collected risk information based on risk categories chosen in the past. There may be better risk indicators than those insurers have used, yet that cannot be known without the information that is developed only once insurers decide to classify risk on the basis of those indications. (Abraham 1986. See also Norman Daniels 1990).

⁴ Carol Heimer has described this insurer-side adverse selection as a form of “moral hazard.” (2002) Although her use of the term moral hazard is inconsistent with its early “immorality” meaning (Baker 1996), it is not consistent with the use of the term in the economics literature. There is a value in maintaining a consistent meaning for concepts across the fields of economics and sociology. In economics, the term “moral hazard” has been used for changes in incentives that result from an insurance (or similar) relationship, while the term “adverse selection” has been used for behavior that results from differences in risk status.

⁵ Most health insurance in the U.S. is received as an employment benefit. Employment-based health plans offer the same benefits to all qualified employees, at the same cost. Although the health benefits are not mandatory, because of U.S. income tax policy and other reasons the benefits typically are offered on terms that are so favorable that all employees who do not have insurance from another source (e.g. from the health plan of a spouse), choose to accept the health benefits. When employment groups offer employees a choice of health plans, some adverse selection can occur when low risk employees disproportionately choose certain plans and not others.

⁶ Limits prohibiting the use of gender, for example, does not drive the low risk (women) out of the pool.

A third approach is to prohibit (or limit) risk-based pricing and underwriting, without requiring the purchase of insurance. Some might object that this approach does not address adverse selection at all, but rather deprives insurers of the means to combat it. Yet, this objection focuses only on insured-side adverse selection and ignores the role of insurer-side adverse selection in disaggregating insurance pools.

Eliminating insurer-side adverse selection may be enough to keep most risks in some insurance pools. Faced with the choice between no insurance and expensive insurance, many (perhaps, depending on the situation, most) low-risk applicants would choose to insure (or at least would not change their purchasing decision because of the higher price). Purchasing insurance may be the cultural norm, people may be sufficiently risk averse, or there may be institutional arrangements that encourage the purchase of insurance (as in the case of homeowners' insurance in the U.S. (Heimer 2002)). The degree to which this approach improves on the risk-spreading function of the insurance market is more difficult to determine than in either of the preceding two approaches. The high risks that would not otherwise have been able to purchase insurance are better off than they would be in the absence of regulation of this kind. On the other hand, the low risks that choose not to purchase insurance at the higher price face the risks alone, so they are worse off than they would be otherwise. In contrast to the "free market" situation, however, all the people without insurance would have had the opportunity to buy insurance at a reasonable price.

I am not aware of any complete adoption of this third approach, but there have been many partial adoptions. For example, some forms of health insurance have been required by state law in some U.S. states to charge all individual applicants the same price.⁷ A more limited approach is to prohibit certain kinds of classifications. Race, religion, and national origin are the most commonly prohibited insurance classifications in the U.S. (not surprising in light of U.S. history), but gender, age and other, more narrowly defined classifications are also prohibited in the U.S. in some contexts. A recent variation on this approach is to prohibit the use of information from genetic testing by insurance companies.

A fourth approach to addressing adverse selection is designing insurance products to change the incentives of low risks that are already in the insurance pool. This addresses the problem identified by the 19th century insurers: even if "the lives at starting are a very select class, they not only lose this advantage, but degenerate till they are on average worse than the general population." (King 1877, p. 397) One example is level premium life or disability insurance products. With a level premium product the insured, in effect, pre-pays part of the premium for later years by paying a higher amount in the early years. Ten years into a twenty-year level premium life or disability insurance policy even the healthiest members of a given cohort will be paying a lower premium than would be available if they started fresh elsewhere.

Level premiums and other methods for keeping low risks in the pool facilitate the spreading of what Robert Work has called in another context "classification risk" – the risk that the risk status of the insured will worsen in the future. (Works 1998) Waiting periods before coverage takes effect, pre-existing condition exclusions in health insurance, discounts that apply only after a period of continuous insurance coverage, and penalties for early termination of accumulating value forms of life insurance are all methods for keeping low risks in the pool.

