

# R E P O R T

to the Governor in Council on a Study Into the Use  
of Gender as a Rating Factor in Automobile Insurance  
in Nova Scotia

November 1, 2004

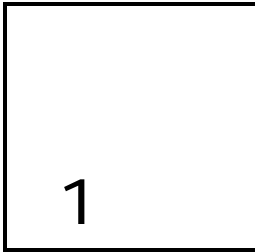
A Study Into the Use of Gender as a  
Rating Factor in Automobile  
Insurance in Nova Scotia

Nova Scotia Insurance Review Board

November 1, 2004

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## Executive Summary

This is the report to Government on The Nova Scotia Insurance Review Board's examination into the use of gender as a risk classification factor in rating automobile insurance.

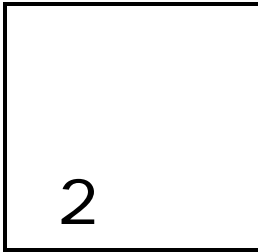
We gathered information for our study through public hearings throughout the Province; written submissions; responses from leading insurance companies to a questionnaire we had prepared; and from a review of insurance claim statistics, rate manuals, and published literature.

The use of gender in automobile ratemaking has been a controversial subject in North America for many years. Those that favor its continued use point to insurance industry statistics that show male drivers, particularly inexperienced male drivers, having a greater accident propensity than female drivers. Those that oppose its use argue that insurance claim statistics are insufficiently detailed and, therefore, mask other factors, such as miles driven, that are reasons for the observed accident experience differences between male and female drivers. They also argue that from a public policy perspective, males and females should be rated alike. The Supreme Court of Canada addressed this issue in 1992, and decided to permit its continued use to give the insurance industry time to find an alternative rating variable; however, we found little evidence to suggest the insurance industry has acted upon the Supreme Court's recommendations.

Our review of available statistics suggests there are differences in the insurance claim rates between male and female drivers, but that for the major coverage, third party liability, the differences have been narrowing over time. We also note that the majority of drivers, even those that are inexperienced drivers, are claims-free.

There are implications associated with eliminating the use of gender. The rates for male drivers, primarily inexperienced male drivers, would decline, thus making automobile insurance more affordable. The rates for female drivers, primarily inexperienced female drivers, would increase. But based on a preliminary review of the rates that insurance companies have filed to become effective November 1, 2004, the difference in the rates that insurance companies are charging male and female drivers is becoming less significant, perhaps in part due to the claim experience, but also because of the elimination of age and marital status. The availability of insurance to male drivers should not be affected by the elimination of gender because underwriting regulations have been enacted in Nova Scotia to prevent insurance companies from denying insurance on the basis of age, marital status, or gender. There would be costs to insurance companies to convert their rating plans to accommodate the elimination of gender.

The Board recommends the elimination of gender as a factor in rating automobile insurance in Nova Scotia.



## Introduction

In accordance with Section 4 of the *Nova Scotia Insurance Review Board Regulations*, the Board is required to conduct an examination into the use of gender as a risk classification factor in rating automobile insurance and report the results of its examination to the Governor in Council on or before the first day of November 2004. To carry out its mandate, the Board retained Mercer Oliver Wyman Actuarial Consulting, Ltd. (Mercer) for actuarial consulting and other advice related to this study.

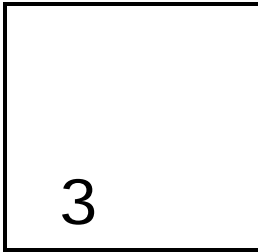
The Board conducted public hearings in nine centres throughout the province to determine whether Nova Scotians wished to have gender remain a factor in rating automobile insurance. Opinions were received from insurance companies, brokers, political parties, interest groups and members of the public.

The Board sent a questionnaire to leading insurance companies operating in Nova Scotia to solicit additional comments, opinions, and information on the matter. It also reviewed literature from other jurisdictions in Canada, the United States, Europe, and elsewhere.

This report begins with a general discussion of the issues with respect to the use of gender that affect the availability and price of automobile insurance in Nova Scotia. Section 4 provides statistical, philosophical, and legal arguments for, and against, the use of gender in automobile insurance rating. The comments the Board received from the public and the insurance industry are presented in Section 5, and this is followed by an examination into the implications of eliminating or retaining the use of gender as a rating criteria. The

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report concludes with the Board's recommendations to the Government. Also included in this report is a bibliography of significant and relevant academic and actuarial literature on this topic (attached as Exhibit 1) and the questionnaire that was sent to leading insurance companies (Exhibit 2). In this report, references are made to the bibliography by numbers appearing in brackets [ ].



## General Discussion

The use of gender in automobile ratemaking has been a controversial subject in North America for the past several decades. The debate has revolved around whether the use of gender results in rates that are “fair.” In Nova Scotia, a “fair” rate should be construed as one that is not “excessive, inadequate, unfairly discriminatory or otherwise unreasonable.” (Part VI, Section 157 (2), Insurance Act, R.S.c.231)

### Situation Prior to November 1, 2004

Prior to November 1, 2004, most, if not all, insurance companies writing private passenger automobile insurance in Nova Scotia used gender as a rating variable in determining the private passenger automobile insurance premium to be charged for third party liability and collision coverages for drivers under age 25. (Principal drivers under age 25 fell into one of eight risk classifications depending upon their marital status, age, and gender. Occasional drivers fell into one of two classes depending upon their gender.)

For those coverages and drivers where gender was a rating factor, the rates for males were higher than the rates for females. According to the recent Insurance Bureau of Canada (IBC) Automobile Statistical Plan (ASP) statistics for the Atlantic Region, the third party liability premium for a young male driver was, on average, about 62% higher than the average third party liability premium for a young female driver.



## Situation Beginning November 1, 2004

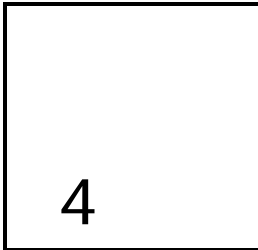
Under the *Automobile Insurance Prohibited Risk-Classification Factors Regulations*, effective November 1, 2004, insurance companies are no longer permitted to use age and marital status as automobile insurance rating factors. As a result, the manner in which drivers and automobiles are rated has changed. The risk classification systems and rates that insurance companies use beginning November 1, 2004 are subject to Board approval. Based on a preliminary review of the rate applications that have been submitted to the Board, it appears that the manner of rating male and female drivers will change, and will vary from company to company.

For example, one company is proposing to charge higher third party and collision coverage rates for male principal drivers than for female principal drivers, where the rate difference varies depending upon the number of years the driver has been licensed; however, this company is not proposing to rate male and female occasional drivers differently.

