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THE ECONOMICS OF DISCRIMINATION

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DR. WALTER E. WILLIAMS: Recently there has been application of essentially civil rights law to the customary procedure of writing insurance. Insurance company practices where females receive lower annuities for a given premium payment than their male counterparts or practices where females are charged lower premium rates for automobile insurance are increasingly being seen as violations of constitutional equal protection guarantees. More recently insurance company policy to test new applicants for the AIDS antibody is seen as discrimination against homosexuals.

The charges and countercharges as to whether insurance companies violate civil rights, in part, reflect considerable confusion in terminology used to frame the debate. Therefore, it is probably worthwhile to spend time to give some operational meaning to the terms. In doing so, we might just shed a little more light on the issue.

Discrimination is frequently used in a pejorative sense to characterize behavior we typically consider reprehensible and illegal. We frequently encounter the use of the word prejudice to describe what are seen as sinister motives of insurance companies and at other times the industry's ignorance or insensitivity.

Discrimination is a perfectly good word to which we can give operational and unambiguous meaning if we consider it solely as an act of choice. Scarcity mandates the necessity of choice. When one activity, individual or good is chosen, then of necessity other activities, individuals or goods cannot be chosen. For example, when people choose to live in Boston, then of necessity they discriminate against living in Philadelphia, Dallas or Los Angeles. When a person chooses a wife, he discriminates against other women as his wife. If I engage Monarch Life Insurance Company, I discriminate against Metropolitan Life Insurance Company. It is obvious that life is full of choices and whenever one chooses he necessarily discriminates.

If we modify the word discrimination with words like sex, race, age, we simply specify a criterion for choice. To the extent that we modify discrimination with words like sex, race and age, we can also think of discrimination being modified with words like region, supplier, customer and so forth. From legal/ethical point of view we might ask: if persons are permitted to engage in region discrimination, what is the case for denying them the opportunity to engage in other forms of voluntary behavior that entails discrimination of one sort or another?

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Prejudice is another useful concept that is widely misused. If we think of the word prejudice as defining behavior where people pre-judge prior to making a choice, it lends itself to unambiguous operational meaning. From an economist's view, prejudging or prejudice simply means making decisions on the basis of incomplete information, e.g., the use of stereotypes, proxies, hunches and guesses.

In order to make decisions, one must have information. Information is not a free good. To acquire an additional unit of information requires the sacrifice of time and resources valuable in alternative uses; hence information costs something. Therefore, we can expect to see individuals (or groups of individuals) seeking to economize on information costs as part of their optimizing strategy. In other words, making reliable decisions on the basis of incomplete information is rational optimizing behavior.

Some important decisions we make on the basis of incomplete information are: (1) getting into our autos without making complete safety checks, (2) consuming a meal in strange places without having first determined whether the food is in fact safe to eat; (3) teaching our children not to speak to or accompany strangers; and (4) fleeing or quickening one's pace upon hearing rustling in the bushes during a midnight stroll through New York's Central Park.

All of these standard everyday activities represent attempts to economize on information costs where people use some known, cheap to observe, attribute as a proxy for some unknown, costly to observe, attribute. Such behavior is part of an optimizing procedure in all decision making sciences. For example, in the recovery of oil it is very costly to observe whether oil is in fact located thousands of feet below the surface. Therefore, oil explorers will seek proxies for the existence of oil such as certain kinds of rock formations. In other words, there is some known correlation between certain rock formations, which are cheaper to observe, and the existence of oil, which is much more costly to observe.

Using cheap to observe attributes as methods to economize on information costs are no cause for controversy until we use them as the basis for establishing some contractual relationships between people. However, in principles there is little difference in using known and cheaply observed attributes as proxies for unknown and more costly to observe attributes whether we are guessing about the probability of oil or the probability of an auto accident claim. Let me use two simple examples where this concept can be applied to people.

Suppose we are on a college campus where the demographics of the student population are identical to that of the country, i.e., females are slightly more than 50% of the population, Jews are 3%, blacks are 13% and so forth. We play the following games: You chose a student to answer the following questions: What is the cos x dx? You may not question him in any other fashion. The payoff matrix is as follows: you win $1,000 for each student you select who integrates the function correctly and you pay $100 for each student you select who fails to integrate the function correctly. Moreover, you have zero information about the mathematical proficiency of the college's students, i.e., you can only distinguish among students by their physical appearances. If the payoff matrix is sufficiently rewarding to induce you to play the game and you seek to maximize your winnings, what is the optimizing strategy to select students to ask?

Clearly, if you thought achieved mathematical proficiency was randomly distributed throughout society you may select students at random. However, you may be familiar with population statistics such as females, Hispanics and blacks score lower on the quantitative portion of SAT and are less often observed as being graduates in the hard sciences while the Japanese and Chinese are disproportionately represented in the hard sciences and score considerably higher on the quantitative portion of the SAT.

With such *a priori* information, you may assign a higher conditional probability of winning by confining your choice of students to Orientals and bypass female, Hispanic and black students. If your behavior was observed by an outside third party, could he conclude that you held malevolent feelings for females, Hispanics and blacks? What could the observer say if he observed a black player using the same selection criteria? Actually there is nothing unambiguous that we can say about the game player's preferences simply by watching him select on the basis of race and sex criteria.