⁷Daniels (1990) reports that New York State is one such example.

For present purposes, this last approach is less significant for its overall effect on the ability of insurance institutions to spread risk than for its demonstration of two important points. First, even some voluntary insurance institutions ordinarily and regularly define people's choices in a way that constrains their ability to realize the full benefits of their low risk status. Second, people are willing to accept such constraints to further risk spreading objectives. These points are a partial response to autonomy objections to government regulation of insurer risk classification.

Justifying Risk Classification

Like political and economic arguments couched in the language of moral hazard, arguments made in the name of adverse selection draw on a reservoir of respect for science. Also like moral hazard arguments, adverse selection arguments are buttressed by moral appeals. Risk classification is justified not only as necessary and inevitable, but also as a good thing.

The leading moral justifications for risk classification are the following:

- without risk classification, low risks are unfairly forced to subsidize high risks,
- risk classification promotes socially beneficial efforts to prevent loss, and
- risk classification promotes individual responsibility.

To illustrate these justifications in action I will briefly describe three public policy debates over risk classification. The first is the 19th century debate over age-based pricing in British fraternal insurance. The second is the depression era (and continuing) debate over experience rating in U.S. unemployment insurance. The third is a recent debate over discrimination by U.S. life, disability and health insurers against battered women. The age-based pricing debate illustrates the subsidy justification. The experience rating debate illustrates the loss prevention and responsibility justifications. The insurance for battered women debate illustrates some of the limits of those justifications.

Age Rating in Fraternal Life and Sickness Insurance

Well into the 20th century, many fraternal insurance organizations required their members to make equal contributions to their common fund, regardless of age or health status. (Emery 1996) In Britain actuaries began challenging this practice by the "friendly societies" in the early 19th century. (Ansell 1835, Hardwick 18--). Friendly societies were fraternal organizations that provided life and sickness insurance benefits to their members. (The sickness benefits were what we would call today short term disability benefits.) The actuaries complained that the premiums paid to the societies by younger members were used, unfairly, to subsidize the benefits of older members.

Charles Ansell, an actuary for the Atlas Insurance Company, set out this fairness argument in his *Treatise on Friendly Societies*, published under the auspices of the Society for the Diffusion of Useful Knowledge:

It is been common heretofore to charge members of Friendly Societies whom might enter them, at ages so tend differing by 20 years, the same rates of contribution; but since the following tables, and the data on which they are founded, show very plainly that for every benefit to which they refer the proper contribution varies with the very year of age, the injustice of requiring men of

different ages to pay alike rates must be manifest; and as little excuse can be hereafter urged for a continuance of so objectionable a practice, it will, in all probability, be at once abandoned, as being utterly at variance with that feeling of equity and benevolence to which all well-regulated Friendly Societies owe their origin and existence. (Ansell 1835 at 107)

Notwithstanding the actuaries' complaints, many friendly societies continued to require equal contributions regardless of age, in keeping with their principles of fellowship and mutuality. (Clawson 1989) These friendly societies rejected the underlying assumption of the actuaries' argument: that justice required that members pay for insurance according to their individual chances of loss.

A second argument pushed with increasing vigor in the latter half of the 19th century combined Ansell's fairness argument with the logic of adverse selection. The actuaries argued that the friendly societies had not set aside sufficient reserves to protect themselves against the aging of their membership, with the result that the younger workers would not receive the benefits that they were promised in return for their premiums. Thus, the level premium arrangement was a means for the older member to take advantage of the younger.

The actuaries reasoned as follows. Because the societies lacked sufficient reserves to pay future claims without the infusion of new members, the current younger members were dependent on the ability of the friendly societies to continue in the future to attract younger members whose premiums would pay part of their benefits. The current younger members could not count on that in the future because other, more actuarially sound, friendly societies were charging age-based premiums. So, younger people in the future would heed the call of justice and self-interest (as the actuaries defined them) and join these other organizations, abandoning the currently young in friendly societies with aging populations that could not in the long run support the benefits promised.