Another company is also proposing to charge higher rates for male principal drivers than for female principal drivers, where the rate difference varies depending upon the number of years the driver has been licensed; however, it is proposing to do so for all coverages, not just third party liability and collision.

Yet another company is proposing to charge, for all coverages, different rates for male and female principal drivers depending upon the number of years the driver has been licensed – including drivers that have been licensed more than 10 years; however, for those drivers that have been licensed between 31 and 55 years, it is proposing to charge higher rates for female principal drivers than for male principal drivers.

The elimination of age and marital status as rating factors is expected to cause some dislocation of premium that will vary from company to company. The implications of the elimination of these rating factors on the use of gender are discussed later in this report.



## The Arguments For and Against the Use of Gender

### Statistics

The argument for explicitly considering gender in automobile insurance rating contends that statistics demonstrate that there is a significant difference in automobile accident insurance claim experience between male and female drivers. The difference is primarily attributed to the claim frequency, i.e., the likelihood of getting involved in an automobile accident [16]. Advocates of this position contend that this data is statistically significant and clearly shows the predictive nature of gender as respects automobile insurance costs.

If this position is accepted, then, in accordance with the Casualty Actuarial Society Ratemaking Principles, the consideration of gender should result in males and females paying premiums that are proportional to the degree of risk that they, respectively, represent to insurance companies.

“Ratemaking should provide for the costs of an individual risk transfer so that equity among insureds is maintained. A rate is reasonable and not excessive, inadequate, or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer.” [7]

Data collected by the IBC, the Insurance Services Office in the U.S. and all major carriers as filed with various jurisdictions appears to support this contention and the use of gender

as a rating factor. In particular, the accident year data published in the Automobile Insurance Exhibits (AIX) by the IBC for the Atlantic Region shows the following insurance claim statistics for the third party liability coverage and the collision coverage for the 10-year period spanning 1993 – 2002.

Table A

| Average Claim Frequency Rates<br>(Number of Claims per 100 Cars Insured)<br>Over the Period 1993 - 2002<br>For the Atlantic Region<br>Third Party Liability Coverage |                |              |
|--|----------------|--------------|
|  | <u>Females</u> | <u>Males</u> |
| Under 6 Years Licensed   | 5.7            | 7.0          |
| 6 or More Years Licensed   | 2.9            | 3.1          |
| Total  | 3.1            | 3.3          |

Table B

| Average Claim Severity<br>(Average Cost per Claim)<br>Over the Period 1993 - 2002<br>For the Atlantic Region<br>Third Party Liability Coverage |                |              |
|--|----------------|--------------|
|  | <u>Females</u> | <u>Males</u> |
| Under 6 Years Licensed   | \$ 13,111      | \$ 13,267    |
| 6 or More Years Licensed   | \$ 11,758      | \$ 11,639    |
| Total  | \$ 11,857      | \$ 11,801    |

As evidenced by the above tables, for third party liability coverage, there is a distinct difference in claim frequency experience (the incidence rate of claims) between male and female drivers that have been licensed less than six years. But there is little difference in claim severity, or the average cost per claim. In the case of drivers that have been licensed for six or more years, the difference in claim frequency between male and female drivers is much smaller, and there is little difference in claim severity.

Table C

| Average Claim Frequency Rates<br>(Number of Claims per 100 Cars Insured)<br>Over the Period 1993 – 2002<br>For the Atlantic Region<br>Collision Coverage |                |              |
|--|----------------|--------------|
|  | <u>Females</u> | <u>Males</u> |
| Under 6 Years Licensed   | 6.8            | 7.4          |
| 6 or More Years Licensed   | 4.1            | 4.0          |
| Total  | 4.2            | 4.1          |

Table D

| Average Claim Severity<br>(Average Cost per Claim)<br>Over the Period 1993 – 2002<br>For the Atlantic Region<br>Collision Coverage |                |              |
|--|----------------|--------------|
|  | <u>Females</u> | <u>Males</u> |
| Under 6 Years Licensed   | \$ 3,562       | \$ 4,444     |
| 6 or More Years Licensed   | \$ 3,037       | \$ 3,260     |
| Total  | \$ 3,066       | \$ 3,305     |

The collision coverage claim statistics reveal differences in both claim frequency and claim severity between male and female drivers that have been licensed for less than six years. And, as is the case for the third party liability coverage, there is relatively little difference in the claim frequency rate between male and female drivers that have been licensed six or more years. We note that the higher claim severity for male drivers that have been licensed for six or more years may be a reflection of the types of cars driven by males (i.e., more expensive to repair or replace) as compared to those driven by females.

Opponents of the use of gender argue that insurance statistics, such as those displayed above, mask what they believe to be the factors that cause the differences in insurance claim statistics between male and female drivers; some suggest that perhaps mileage driven would be a more appropriate factor. Opponents contend that at every age in their driving lifetime, men as a class drive more miles and have more accidents as women. “This fact consistently demonstrates on a large scale that accidents are proportional to

mileage and that mileage is both the objective measure of a car's exposure to risk of accidents and the objective measure of the cost of providing insurance protection for the car's owner and users." [6] Opponents further argue that if the IBC were to collect other data, such as miles driven, and it was sufficiently detailed and accurate, that data would show gender is an inappropriate rating factor.

Insurance companies argue :

- (a) while mileage driven is a measure of exposure to automobile accidents, it is not practical to collect accurate, detailed information on mileage driven;
- (b) the exposure related to mileage driven is not constant across all profile groups (for example, the exposure related to driving non-stop for 50 kilometres on a four-lane highway with no traffic and within the speed limit is not the same as the exposure related to 10 five kilometre trips to a shopping mall on a crowded single lane highway at dusk); and
- (c) there have been studies suggesting that even after considering differences in mileage driven, the manner in which the vehicle is used, the type of vehicle driven, and accident rates, there remain differences in the insurance claim statistics between male and female drivers [20].

Insurance companies point out that it is for these reasons that annual mileage driven is reflected to a limited extent in the rates that they charge (e.g., over or under 16,000 kilometers per year), and that the use of the vehicle, the accident record of the driver, the type of vehicle driven, the gender of the driver, and, up until November 1, 2004, the age and marital status of the driver, are also reflected in the rates they charge.