Consider that we change the game. This time there are five black males, five white males, five black females and five white females. From this group of 20 people you are to select a five person basketball team, and if you win a forthcoming game, you win $1 million. You have zero information about basketball proficiency among the 20 people; they appear to be the same with respect to weight and height; in other words, you can only differentiate between them by race and sex.

One imagines that the average person, a Bayesian, seeking to maximize his winnings, would not select any of the females even though there's a non-zero probability that some may be more proficient than the males in the group. One also imagines that the five players ultimately selected would be dominated by black males. Like the former example, there is nothing that one can say unambiguous about race and sex preferences by observing that the chooser's selection is dominated by the black males. Moreover, one needs to consider, in this case or the mathematics example, a causal connection between physical attributes and proficiency; a correlation is all that is necessary.

The next question is: would anyone care if the chooser chose to indulge his preferences, say by choosing whites only or females only? What it would mean is that if, in the true state of the world, black males had a higher basketball proficiency than white males or females, the chooser who allowed personal race and sex preferences to dominate his choice would pay by losing and his competitor would be guaranteed consistent winning. None of us, at least not I, would attempt to enact legislation to make a racist select blacks if he chose not to do so.

Now we may ask whether there are any important differences between the use of cheaply-to-observe characteristics in these examples and actual practices in the real world of insurance.

The task of an actuary is to calculate risks, assign risk classes and establish premium. In the area of automobile insurance, for example, of the insured and based upon the risk category, actuary has to decide upon the risk category, of the insured and based upon the risk category, a premium is established. In deciding the risk category, the actuary must have some information regarding the likelihood of a claim and its value. However, it is not likely that the actuary will have all the relevant information to make a complete assessment. He

does have information about the driver's record such as prior accidents and traffic citations but that may be insufficient. Therefore, personal information such as credit rating, education, sex and age may be sought in an effort to assign a risk class.

This information may appear irrelevant to the uniformed observer but it may be quite relevant. Insurers have a body of data from their prior claim experiences. They may have found a systematic correlation between drivers having a poor credit rating, being a high school dropout and a young male on the one hand and a high claim experience on the other. Therefore, the actuary may use these factors which may be highly correlated to the likelihood of a claim as a way of assigning a risk category. Personal attributes are not perfect predictors of driving conduct. The insurance company could obtain much more reliable information about a particular driver by employing a detective to follow the prospective client to observe his driving behavior under various driving conditions and psychological moods and examine just how carefully he maintains the safety equipment on his automobile. While information like this is very useful in establishing risk classes, it is very costly to obtain. Therefore, if the actuary feels that these factors are crucial to his assessment, he may seek less costly proxies for these characteristics and indeed, his claim experience may provide a correlation between personal attributes such as sex, age, credit rating and education and the likelihood and frequency of accident claims.

What if the actuary uses age as one of the criteria for establishing risk class when it has no relevance at all. In other words, he assigns a higher risk and a higher premium for younger drivers when in the true state of the world age has no bearing whatsoever on driving behavior. From a social point of view, should we care; should we impose legislative restraints on his behavior to insure "fair" treatment for the young? The answer to that question, I think, can be answered by going back to our calculus example. If a person chose height as a proxy for mathematical proficiency, when in fact there was no correlation, would we care?

My answer is no, modified by "it all depends." The "no" component of my answer is that if an insurance company uses age to set risk class, when in fact age has no bearing, market forces will met out swift and certain punishment. In other words, some other insurance company will discover, in the pursuit of a greater market share, that age (independently) has no bearing and will offer a lower premium to the young and capture customers from the errant company. That is, if age seems to have a bearing on claim experience, companies in the pursuit of a larger market share will attempt to refine the category by attempting to discover a way of establishing which among the young are high risks and which are low.

But what if an insurance company has been granted monopoly power by a state? That brings me to the "it all depends" portion of my response. If monopoly powers have been granted, then the corrective forces of the market place are blunted. In that case, an argument may possibly be made for legislative intervention.

Similar analysis can be applied to health insurance. In that AIDS infection is a very costly illness, I think that insurance companies can use homosexuality as a proxy for the incremental likelihood of a person contracting the disease. People can say that people other than homosexuals contract AIDS. That is true. But whether the probability of contracting AIDS, when one is a homosexual, is an

empirical question. And if the probability is higher, homosexuality should be used in assigning risk classes just as any other characteristic.

What we are observing in the legislation for unisex insurance and bans against using certain personal characteristics in assigning risk class and premiums is what my colleagues at George Mason University call "rent-seeking" behavior. Rent-seeking behavior occurs when individuals seek to use government power to achieve what is more costly to achieve though voluntary relationships in the market. Women want to pay the same insurance premium as men but receive an annuity stream that is greater than that received by men. Homosexuals want to pay the same health insurance premium but receive higher expected benefits. As such these individuals are calling for a redistribution of income from those in a lower risk category who will be forced to pay premiums higher than that indicated by their risk class.

So what else is new? It is another case of a well organized group of people with relatively concentrated benefits imposing costs to be borne by another group that is not as politically organized.