The Quarterly Review summed up one of the conclusions of a series of actuarial reports on friendly societies in 1864 as follows:

So long as the societies consisted, for the most part, of young, healthy men, and the average amount of sickness remained low, the payments made seemed ample; the funds accumulated, and many flattered themselves that they were in a prosperous state, when in fact they contained the sure elements of decay. For, as the members grew older, their average liability to sickness was regularly increasing. The effects of increased age upon the solvency of benefit clubs soon becoming known, the young men avoided the old societies, and preferred setting up organisations of their own. The consequence was, that the old men began to draw upon their reserves at the same time that their regular contributions fell off; and when, as was frequently the case, a few constantly ailing members kept pressing upon the society, the funds at length became exhausted, and "the box" was declared to be closed. (p. 327-28)

In this view, friendly societies that continued charging level premiums were "sawing the young members for the sake of the older ones." (Chambers 1859 p. 356) The proposed solution, which many friendly societies continued to resist, was to adopt age-adjusted premiums of the sort pioneered in the commercial life insurance societies.

Whether the level premiums in fact explain the gradual demise of the friendly societies is a subject of historical dispute. The traditional view was to this effect (Gosden 1961), though there have been suggestions that the more significant problem was that the friendly societies began paying "retirement" benefits under the guise of "sickness" benefits. (Gilbert 1965) Recent and more sophisticated financial analysis of the Canadian counterpart to the friendly societies demonstrates that, notwithstanding the claims of the 19th century actuaries, many level premium fraternal insurance organizations were financially sound well into the 1920's. (Emery 1996)

For present purposes, the significance of the age rating debate lies in the relationship between the subsidy and adverse selection arguments. The subsidy argument makes risk classification "fair"; the adverse selection argument makes risk classification "necessary." Where there is resistance to the fairness claim, the necessity claim helps to construct the high risk members of the pool as different from, and hostile to, the low risk members of the pool. At the same time, the fairness claim legitimates the efforts of the risk classifying insurer to poach the low risk members from the resisting insurers (i.e., insurer -side adverse selection).

Even if the mid -19th century predictions of the actuaries proved true, and the level premium friendly societies failed because they could not attract new members, that demonstrates neither that age based premiums were fair nor that they were necessary. At most, the age -based premiums were necessary only because of the insurer -side adverse selection, which could have been prevented through government policies that reduced poaching. Moreover, while the ability of some member to collect their benefits was certainly unfair, the failure to attract new members was a likely to be attributable to the actuaries' disparagement of the financial soundness of the level premium societies as it was to the level premium themselves.⁸ Indeed, as explained above, as long as the premiums are adequate, level premiums in fact can help control insurer -side adverse selection by keeping low risks in the insurance pool. Disparaging the financial soundness of a friendly society (or other insurer), however, can easily become a self -fulfilling prophecy, much like a run on a bank. Who would want to start a long term relationship with an insurer that might not be able to pay claims in the future?

Experience Rating in Unemployment Insurance

In contrast to life, health and disability insurance, there has never been a broad unemployment insurance market. Some individual firms and labor unions have provided short term unemployment insurance benefits for their employees or members, and some lenders have provided a modest amount of unemployment insurance in the form of debt forgiveness provisions that are contingent upon unemployment. But, the problems of adverse selection and moral hazard seem to have made a broad market in unemployment insurance impracticable.⁹

⁸For examples of articles disparaging traditional friendly societies and promoting the "scientific" friendly societies, see Tuffnell 1842, Chambers 1853 & 1859, British Almanac 1861.