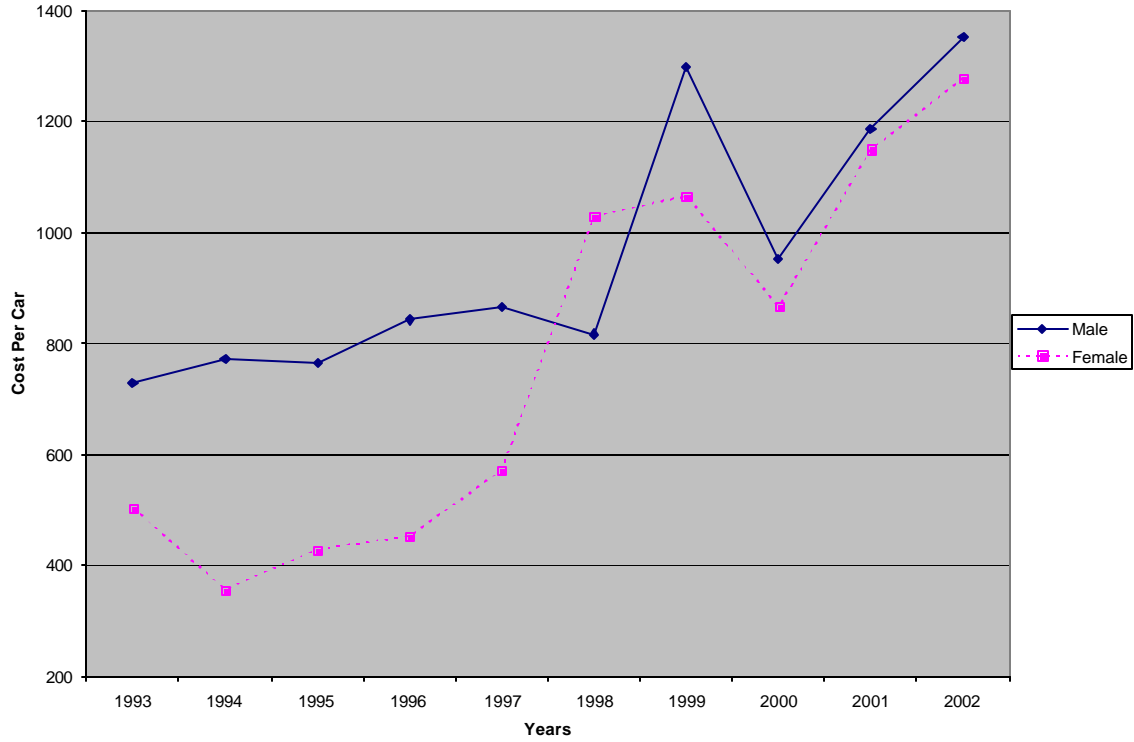
Opponents counter by saying it is possible to collect accurate information on mileage driven as it is already collected for vehicle sales, during annual vehicle inspections, and vehicle servicing; and there are private companies that could perform odometer audits. They further argue that factors such as driving experience, in particular, could be given more weight in the rating process in lieu of the consideration of gender.

On the issue of collecting more accurate and detailed data about the driving habits of drivers, according to a recent article in the Wall Street Journal, “many cars already have rudimentary devices that gather some crash information...and some auto makers, including General Motors Corp., have gone a step further, putting in sophisticated electronic contraptions to track data such as car speed and seat-belt usage in crashes where the air bag has been deployed.” The article also states that in August of this year, The Progressive Corporation began a pilot program in Minnesota to track how often, how far, and how fast people drive by providing volunteer drivers with an electronic device that is installed in their vehicles. And the U.S. National Transportation Safety Board has recommended the placing of black boxes into new cars to gather data at the time of an automobile crash to improve car and driver safety. But the usage of such electronic devices to collect data raises privacy issues that will need to be addressed. [9]

We conclude this discussion of statistics with a presentation of male and female driver claims experience by year to see if the difference in claim experience is narrowing over time. The following tables graphically depict how the differences in claim cost per car insured (the combination of frequency rates and average cost per claim) between male and female drivers have changed over the ten-year period 1993 through 2002 in the Atlantic Region.

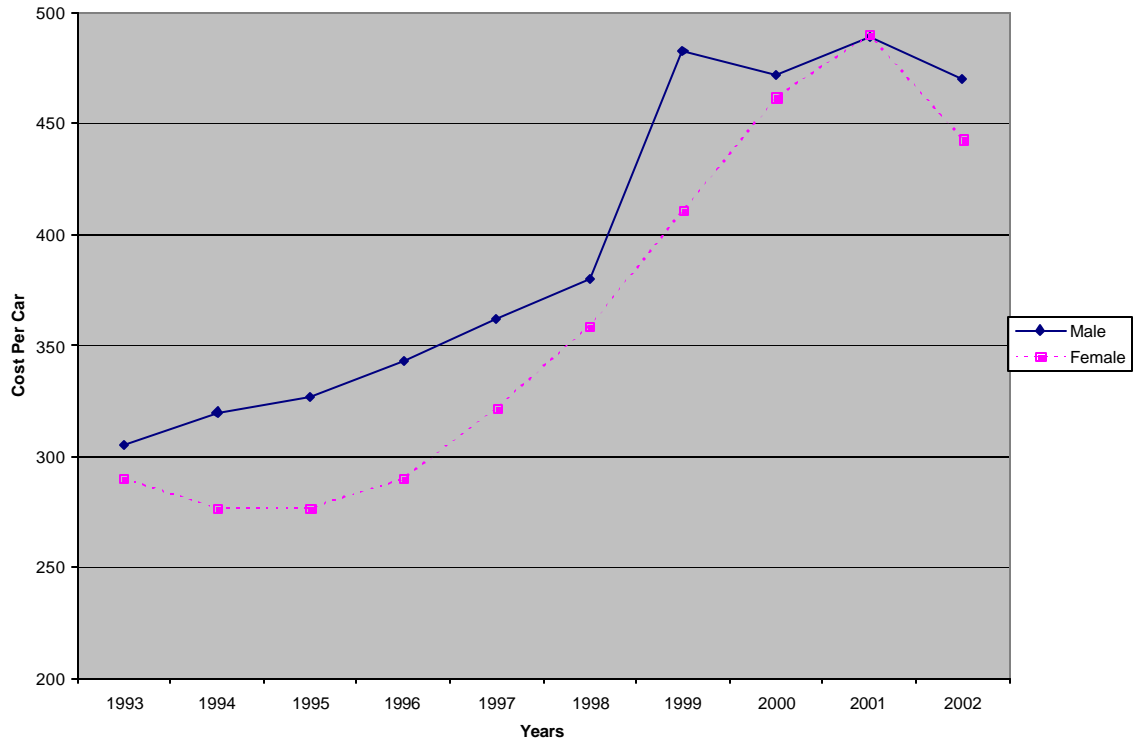
Average Cost Per Car Insured  
Over the Period 1993 – 2002  
For the Atlantic Region  
Third Party Liability Coverage  
Drivers Licensed Less Than 6 Years

