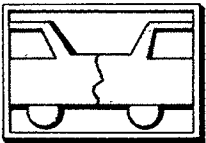




## Classifying Drivers: How Fair Are Demographics?



In 1975, North Carolina took the national lead in eliminating age and sex discrimination in automobile insurance. Seven years later, John Hall of Georgia State University still maintained before a legislative committee that age and sex are “the most satisfactory surrogates” for measuring the likelihood that individuals will have accidents.

Do young people, especially young men, account for a disproportionate share of accidents? Yes, but it may not be that simple. For example, insurers in some states (but not North Carolina) have offered small discounts to students with good academic records. And the industry’s own classification plans suggest that youngsters tend to settle down when they get married.<sup>16</sup>

When representatives of the insurance industry speak of “fairness” in classifying drivers, they usually mean that there is a statistical correlation between certain characteristics, such as age and gender, and accidents. This concept of fairness refers to *statistical equity*.

“Private passenger auto insurance premiums must be established and charged before costs are known. This is the very nature of the insurance concept,” explains Paul Mize, general manager of the N.C. Rate Bureau. “If all rates were equalized regardless of the statistical probabilities, the result would be inequitable and there would certainly be severe insurance market problems. It is not difficult to understand that insurance underwriters would, based upon known statistical probabilities, readily accept the ‘good’ and reject the ‘bad’.”

Other spokesmen for the insurance industry echo Mize, emphasizing the importance of using statistical probabilities in projecting insurance losses. "A person is a member of a class, and various classes of people will cause a certain level of losses," says John B. McMillan, a lobbyist for Allstate Insurance Company until his recent appointment as counsel to Lieutenant Governor Robert B. Jordan III. "You determine rates based on a group or class."

As a public policy matter, however, statistical equity is not the only type of equity to be considered. There is also *social equity*. Philosopher John Rawls contends that a just system is one people would accept as fair without knowing their lot in advance.<sup>17</sup> Applied to insurance, this definition suggests that socially equitable rating criteria should be 1) directly related to accident-proneness and not surrogate measures of something else, and 2) based on factors that are within the driver's control.

### Statistical Equity

Many students of the insurance industry, including Georgia State's Hall, argue that age and sex are the best surrogates for the characteristic of accident-proneness. But statistics that appear to show that a group of drivers is accident-prone might really measure something else—something objectively measurable and not directly related to being a member of a certain group.

Men, for example, are involved in twice as many accidents and four times as many fatal accidents as women, according to 1982 data from the National Safety Council. But it turns out that men not only have twice as many accidents as women, but also *drive more than twice as many miles*, according to the Federal Highway Administration. One might conclude that mileage was a better predictor than gender. Still, if drivers' genders was the only information available, a logical person would bet on the women or demand better odds on the men.

The National Safety Council statistics also show that teenagers are about 50 percent more likely to have accidents than the average for all drivers. And this is despite the fact that they drive, on average, substantially fewer miles than older drivers. However, young men do drive more than young women, which may partly explain why they appear to be worse insurance risks.

Demographic measurements might be a crude substitute for assessing personality. Traditionally, underwriters have favored drivers

**Table 2. Factors in a Statistically and Socially Equitable Driver Classification System**

	<b>Socially Equitable</b>	<b>Socially Inequitable</b>
<b>Statistically Equitable</b>	Driving Record Mileage	Sex Age Territorial Rates Marital Status
<b>Statistically Inequitable</b>	Flat Rates Group Insurance	Race Income "Redlining" Personal Judgments Punitive Rates for Poor Drivers

Table prepared for *North Carolina Insight* by Steve Adams.

who embrace stable, middle-class values. Underwriters for various companies, Andrew Tobias reports in *The Invisible Bankers*, have looked askance at renters, airline stewardesses, entertainers, messy housekeepers, homosexuals, and people with nicknames like "Shorty" and "Scotty." The list goes on and on.<sup>18</sup>

In 1971, Grinnell Mutual, an Iowa-based insurance company, gave a battery of personality tests to 30,000 drivers. Sure enough, drivers who the test indicated were aggressive and reckless were twice as likely as the meek and mild to have accidents and 10 times as likely to have fatal accidents.