⁹The moral hazard of unemployment insurance results from the (partial but substantial) control that employers and workers have over unemployment. The existence of unemployment insurance can change the incentives of employers to retain workers, as well as the incentives of workers to be retained. The adverse selection also results in significant part from this same control. Because low risks can prevent loss in at least ordinary economic conditions by limiting the number of layoffs, they are likely to drop out of an insurance market that does not offer them a low price for their insurance. Yet, an unemployment insurer would find it very difficult to segregate individual employers by their ability or willingness to control unemployment, with the resulting "lemons problem" described so aptly by the economist George Akerlof. (1970). Akerlof analyzed a hypothetical situation in which used car buyers face a market composed of "peaches" and "lemons" and are unable to determine whether any individual car is a peach or lemon. In

An additional factor inhibiting the development of an unemployment insurance market is the fact that much of the benefit of unemployment insurance accrues to society at large, not simply to the individuals or firms that purchase it. Unemployment insurance allows workers time to look for jobs that match their education and training, and it supports families and communities during hard times, all of which lead to a more productive economy. Termed "positive externalities" by economists, benefits like these cannot be promoted by the market because there is no practical way for individual firms to charge society at large. It's not that positive externalities *prevent* the development of a market, simply that the market will provide less of the thing that produces the positive externalities than society would be willing to pay for.

The positive externalities of, and adverse selection in, unemployment insurance help explain the decision by governments in most developed countries to provide unemployment insurance. Providing the insurance through the state solves the positive externality problems because the state has the means to charge society at large for unemployment insurance benefits. It also solves the adverse selection problem because the state has the authority to bind risks to the pool.

Since states can solve (and in most cases have solved) the adverse selection problem by mandating universal participation in an unemployment insurance system, why have I included a discussion of unemployment insurance in an essay on risk classification? With mandatory insurance and a single insurance provider there should be no need to classify risks to prevent adverse selection.

Yet, at least in the U.S., there is risk classification in unemployment insurance, in the form of *experienterating*. Experienterating is the insurance term for charging different prices based on past experience. It is a form of risk classification because past experience is used to predict future risk. So, for example, an employer that has laid off significant numbers of workers in the past is treated as a high risk for lay offs in the future and, accordingly, is charged a higher rate.

The existence of risk classification in unemployment insurance further demonstrates that the appeal of risk classification goes beyond concerns about adverse selection. One basis for that appeal is the fairness justification addressed in discussing the debate over a rating in friendly societies: people should pay according to the risk they bring to the insurance pool. Although that justification is not fundamentally different in the unemployment context, the fairness claim may

that situation, the most that a rational buyer will pay is the average price, which is less than a peach is worth. So, owners of peaches will tend to keep them, with the result that the car market becomes disproportionately composed of lemons, so that people will pay even less for cars, driving even more peaches out of the market, and soon. In practice, the used car market does not unravel in this way because people do have ways of evaluating whether a car is a peach or a lemon. Similarly, it is possible that unemployment insurance could make the same judgment about prospective purchasers of unemployment insurance. Yet, unemployment insurance presents a more difficult lemons problem than used cars because of the interaction of adverse selection and moral hazard. In the case of unemployment insurance, the sale is only the beginning of the relationship. The purchasers of the insurance who have behaved like peaches in the past may now start acting like lemons once the insurer picks up the cost of unemployment (moral hazard), making it doubly difficult to know whether a prospective insured is "really" a peach or a lemon.

be stronger since many employers are likely to have more control over their unemployment risks than most people have over the aging component of their risk status.¹⁰

There is a second, *prevention* justification for experiential risk classification that also relates to this same control: experiential risk classification rewards employers who provide stable employment and punishes those who do not, and thereby encourages employers to stabilize their employment rolls. William Beveridge, one of the architects of the British social welfare system, described the underlying moral hazard concern as follows:

Those dangers, in a sentence, lie not so much in the risk of demoralizing recipients of relief, so that they do not look for work, as in the risk of demoralizing governments, employers and trade unions, so that they take less thought for the prevention of unemployment... The fear of causing unemployment may vanish from the mind of trade union negotiators and open the way to excessive rigidity of wages and so to the creation of unemployment. Industries practicing casual engagement or perpetual short time may settle down to batten on the taxation of other industries or of the general public in place of reforming their ways. (1930, p. 43).

As with any other moral hazard situation, the "solutions" will be a mix of control and coinsurance. From a moral hazard perspective, experiential risk classification is a form of coinsurance in which employers face the threat of paying higher premiums in the future as a consequence of layoffs. ("Control" options involve restrictions on layoffs for employers and voluntary quits for employees.)