Table E



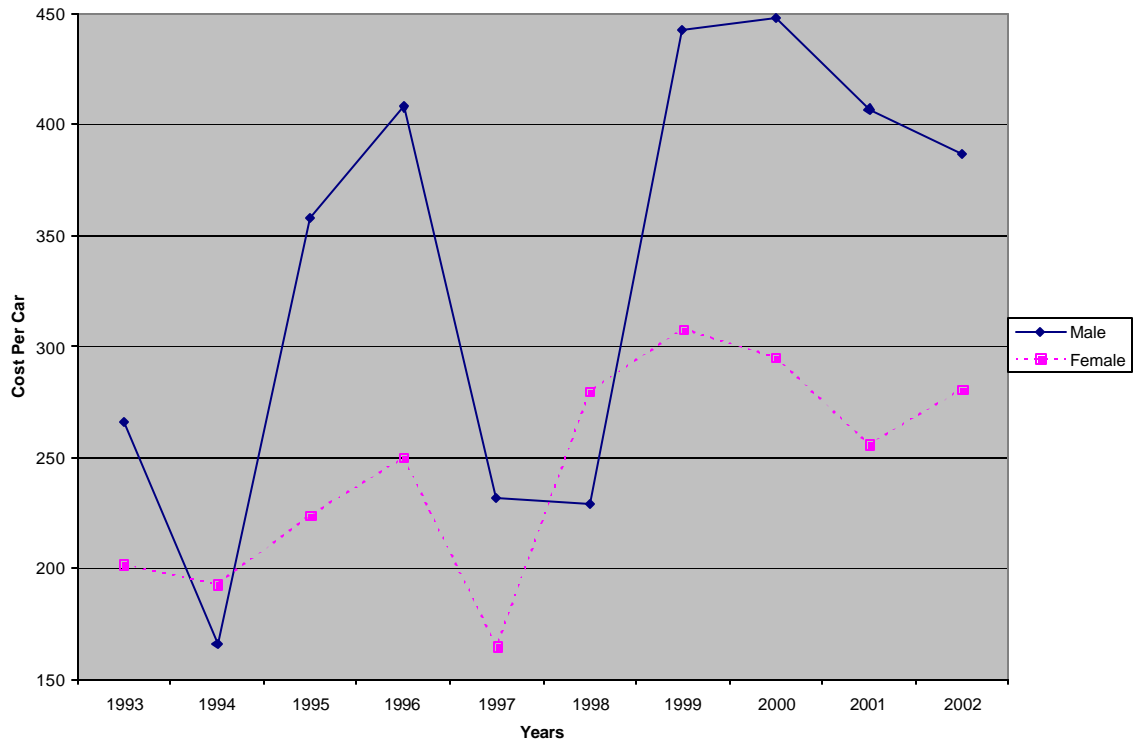
Average Cost Per Car Insured  
Over the Period 1993 – 2002  
For the Atlantic Region  
Third Party Liability Coverage  
All Licensed Drivers

Table F





Average Cost Per Car Insured  
(Average Cost per Claim)  
Over the Period 1993 – 2002  
For the Atlantic Region  
Collision  
Drivers Licensed Less Than 6 Years Table G

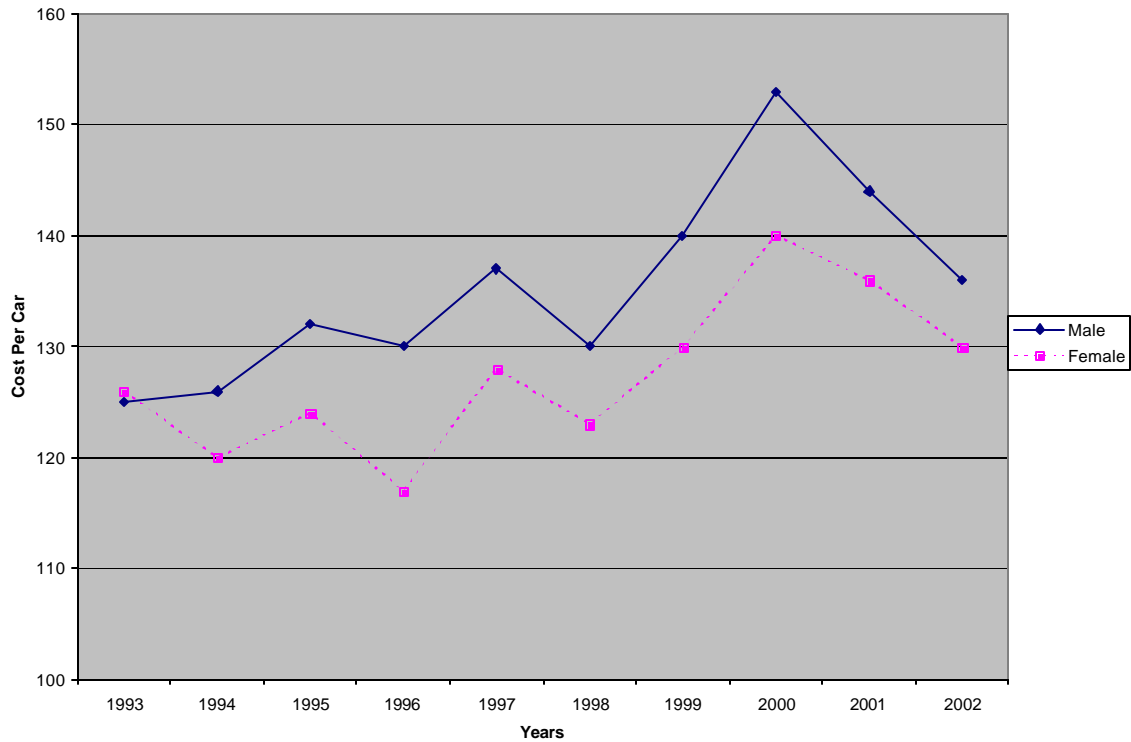


Average Cost Per Car Insured  
(Average Cost per Claim)  
Over the Period 1993 – 2002  
For the Atlantic Region

Collision

All Licensed Drivers

Table H



The above tables reveal that:

- For third party liability coverage, differences in the average cost per car insured have narrowed for drivers licensed less than six years, as well as for all drivers.
- For collision coverage, differences between male and female drivers in the average cost per car insured have remained fairly consistent over the ten-year period for drivers licensed less than six years (subject to year-to-year fluctuations) and all drivers.

## Social Policy

Those who oppose the use of gender as a rating factor argue that doing so, is not fair or reasonable from a social policy perspective.

