## Age As An Insurance Rate Class Variable

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## **EXECUTIVE SUMMARY**

## PART ONE: INSURANCE

The insurance mechanism is nothing more than a formal process that allows widely divergent policyholders to "pool" their collective risk. This allows people to substitute a known premium for an unknown and highly variable potential loss (e.g. the loss of one's house in a fire). However, all claims must ultimately be paid by policyholders' premiums. Except for some small amounts of investment income, premiums are the only source of funding within the insurance process. In fact, total premium income must equal total claims paid plus an amount to cover the cost of administration of the process.

Because insurance benefits are highly similar across insurance companies, insurers compete for customers based mostly on price. Thus, there is a strong pressure to achieve the lowest possible premium for each potential policyholder so long as the premium at least covers the "expected" loss costs.

Risk classification allows insurers to subdivide policyholders into groups that bring close to identical risks to the insurance pool. Each policyholder in a defined risk class will pay the same premium, which is a direct function of their risk profile. Equal risks are treated equally, but unequal risks are treated unequally. This is referred to as "actuarial equity." All pricing must be done on "expected" costs since premiums are set at the beginning of the policy exposure period before actual claims are known.

Many Canadians now view the ability to drive a car as a social "right". Thus, the denial of this "right", because one's premium is prohibitively high, is viewed as an affront to an

accepted human right. Legislators then may respond by removing the use of Risk Classification Variables such as age and sex to "solve" this problem. However, if the Risk Classification Variables do truly measure the risk being brought to the insurance pool, then the result is inevitably cross-subsidisation whereby safe drivers pay a higher premium than before to subsidize the rates of poorer drivers who can no longer be identified. There is statistical evidence that such cross-subsidisation does exist in the three provinces that use mostly government-monopoly auto insurance and which do not use age and gender as risk classification variables.

There are five principles of Risk Classification. The system should:

- reflect expected cost differences
- distinguish among risks on the basis of relevant cost-related factors
- be applied objectively
- be practical and cost-effective
- be acceptable to the public

One reason for the wide use of "age" as a Risk Classification Variable is that it satisfies all of these criteria. In particular, age and sex are used as rating criteria because they provide a relatively costless statistical measure of expected loss costs. It may not be possible to prove a "cause-and-effect" relationship between the Risk Classification Variable and ultimate costs. This is not an actuarial requirement.

While the "age" of the driver cannot be proven to be the cause of accidents, there is strong statistical evidence that age and automobile loss costs are correlated. Not only

that, there appears to be no perfect proxy or substitute for age as a Risk Classification Variable (e.g. years licensed).

## PART TWO: THE ETHICS OF USING AGE AS AN INSURANCE RATING VARIABLE

Moral or ethical theory does not offer a singular approach to assessing whether it is ethical to use age as an insurance rating variable. The conclusions reached will depend on the analytical approach that is adopted. To that end, it is useful to understand the primary philosophical approaches that are available to use.

Utilitarianism assesses the ethical value of an action by the extent of the utilities, interpreted as pleasure, which result from actions or rules. Actions or rules that lead to the greatest amount of this variable are considered morally superior. A difficulty of Utilitarian reasoning is that it is unable to account for, or accommodate, individual rights. Efficiency theory is a variant that focuses on identifying and achieving efficient states of being. A pareto optimal state is one where no one can be made better without making someone worse off. A pareto improvement is said to occur when it is possible to take an action, or change a system, that makes at least one individual better off, without making anyone else worse off. Both of these approaches are results focused.

Deontology is an analytical approach the removes the focus on outcomes and places it on identifying and valuing certain intrinsically good qualities. The difficulty with deontology flows from trying to identify these intrinsically good qualities or values. Rights arguments are often employed to argue that age differentiation is unjustified. Rights theories claim, in principle, that everyone has the same fundamental rights.

Concepts of liberty, freedom, security, equality and egalitarianism all have relevance to a rights oriented discussion. What distinguishes the various approaches within rights theory is how rights are defined and, inevitably, the critical relationship between potentially conflicting rights. A discussion of rights or harms only can proceed in a coherent manner if there is an understanding of the underlying substantive value or values upon which the theory is based. The values underlying rights have been proposed to be based on benefits, interest, and choice.

Choice theory also provides useful analytical insight in the context of using age as an insurance rating variable. The theory asserts that what is important in understanding the idea of rights is not the value of the interest that is protected since this is in dispute, but who has the power to choose what happens. The theory tries to separate itself from having to judge whose interest ought to trump in a situation of conflict, and looks rather at who has the choice or control over what happens. In this context, a reasonable evaluation of interests, including those of drivers, insurers, and other societal stakeholders can take place.

The concept of discrimination has typically had negative connotations. It is true that some drivers are negatively impacted by age-based differentiation in insurance rates. However, the alternative which involves removing age as a variable, is not without its own harm. People who pose less of a risk will be forced to pay more and the overall costs of the system would increase. Further, the concept of actuarial equity can be argued to be ethical using theoretical approaches grounded in utilitarianism, equality and egalitarianism.

Most Canadians now view the ability to drive as a social "right". Insurance requirements that are prohibitive to the exercise of that "right" are, as a result, viewed as unethical. However, a thorough exploration of the issue suggests that there is a strong ethical argument for requiring vehicle insurance. Further, governments should not be ethically obliged to assist individuals when the requirement of insurance proves too prohibitive for an individual to be able to drive. There must be a limit on "rights" claims that can be made to challenge every negative impact. Governments should not assume they are ethically obliged to intervene. Although they may choose to, and have done so in certain jurisdictions, there is not any overriding ethical imperative to do so. This is not to say that ethical arguments could not be provided for making such a decision. However, those who choose not to are not without a moral foundation either.