Generalizing from this example we can see many instances in which risk classification is justified on the grounds of loss prevention. Reduced property insurance premiums for buildings with sprinkler systems, fire alarms and night watchmen arguably reduce insurance losses, as do reduced auto insurance premiums for cars with good safety records and anti-theft devices. Whether non-smoking and other lifestyle classifications accomplish the same goal for life and health insurers is more controversial, but these discounts have been justified on that basis as well.

A final justification for experiential unemployment insurance is less pragmatic and more openly ideological. Labor economist Joseph Becker described this justification as follows:

(1) As its main mechanism for the allocation of resources, our society has chosen the free market. (2) The market works more efficiently as market prices more accurately reflect the full costs of production. (3) The costs of production are reflected in market prices the more fully as the unemployment tax is the more completely experience-rated. (4) Thus experiential risk classification accords with society's choice of the market as the main mechanism for the allocation of resources. (Becker 1972, p. 7)

Although one certainly could take issue with any of these four points,¹¹ they are a useful description of a belief structure that supports experiential risk classification, specifically, and risk classification more generally.

¹⁰ See Becker 1987 for the application of the "fair opportunity" principle of distributive justice to insurance risk classification. This principle "requires that the allocation of benefits and burdens reflects some relevant characteristics, which all have had the opportunity to acquire, of the individuals involved." (p. 66)

The underlying idea here is that a factor should be made responsible for the risks that the face. Accordingly, prices for insurances should be tailored to the expected risk of each insured. In the context of unemployment insurance that means that unemployment premiums should be based on the experience and risk of the individual firm (or, perhaps even on the experience and risk of the individual employee, though that has not yet to my knowledge been advocated).

What makes this different from the prevention (moral hazard) justification for risk classification is the explicit connection to the governmental rationality – “governmentality” – of liberalism and responsibility. Risk classification is not simply fair, and it does not depend on the empirical grounds of moral hazard. It is constitutive of an entire approach to governing the self and others.¹² This connection between risk classification and individual responsibility helps explain why risk classification seems like a “natural” and “essential” aspect of insurance to people brought up within the liberal tradition, and it also helps explain the almost passionate commitment of many in the insurance industry and actuarial profession to risk classification.

Nevertheless, it is important to be clear that responsibility justifies risk classification in general, but not every risk classification. Whether a particular risk classification is justified depends on the nature of the classification and the meaning and purpose of responsibility – which is a complex concept, with multiple and not always consistent meanings. (Baker 2002). People can be made responsible (“accountable”) so that they will become responsible (“trustworthy, loyal, ...”). Or people can be held responsible (“accountable”) only when they are in fact responsible (have a causal or controlling role with regard to the risk in question). Like any other governmental rationality, “responsibility” does not provide a single answer to a social question, but simply a conceptual (and institutional) approach.

Prohibiting Discrimination Against Battered Women

My final example comes from the controversy surrounding the revelation in the late 1980's that some large U.S. insurers were refusing to sell life, health and disability insurance to battered women on the grounds that they posed an unacceptably high risk. (Hellman 1997) In response to his news, states began enacting legislation prohibiting insurers from discriminating against victims of domestic violence, and bills to do the same on a national level were introduced into the U.S. Congress. In the effort to defeat this legislation, the insurers' defense was that excluding battered women from the insurance pool was “actuarially fair.” According to the insurers, the history of abuse meant that these women were much more likely to make life, health or disability insurance claims in the future than other, otherwise similarly situated women who were not domestic abuse victims. This high risk meant that it was “actuarially fair” to exclude them from the insurance pool, just as insurers excluded other unacceptably high risks. This *actuarial fairness* justification is a somewhat more elaborate version of what I earlier described as

¹¹(3) is the most controversial step in this chain of reasoning, treading on the always difficult question of “what is a cost of what.” Why unemployment should be regarded as always and everywhere a cost of production is a mystery, particularly given the “creative destruction” of capitalism. For example, it seems odd to assign to one form of production the costs of unemployment that result from the emergence of a competing form of production. And assigning those costs to the emerging form of production would inhibit the development of superior technology that is one of the main benefits of capitalism.