Many of the literature references included in Exhibit 1 refer to social policy considerations:

1. *it is a form of gender discrimination [2,3,5,22,32]*
2. *there is no causal link between gender and accidents [6,10]*
3. *insurers and insureds will both benefit by eliminating use of gender in rating [14,31]*
4. *use of gender is contrary to public policy [11,14]*
5. *there are alternate factors that are more clearly associated with risk [5,6,15,18,20,27,31]*
6. *gender is not a factor a person can control, and there is therefore, no incentive for loss control [5,31]*
7. *the insurance industry is inconsistent in its use of gender as rating [5,6,25]*

### *1992 Supreme Court Decision*

*(Zurich Insurance Company of Canada v. Ontario Human Rights Commission [1992] 2 S.C.R. 321)*

In 1983, the Zurich Insurance Company of Canada was challenged by the Ontario Human Rights Commission over discrimination in rating automobile insurance. The case went to the Supreme Court of Canada in 1992, and although the Court allowed Zurich to continue to use age, sex and marital status as rating factors, the industry was encouraged to seek less discriminatory methods. It was stated, “to allow ‘statistically supportable’ discrimination would undermine the intent of human rights legislation which attempts to protect individuals from collective fault.”

The *Human Rights Act of Nova Scotia, R. S., c214*, subsection 5(1) states that discrimination on the basis of age or sex is prohibited. It is permitted, however, under paragraph 6(f) if it is based upon a bona fide qualification. Such qualification must be reasonable, causal, and there must be no practical alternative.

We present certain of the social policy issue considerations from this Supreme Court decision that we suggest are relevant to the current discussion on the use of gender. The Supreme Court allowed the continued use of gender on the basis that no practical alternative was available. But in issuing its decision, the Supreme Court commented on the issue of statistical support and the need to provide the industry with time to collect alternative data. The dissenting opinion commented on the need for a causal link.

### *No Practical Alternative to Gender*

According to the Supreme Court, the test for the use of gender must be reasonable and bona fide; that is a discriminatory practice is reasonable if there is no practical alternative.

“Section 21 provides a defense to a *prima facie* discriminatory practice if reasonable and *bona fide* grounds for that practice exist. A discriminatory practice is "reasonable" within the meaning of s. 21 of the Code (a) if it is based on a sound and accepted insurance practice, and (b) if there is no practical alternative. A practice is sound if it is desirable to adopt it for the purpose of achieving the legitimate business objective of charging premiums that are commensurate with risk. The availability of a practical alternative is a question of fact to be determined having regard to all of the facts of the case. The practice, to meet the test of "*bona fides*", must be adopted honestly, in the interests of sound and accepted business practice and not for the purpose of defeating the rights protected under the Code.”

### *Statistics, Alone, are not Sufficient*

“Human rights values cannot be over-ridden by business expediency alone. To allow "statistically supportable" discrimination would undermine the intent of human rights legislation which attempts to protect individuals from collective fault. It would also perpetuate traditional stereotypes with all of their invidious prejudices. Whether there was an alternative, which in all the circumstances was practicable, must be considered.”

### *Time to Collect Statistics*

“The insurance industry must be allowed time to determine whether it can restructure its classification system in a manner that will eliminate discrimination based on enumerated group characteristics and still reflect the disparate risks of different classes of drivers. While the situation as it existed in 1983 did not provide a reasonable alternative to setting premiums based on age, sex and marital status, the situation today and in the future may be quite different. The insurance industry must strive to avoid setting premiums based on enumerated grounds.”

### *Causal Link with Gender*

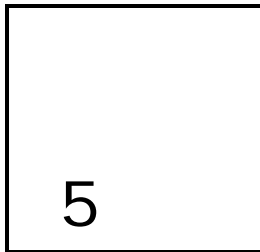
To be reasonable and bona fide, the use of gender must have a causality link and be more than traditional or accepted insurance practice. While arguments have been presented on the behavior of young males affecting their claims experience, it has yet to be definitively argued that the reason is because the individual is male rather than female. In Zurich (supra) the Supreme Court had this to say:

“The test for "reasonable and *bona fide* grounds" should be based on the test established for employment situations. The terms "reasonable and *bona fide*" are stronger than the single term "*bona fide*." The protection of individual rights is equally important in employment and insurance contexts.

A two-pronged test with subjective and objective components should be adopted. The subjective component requires that a distinction in an insurance contract based on age, sex, marital status, family status or handicap be imposed honestly, in good faith, and in the sincerely held belief that such distinction accurately reflects the cost of the risk insured, rather than for ulterior or extraneous reasons aimed at objectives which could defeat the purpose of the Code. The objective component requires that the distinction be reasonably necessary to assure the proper allocation of risk among insured groups. Any rational connection must causally link distinction and the insured risk

and must be more than a statistical correlation or a simple reliance on traditional or accepted insurance practices which may be nonetheless needlessly discriminatory. The distinction must also be a reasonable means of identifying and classifying similar risks.”

The Board has found little evidence to suggest the insurance industry has acted upon the recommendations offered by the Supreme Court in Zurich (*supra*). It seems evident that, left to itself, the industry is reluctant to initiate change to the way it rates automobile insurance products. The Government of Nova Scotia decided to impose change on the industry by passing legislation that will eliminate the use of age and marital status as rating factors in automobile insurance after November 1, 2004. Furthermore, the Government ordered this study into the use of gender as a rating criterion in automobile insurance to be completed on or before November 1, 2004.



## Comments from the Public and Insurance Companies

### What the Public Said

Judging by the small number of written and oral submissions to the Board, there appears to be a general lack of interest on the part of the public with respect to the particular issue of gender as a rating factor in automobile insurance.

The high cost of insurance for young males was a concern of most of the presenters that spoke on this issue. This group favors the elimination of the use of gender as a rating factor in automobile insurance. A minority of the presenters were opposed, undecided, or noncommittal.

### General Comments

- Young males with good driving records are being discriminated against.
- Young males should be given the benefit of the doubt until the driving record is established. This sentiment was expressed more than once.
- Some young males are more careful drivers than some young females.
- The high cost of insurance makes it impossible for young males to own a car.

- The high cost of insurance for young drivers affects their employment prospects. This is a particular concern to those who live in rural areas of the province that are not serviced by public transit.
- The high cost of insurance is encouraging many drivers (as much as 30%) to drive without insurance, particularly in the rural areas where public transportation is limited. This was mentioned more than once.
- Misrepresentation of the permanent address of young drivers is a common practice. This allows them access to the vehicle (as an occasional driver of the car) without having to pay the higher premium.
- Girls are as bad drivers as are boys. Gender is no longer an issue.
- Not all young people should have to pay for the actions of a few.