North Carolina's state-regulated driver classification system spares drivers from being classified at the whim of an underwriter. And as discussed earlier, basing rates directly on the basis of age and sex is also prohibited in North Carolina.

### Social Equity

Traditionally, most discussion of "fairness" of rates and classification systems has focused on statistical equity, not social equity. But even if the most statistically equitable system could be found and put into law, that system might not be socially equitable. This way of looking at the concept of insurance has received little attention.

If statistical equity alone becomes one's goal, demographic driver classifications have several serious drawbacks from a public policy standpoint.

\*Demographic criteria penalize drivers by using broad categories. Members of certain groups—young men, for example—may *tend* to have characteristics that make them more accident-prone. But such generalizations are never universal. Many perfectly safe drivers inevitably will be condemned to higher rates because of factors beyond their control.

\*Demographics can lead to unacceptable generalizations. What if the insurance industry proposed to charge higher rates to minorities and poor people? There are no data to suggest these groups are especially accident-prone, but such discrimination might be considered socially or politically intolerable, even if the statistics indicated they were. Is it any more appropriate to discriminate by age and gender than it is by race and economic level?

\*Statistics are available only for the demographic categories the insurance industry chooses. Without comparative data, it is impossible to determine whether the industry has chosen the most appropriate categories. Interestingly, the N.C. Rate Bureau has not kept data by age and sex since age and sex discrimination was banned in North Carolina.

On the other hand, spokesmen for the insurance industry contend that it would be unfair *not* to use demographics in underwriting. "Many sawmills and restaurants never burn. Nevertheless . . . it is not equitable to charge all fire insurance policyholders the same rate because owners of dwellings would be subsidizing owners of restaurants and sawmills, which have been shown by experience to be more likely to burn," says Paul Mize. "To whatever extent youthful drivers as a group pay a smaller share of the total auto liability premiums than their share of the losses they cause, older drivers as a group must pay more to offset."

Industry representatives object most vigorously, perhaps, to the proposition that an individual in a group, for underwriting purposes, might be penalized because of the general characteristics of that group. "If one person caused an accident that cost an insurance company \$3 million in a lawsuit, you don't turn around and charge that person \$3 million," says John McMillan. "Insurance is a prospective business. You determine rates based on a group or class. A person is a member of that class. You can identify a *group* of people that should get lower rates—because you are not singling out an individual."

## Statistical and Social Equity — Combined

**T**he two examples put forward by Mize and McMillan—the sawmill vs. homeowner fire insurance rates and the \$3 million settlement—sound convincing when considering statistical equity *alone*. These very examples, however, help to sharpen the distinction between statistical and social equity. Sawmills probably pose a higher risk of fire than houses *by virtue of being sawmills*, not because of some surrogate measurement. All sawmills produce flammable materials and use industrial equipment. Moreover, sawmills are businesses. Investors have chosen to put their money into the sawmill business, and the higher insurance rates are passed along to consumers in the price of the product. Running a sawmill and owning a home are entirely different propositions. Different insurance rates may be both socially and statistically equitable.

By contrast, private passenger auto insurance is not a business expense, but an essential, legally required, personal service. Moreover, in projecting auto losses, demographic criteria are *surrogate* measures of something else. Young, single men cause more auto insurance losses than others, not because they are young, single men, but because they *tend* to share some other characteristic—recklessness, perhaps. Not all young men share this characteristic, however. Demographic criteria may be statistically equitable. But it is socially *inequitable* to charge higher rates on the basis of criteria that are beyond a driver's control and are *surrogate* measures of characteristics that a particular driver may not share.

The most desirable rating system would be both statistically and socially equitable (see Table 2). Demographic driver classifications, such as age and sex, are inherently *socially* inequitable. They lump together drivers who may or may not share the intended characteristics. It may turn out that some such classifications are really surrogate measures for something else entirely, something that can easily be measured by an acceptable means.

Mileage appears to fall into this category. It is both measurable and directly related to the risk a driver poses to an insurance company. Yet, the current system of classifying drivers addresses mileage only indirectly through classification of car use—farm, pleasure, commuting to work (over or under 10 miles), and business. If North Carolina's driver classification system needs to be refined, the legislature, the Insurance Commissioner, and the insurance industry might consider mileage criteria.