¹²(Cf. O'Malley 2002 and Rose 1999) I do not wish to enter here into the debate whether there is any significant difference between “liberalism” and “advanced liberalism.” Since the 19th century one of the core characteristics of liberalism has been the emphasis on individual responsibility. (Ewald 2002) (For an introduction to the concept of governmentality see Burchell, Gordon and Miller 1991.)

the simple fairness, or subsidy, justification in the discussion of a rating in fraternal life insurance.

The legal philosopher Deborah Hellman used this controversy as an occasion to examine the ethical basis for insurance risk classification. As she described, the actuarial fairness justification for excluding high risks rests on a view that "fairness requires that low risk insureds be permitted to join together in insurance pools and thereby benefit from their good health" (or other low risk status). (p. 398). This view rests, in turn, on the existence of a liberty interest in freedom of association -- that is qualitatively distinct from the moral hazard and adverse selection justifications for risk classification.

Whether this liberty interest justifies any particular risk classification depends, in Hellman's view, on whether the resulting low risk status is "deserved" and, if it is not deserved, whether one accepts the link between desert and entitlement made most famously by Rawls. If the low risk status is deserved, the moral claim to benefiting from that status is a strong one. If the low risk status is not deserved, the moral claim to benefiting from that status is a weaker one that rests on drawing a clear distinction between desert and entitlement (a distinction often associated with the work of Nozick), so that people may be morally entitled to the fruit of attributes that they have done nothing to deserve.

Hellman concludes that good health is "morally arbitrary": the victims of domestic violence do not deserve their "high" risk status, just as most other people do not deserve their life, health risk status. She describes the dispute over the significance of her conclusion as follows:

Does the moral arbitrariness of that fact mean that low-risk insureds are not entitled to the benefits that follow from good health? Or instead, is it interference with the low-risk insured's ability to benefit from good health that requires justification? Those struck by the moral arbitrariness of good health are likely to believe that risk rating is unjustified in most cases. Since the healthy do not deserve the benefits health makes possible, they have no legitimate claim of entitlement to them. This rationale supports community rating and single payer schemes.¹³ Those who are struck by the idea that my talents, fortunes, and experiences are my own and thus that the community needs a powerful justification to interfere with my ability to use and enjoy these traits, are likely to believe that any restraint on my ability to join with whomever I wish in insurance schemes constitutes an infringement of liberty requiring a defense. This rationale supports the utilization of risk rating by private insurers. (402)

Thus, debates over the legitimacy of particular forms of risk classification invoke classic debates over the nature of distributive justice.

As the insurers' position in the battered women controversy demonstrates, actuarial fairness adopts a version of the more extreme, libertarian position. Actuarial fairness saddles people with all the consequences of their high risk status, whether deserved or not. Conversely, it entitles other people to all the benefits of their low risk status, also whether deserved or not.

¹³"Community rating" is the practice of charging all the participants in a health plan the same rate (a "community" rate), and "single payer" refers to the practice of allowing only a single, monopoly insurer. As discussed above, this is a common approach to the adverse selection problem. Most western countries go one step further and mandate participation in the national health plan.

Yet, on close examination we can see that actuarial fairness is not in fact grounded on the liberty interests of individuals. As Hellman (199 -) and others have noted, proponents of actuarial fairness defend the freedom of insurance institutions to classify, but they do not put individual liberty above the interests of those institutions. (E.g., Daniels 1990) Defending individual liberty above the interests of insurance institutions would mean vesting individuals with a right to accurate risk classifications, and the level of accuracy required would not be within the sole purview of the insurance institutions themselves. Put another way, a truly libertarian approach would obligate insurers to do more than classify applicants accurately within the context of their ordinary business arrangements. Instead it would obligate them to conduct research to determine accurate forms of classification. How much research, and at what cost, would have to be determined, but there is no reason to believe that it would match the amount of research insurers presently determine is appropriate.