## What the Insurance Companies and Brokers Said

A set of six questions concerning the use of gender in automobile insurance rating, as set out in Exhibit 2, was sent to major writers of automobile insurance in the province representing 75% of the automobile insurance market. All companies responded. The IBC also presented a submission on this issue.

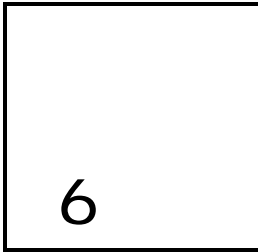
The responses from the companies and IBC were similar. A summary of their comments follows.

- Insurers believe that rating should be risk-based so that policyholders pay a premium commensurate to the risk they impose.
- Although not as important a risk factor as age, gender is a significant automobile insurance risk factor, and, therefore, should be retained.



- Insurance claim statistics, as captured by insurers and reported to the IBC, show a clear difference in automobile insurance claim experience between males (worse) and females (better). This distinction exists in Nova Scotia claim experience, Atlantic Provinces claim experience, and Canada-wide claim experience. Therefore, consistent with the position that rating should be risk-based, males should pay a higher premium than females.
- Insurers acknowledge that there are political and public interest issues that arise from using gender to set insurance prices. However, they argue that any change to eliminate gender as a rating variable will exacerbate the dislocation resulting from the elimination of age and marital status as rating factors. The rates for inexperienced female drivers would increase and the rates for inexperienced male drivers would decrease. In addition, any beneficial effects on overall road safety of higher insurance costs for young male drivers will be lost.
- Eliminating the use of gender would also cause insurers to incur additional expenses to re-configure their rating and statistical systems, a cost that would be passed on to the consumers.
- Failing to reflect the statistically significant reduced cost of females would be discriminating against females.
- In response to the Supreme Court of Canada's decision in *Zurich v Ontario Human Rights Commission (supra)* indicating that the insurance industry should seek an alternative to setting premiums based on gender and restructure its classification system accordingly, a few companies reported that they have monitored the automobile claim experience and even after applying sophisticated statistical tests, the data continues to show higher claim costs for males than females. Insurers acknowledge that some studies hypothesize that gender operates as a proxy for mileage driven, driving at high speeds, driving at night, driving under the influence of alcohol, and the propensity not to use seat belts. But they say there is no practical or reliable way to objectively measure these behavior characteristics; there is no practical and reliable alternative to gender.

- Automobile insurance is not the only industry that charges prices based on gender. For example, life insurance premiums vary by gender. Under the Nova Scotia *Human Rights Act (supra)*, subsection 5 (1), discrimination against an individual or class of individuals, in the provision of or access to services or facilities, on account of, among other things, age or sex, is prohibited. But paragraph 6(f) provides that such discrimination is not prohibited if it is based on a bona fide qualification.
- The companies point out other provinces such as New Brunswick, Ontario, and Quebec continue to use gender as a rating variable in automobile insurance.
- Reference was made to comments made in 1998 by an Ontario Supreme Court Judge: “Unlike age, gender in its own right is not predictive; however, eliminating gender as a rating factor and substituting kilometers driven will expose the system to increased verification costs which will be passed on to the consumer in the form of increased premiums; there is also a question as to the reliability of the substitute.”
- It is not likely that one or more companies will voluntarily eliminate the use of gender because by doing so they will effectively be priced out of the market for female drivers and they will not charge enough for male drivers.



## Implications of Eliminating Gender Rating

There are differences of opinion on the implications of eliminating gender rating in Nova Scotia. These differing views are presented below.

**View:** The elimination of gender will unfairly decrease premiums for inexperienced males and increase premiums for inexperienced females. This may be seen as rewarding high risk drivers and penalizing good risk drivers.

**Counter View:** Those who have accidents or convictions, both male and female, will pay higher premiums. Those who remain free of accidents or convictions will enjoy lower premiums.

**View:** The elimination of gender could cause the rates for all insureds to increase as inexperienced males, not being charged their actuarially fair premium, would be more apt to drive (or their parents would be more inclined to let them drive). This premium increase would be due to the increased number of accidents with more inexperienced male drivers on the road.

**Counter View:** The elimination of gender rating should not affect the driving behaviour of male drivers.

View: The elimination of gender could create automobile insurance availability problems. If insurers are forced to price inexperienced males and females the same, the inexperienced males that companies believe to be under-priced could find it increasingly difficult to find insurance. This could create an increase of risks in the Facility Association.

View: The premiums for inexperienced female drivers would likely increase.

Counter View: Underwriting Regulations have been enacted in Nova Scotia to prevent insurance companies from denying insurance on the basis of age, marital status, or gender.

Counter View: The premiums for inexperienced male drivers would decrease. As a result of the reduction in premiums for inexperienced male drivers, inexperienced males will find insurance to be more affordable.

View: Studies have not been conclusive as to the appropriateness and usefulness of vehicle mileage as a major rating criterion in lieu of gender:

“Other variables such as years of driving or annual driving distance have also been put forward as a suitable alternative to age.

However, actuarial data to date has not shown annual driving distance to be a useful indicator of risk.” [34]

“Mileage cannot substitute, however, for gender as a rating variable on determining fair insurance prices.” [3]

Counter View: The elimination of gender rating should lead to greater consideration being given to mileage driven, which is a major reason for the difference in driving experience between males and females.

“Mileage is certainly not the whole story ... but the evidence supports the conclusion that mileage is a very significant cause of variation among individual risks.” [2]

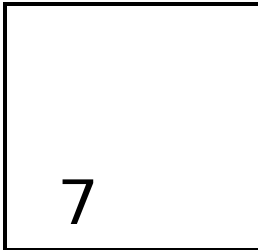
As respects this last view, it is not clear whether the insurers in Nova Scotia would expand the use of mileage driven as a rating factor if gender is eliminated. First, as indicated above, mileage is not universally accepted as an appropriate substitute for gender. Second, detailed mileage data is not currently captured in the ASP, so, at least in the short term it may be difficult to develop accurate rating factors based on mileage. Third, the use of mileage driven, and ensuring that the information is accurate, would likely increase the expense of providing insurance, as it would require insurance companies to obtain and verify odometer readings (odometer audits), probably at the beginning and end of each policy term, which would add to the cost of obtaining and renewing policies.

The actuarial standards of practice for risk classification identify four basic principles that should be present in any sound risk classification system. [1]

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1. A rate is an estimate of the expected value of future costs.
2. A rate provides for all costs associated with the transfer of risk.
3. A rate provides for the costs associated with an individual risk transfer.
4. The system should be practical, cost-effective, and responsive to change.

Some would argue that mileage driven fails to meet this last principle.



## Implications of Retaining Gender Rating

As has been discussed, prior to November 1, 2004, gender was only used as a rating factor in Nova Scotia for drivers under the age of 25, and only for the third party liability and collision coverages. However, this manner of considering gender will change beginning November 1, 2004 because as of this date age and marital status will no longer be permitted as rating factors. So, for gender to be retained as a rating factor, insurance companies will either have to:

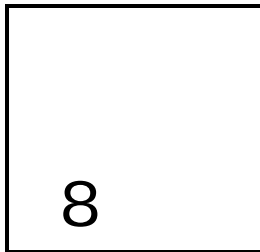
- rate all males and females differently (regardless of age or marital status), or
- introduce some surrogate for age (such as years licensed) and rate certain categories of males and females differently depending upon the surrogate that is implemented (for example, using gender as a rating factor only for inexperienced drivers), or
- use gender as a rating factor only in the case of the occasional driver classification.

Under each of these approaches, certain drivers over the age of 25 will be rated based on their gender, and this represents a change from how they had been rated. As such, concerns may be raised. Those over age 25 that would be rated differently may feel the change in rating practice is not justified or socially acceptable, as they were not rated based on their gender in the past. Based on a preliminary review of the rate filing

applications that have been submitted to the Board, it appears that most companies are proposing the second approach listed above, although, as discussed earlier in this report, companies are doing so in different ways.

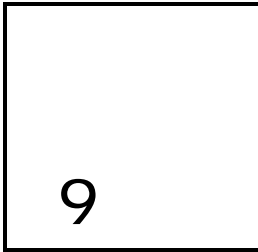
The Board has found nothing in the published material to indicate that continued use of gender would affect the availability of automobile insurance. However, continued use of gender in rating could contribute to an affordability issue for young males, especially those impacted adversely by other rating factors (territory and type of vehicle for instance), as rates continue to rise due to increased costs (inflation).





## Comparison to Other Canadian Provinces

In the provinces of British Columbia, Manitoba, and Saskatchewan, where automobile insurance is offered primarily through government providers, age, gender and marital status are not used as rating factors for automobile insurance. In the province of Alberta, where automobile reforms are currently under review and a maximum benchmark set of rates was introduced effective October 1, 2004, age, gender and marital status will not be used as rating factors in determining the new benchmark rates. Gender continues to be used as a rating factor in Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador.



## Concluding Comments and Recommendations

It would appear that the Government has three options with respect to the use of gender in automobile insurance rating:

1. It can do nothing, in which case gender will be retained as a rating factor.
2. It can legislate an end to the use of gender as a rating factor.
3. It can allow the continued use of gender as a rating factor, but require companies to gradually phase out the rate distinction between male and female drivers.

In the course of this study the Board has:

- reviewed the methods used to rate automobile insurance in Nova Scotia and elsewhere
- reviewed various studies on the use of gender as a rating criteria
- conducted public hearings in nine Nova Scotia centres
- studied written submissions from interested persons and organizations.

## Conclusions

1. The Board has concluded that the majority of Nova Scotians who made representation to the Board believe it is unfair to continue to use gender as a rating factor in automobile insurance. However, we also recognize that the public response to this issue was limited.
2. The Board has concluded that industry is reluctant to eliminate the use of gender as a rating factor in automobile insurance.
3. Since the Nova Scotia Government decided to eliminate age and marital status as rating factors, beginning November 1, 2004, the Board finds that the continued use of gender as a rating factor is now of less significance. Initial reviews of proposed rates, effective November 1, 2004, indicate the distinction between male and female drivers will apply to a minority of the drivers in Nova Scotia, and that differences in the premium charged male and female drivers is narrowing.
4. The statistics presented in Section 4 of this report show that in the Atlantic Region any differences in the overall claim experience between male and female drivers is confined to the inexperienced drivers, and the differences generally have narrowed over time. It is noteworthy, however, that the majority of inexperienced drivers remain claims-free. In an average year between 1993 and 2002, approximately 93% of the vehicles operated by inexperienced male drivers in the Atlantic Region have been claims-free compared to 94.3% of the vehicles operated by inexperienced female drivers. The claims experience of males and females within this majority group of inexperienced drivers is comparable within 1.3 percentage points. The Board finds this is not a sufficient difference to justify gender based rate differentials.

## Recommendation

The Board recommends the elimination of gender as a factor in rating automobile insurance in Nova Scotia.

## GENDER IN AUTOMOBILE RATING

### Bibliography

This bibliography is not intended to be exhaustive, but it is intended to present a cross section of the views that have been expressed by academics, actuaries, and special interest groups on the issue. The reader will note that many of the papers are not recent (dates for all papers were not available). The topic of gender in automobile insurance rating has not generated significant discussion of late. Internet locations for articles are provided when possible. The referenced papers can be provided if so requested.

1. **American Academy of Actuaries, “Actuarial Standard of Practice No. 12,” 1989; <http://www.casact.org/standards/asop/asopno12.pdf>**

#### Abstract

This outlines the guidelines for actuaries in designing, using, and updating risk classification systems.

2. **Bailey, Robert A, and Simon, LeRoy J., “Two Studies in Automobile Insurance Ratemaking,” *Casualty Actuarial Proceedings*, Vol. XLVII, Part I, No. 87, May, 1960; <http://www.casact.org/pubs/proceed/proceed60/60001.pdf>**

#### Abstract

The first study “uses the Canadian experience for private passenger automobiles to show (1) that merit rating is almost as effective as the class plan in separating the better risks from the poorer risks, (2) that both merit rating and class rating leave unanalyzed a considerable amount of variation among risks and (3) that certain available evidence supports the conclusion that annual mileage, which has long been felt to be an important measure of hazard, is a very significant cause of his unanalyzed variation among risks.”

The second study “presents a method for obtaining relativities among groups on which a multiple classification system has been imposed,” i.e., how rating factors might be derived.

- 3. Brown, Robert L., “Recent Canadian Human Rights Decisions Having an Impact on Gender-Based Risk Classification Systems,” *Journal of Actuarial Practice*, Volume 3, Number 1, 1995**

Abstract

“With the passage of the Canadian Charter of Rights and Freedoms on April 17, 1982, all previous court precedents using gender in risk classification systems became obsolete. Three cases involving issues of discrimination in the use of age and gender now clarify the position of the Canadian judiciary. Based on the decisions in these three cases, this paper presents arguments that can be used in any jurisdiction to defend successfully the use of gender in a property/casualty risk classification system.”

- 4. Bruce, Christopher J., PhD, “How Are Automobile Insurance Premiums Determined?,” *ECONOMICA LTD.*, Autumn 2003 Vol. 8, No. 3; <http://www.economica.ca/ew83p1.htm>**

Abstract

“... there is often confusion in the media about the process by which premiums are determined. The purpose of this article is to provide a brief introduction to that process. Three topics will be discussed: actuarial rating, rating classes, and experience rating.”