In practice, the fairness argument has been mobilized in public policy debates, not to protect the rights of low risk individuals, but rather to promote the freedom of insurance organizations to classify insureds through any means they wish. While some “low risk” individuals may believe that they are benefited by risk classification, any particular individual is only one technological innovation away from losing his or her privileged status – the reality that lies behind the widespread concern with genetic testing by insurance companies.¹⁴ If there is a fundamental moral principle at work here, it is not liberty, but utility. Once we are in the realm of utility, liberty is only one value among many, and there is no reason to make insurance institutions the arbiter of that utility (especially because of the collective action problem created by risk classification). This is not to say that risk classification is always and everywhere bad, but rather that the fairness justification for classification does not carry all the moral force that its proponents assert.

Like Hellman, I do not pretend to be able to resolve the debate over the morality of risk classification. My purpose in invoking the debate is to demonstrate that risk classification involves substantial moral and ethical commitments. Classifying insureds according to risk both reflects and creates a moral vision. Risk classification reflects a commitment to individual responsibility (recognizing that what that means is up for debate). Risk classification also creates that commitment by helping to persuade people that the purpose of insurance is individual protection and, accordingly, that the insurance group is a collection of individuals without any responsibility to one another. (Cf. Baker 2002) Seen in this light, it is hardly surprising that many friendly societies and other fraternal insurance organizations long resisted risk classification, and that strong forces are arrayed against the health insurer risk classification today. (E.g., Stone 199 - and 2002).

Conclusion

These are hardly the last words on either adverse selection or the challenge that it poses to the promise of insurance. My intent, so far only imperfectly realized, is to expose the concept of adverse selection, and the technologies that relate to it, to the kind of genealogical analysis previously given to the related concept of moral hazard. As with work on moral hazard, the

¹⁴ The fairness argument in favor of a rating for sickness insurance would also justify genetic -based risk classification. Indeed, the subsidy claim is stronger in the case of genetic classification than it is for age classification, since everyone gets sold, while genetic makeup is fixed at conception. Since risk classification on the basis of genetic testing is widely regarded as repugnant (a state of affairs that is demonstrated by the many statutes prohibiting that practice), that demonstrates the existence of at least an implicit counter-vision of “fairness.”

objective is to demonstrate how the rhetoric of adverse selection disguises ideological or moral commitments. The goal is not to discredit the concept, itself, but rather to clear away some of the underbrush that inhibits addressing very real problems in the design of socially responsible insurance institutions.

In particular, much of the literature on insurance treats risk classification as an inevitable, essential response to the problem of adverse selection and ignores the role of risk classification in promoting adverse selection. The literature often takes for granted the following (familiar) belief structure. "Private" insurance is better than "public" insurance. "Voluntary" insurance is better than "mandatory" insurance. The following statement by the then president elect of the American Academy of Actuaries to the U.S. Commission on Civil Rights is typical:

The basic principle is quite simple to state: The risk classification process is essential to the viability of private, voluntary insurance mechanisms. Where substantiated differences in risk of loss exist, they must be recognized in a private, voluntary insurance mechanism to avoid anti-selection by those subject to high risks against those subject to low risks.... It is at best questionable, and more likely, impossible, that broad social cost-spreading objectives can be accomplished through voluntary, private market mechanisms. (U.S. Commission 1979 p. 141).

If nothing else, I hope that this essay has helped expose statements like these as arguments in favor of particular interests, within the context of a particular moral vision. The particular interests are those of insurance institutions seeking maximum autonomy from societal control. The particular moral vision is that of "actuarial fairness" – a watered-down form of liberalism that privileges individual interests over the common good and that privileges, above all, the interests of insurance institutions organized on its terms.

References

- Kenneth Abraham (1986), *Distributing Risk* (New Haven: Yale U. Press).
- Charles, Ansell (1835), *A Treatise on Friendly Societies* (London: Baldwin & Cradock).
- J.H. Van Amringe (1873) "Life Assurance" *The Galaxy* 15:249 -54, 396 -401, 527 -35 (serialized in February, March and April 1873 issues).
- Tom Baker (1996), "On the Genealogy of Moral Hazard," *Texas Law Review* 75:237 -92.
----- (2000), "Insuring Morality," *Economy & Society* 29:559 -577.
----- (2002), "Risk, Insurance and the Social Construction of Responsibility," in T. Baker & J. Simon (eds) *Embracing Risk* (Chicago: University of Chicago Press).
- Joseph M. Becker (1972), *Experience Rating in Unemployment Insurance: Virtue or Vice* (Kalamazoo, Michigan: W.E. Upjohn Institute).
- Perry C. Beider (1987), "Sex Discrimination in Insurance," *Journal of Applied Philosophy* 4:65 -75.
- William Beveridge, *The Past and Present of Unemployment Insurance* (London: OUP 1930).

- Graham Burchell, Colin Gordon, and Peter Miller, eds (1991), *The Foucault Effect: Studies in Governmentality* (Chicago: U. of Chicago Press).
- Chambers (1853), "Friendly Societies" *Chambers Journal* 19:199
 ---- (1859), "Friendly Societies" *Chambers Journal* 32:355 -56
- Clawson (1989), *Constructing Brotherhood, Class, Gender, and Fraternalism* (Princeton: Princeton University Press).
- Norman Daniels (1990) "Insurability and the HIV Epidemic: Ethical Issues in Underwriting," *Millbank Quarterly* 68:497 -525.
- J.C. Herbert Emery (1996), "Risky Business? Nonactuarial Pricing Practices and the Financial Viability of Fraternal Sick Insurance," *Explorations in Economic History* 33:195 -226.
- Richard Ericson, Dean Barry and Aaron Doyle (2000), "The Moral Hazards of Neo-Liberalism: Lessons from the Private Insurance Industry," *Economy & Society* 29:532 -58.
- Bentley Gilbert (1965), "The Decay of Nineteenth Century British Provident Institutions and the Coming of Old Age Pensions in Great Britain," *Econ. Hist. Rev.* 17:550 -63.
- Hardwick (18 --) *Manual for Friendly Societies* (London: Routledge).
- Carol Heimer (1985) *Reactive Risk and Rational Action: Managing Moral Hazard in Insurance Contracts* (Berkeley: University of California Press).
- Deborah Hellman (1997), "Is Actuarially Fair Insurance Pricing Actually Fair?: A Case Study in Insuring Battered Women," *Harvard Civil Rights - Civil Liberties Law Review* 21:355 -411.
- D.R. Jacques, (1849) "Society on the Basis of Mutual Life Insurance" *Hunt's Merchant Magazine and Commercial Review* 16:152, 153 (1849)
- George King (1876) "On the Mortality Amongst Assured Lives" *Journal of the Institute of Actuaries* 19:381-405.
- Henry C. Lippincott (1905), "The Essentials of Life Insurance Administration," *Annals of the American Academy of Political and Social Science* ,26:192 -208.
- Pat O'Malley (2002), "Imagining Insurance: Risk, Thrift, and Life Insurance in Britain," in T. Baker & J. Simon (eds) *Embracing Risk* . (Chicago: University of Chicago Press).
- Nikolas Rose (1999), *Powers of Freedom* (Cambridge: Cambridge University Press).
- M. Rothschild and J. Stiglitz (1976), "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," *Quarterly J. of Econ.* 90:629 -49.
- Deborah Stone (2002), "The Moral Opportunity of Insurance," in T. Baker & J. Simon (eds) *Embracing Risk*. (Chicago: University of Chicago Press).
- (199 -), "The Struggle for the Soul of Health Insurance," *The American Prospect* [**need cite**]
- Quarterly Review (1864), "Workmen's Benefit Societies," *Quarterly Review* 116:318 -350
- Tuffnell, "Improved Friendly Societies" (184 2), *Penny Magazine* 11:387 (excerpt from "Mr. Tuffnell's Report to the Poor Law Commissioners").

U.S. Commission on Civil Rights (1979), *Discrimination Against Minorities and Women in Pensions and Health, Life & Disability Insurance* (Washington, D.C.: U.S. G.P.O.)

Robert Works (1998) [**need title and cite**] *Connecticut Insurance Law Journal* ,5: --- ----.