- 5. Butler, Patrick, “Automobile Insurance Pricing: Operating Cost versus Ownership Cost; the Implications for Women,” *National Organization for Women*; <http://www.fhwa.dot.gov/ohim/womens/chap39.pdf>**

Abstract

“This paper assessed the ability of automobile insurance prices to distinguish the 2:1 ratio of men’s to women’s annual mileage, which is linked to a similar ratio of accident involvement per year. Review of current price classed by driver sex and age, by future mileage, and by past driver record reveals severe limitations to their capacity to assess women’s lower mileage exposure to risk of accidents. Accidents are modeled as a process of random sampling of vehicle miles traveled (VMT) by cars in an insurance class. This analogy underscores 1) the impossibility of pricing by individual accident record and 2) the paramount importance of odometer-measured vehicle miles of on-the-road exposures for assessing individual accident risk in money terms.

The need for risk classification as the essential complement to exposure is shown by considering how a single insurance surcharge on gasoline (“pay at the pump” insurance) as an exposure measure would perversely affect incentives for risk control. Current risk classification is profoundly compromised because individual exposure is not measured. An efficient per-mile premium system combining exposure measurement and risk classification is described. Current flat premiums are compared to premiums that would increase in direct proportion to miles of driving exposure. This comparison shows how individuals, and also women and men as groups, would be affected by changing insurance from a fixed cost of car ownership to a per-mile operating cost of car use.”

- 6. Butler, Patrick; Butler, Twiss; and Williams, Laurie L., “Sex-Divided Mileage, Accident, And Insurance Cost Data Show That Auto Insurers Overcharge Most Women,” *Journal of Insurance Regulation*, Volume 6, March and June, 1988**

#### Abstract

“The paper, which is presented in two parts, examines the effect of current pricing – 80 per cent unisex – on insurance cost to women by using the same accident, mileage, and price data auto insurers cite to defend sex-rating. The authors distinguish between classifications and measurement of on-the-road exposure, and test the response of prices to the known 2:1 ratio at all ages of men’s to women’s driving exposure and accident involvement. The authors maintain that fixed annual premiums

result in windfall profits, which prove prices are not responsive to mileage exposure. They present evidence that competition depresses men's prices below cost. The authors conclude that women are overcharged as a class; they examine the regulator's responsibility to prevent pricing that ignores significant cost differences and to prevent misrepresentation of such pricing to the public."

7. **Casualty Actuarial Society, "Statement of Principles Regarding Property and Casualty Insurance Ratemaking," 1988;**  
**<http://www.casact.org/standards/princip/sppcrate.pdf>**

Abstract

This statement identifies "and describes principles applicable to the determination and review of property and casualty rates."

8. **Comite Europeen Des Assurances, "Gender Equality in Insurance – Frequently Asked Questions (FAQs)," CEA Note of 19 January 2004;**  
**<http://www.cea.assur.org/cea/v1.1/posi/pdf/uk/position195.pdf>**

Abstract

"On 5 November 2003, the European Commission presented a draft directive on equal access to and supply of good and services ... aimed at banning the current practice ... of differentiating rates ... according to gender for insurance products."

The article presents the insurance industry responses to frequently asked questions surrounding the issues, including why European insurers are opposed to the initiative.

9. **Chu Dow, Kathy, "Auto Insurer Cuts Rates for 'Black Box' Testers, The Wall Street Journal, August 12, 2004**

Abstract

This article briefly discusses a pilot program being implemented by Progressive Corp. in Minnesota, where, for a discount of between 5% and 25%, the company is



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Scotia

installing electronic devices in the vehicles of volunteer drivers that will collect data on the how often, how far, and how fast people drive.

- 10. Cummins, J. David and Weiss, Mary A., “Regulation and the Automobile Insurance Crisis,” Regulation, The Cato Review of Business & Government; <http://www.cato.org/pubs/regulation/reg15n2c.html>**

Abstract

As the price of automobile insurance continues to escalate, insurance buyers have become increasingly dissatisfied. Consumers and consumer organizations in many states have targeted the auto insurance industry as the primary source of the auto insurance crisis. Insurers have been accused of creating the auto insurance crisis through inefficient management, anticompetitive practices, and lax claims settlement policies. This article examines the auto insurance problem with particular emphasis on the role of regulation as a potential solution. The article contends that insurers use gender rating as a proxy for mileage.

- 11. De Wit, G.W., and Van Eeghen, J, “Rate Making and Society’s Sense of Fairness,” ASTIN Bulletin, Vol. 14, No. 2; <http://www.casact.org/library/astin/vol14no2/151.pdf>**

Abstract

“Actuaries have always been in search of ways to determine premiums which match the risks insured as closely as possible. They do this by differentiating between them on the basis of observable risk factors ... Outsiders may not always be very positive about such a refined premium differentiation. The basis of insurance, they say, should be solidarity among insured; premium differentiation ultimately results in letting every individual pay his own claims, it is the end of insurance. Much confusion arises during discussion about this subject, especially between actuaries and non-actuaries. We will therefore first give a mathematical definition of solidarity ... followed by a brief description of certain trends in society which might bring insurers to deliberately drop certain risk factors from their tariffs in order to increase solidarity ... The consequences of doing so are examined and it is shown that increased solvency requirements will in the end prove to be ineffective. A possible solution is a voluntary transfer of premium between companies.”

- 12. Geitner, Paul, “European Parliament Backs End to Consideration of Gender in Setting Insurance Rates,” Associated Press, 30 March 2004; <http://www.sfgate.com/cgi-bin/article.cgi?f=/news/archive/2004/03/30/international11104EST0580.DTL>**

Abstract

This news article outlines the current EU attempt to outlaw use of gender in insurance rating.

- 13. Harleston, Jerome, Senior Attorney, “Automobile Insurance Rate Comparison,” OLR Research Report, 2002-R-0752, September 6, 2002; <http://www.cga.state.ct.us/2002/olrdata/ins/rpt/2002-R-0752.htm>**

Abstract

This article shows a very simplistic rate comparison of Connecticut automobile insurance rates for 22 year-old male and female drivers.

- 14. Hunstad, Lyn, “Measuring and Modifying the Effect of Auto Rating Factors,” Journal of Insurance Regulation, Volume 14, No. 2, Winter, 1995, pp159-187; <http://www.ohrc.on.ca/english/consultations/insurance-consultation-report.shtml>**

Abstract

“In October 1999, the Ontario Human Rights Commission released a Discussion Paper for public consultation entitled Human Rights Issues in Insurance. The objective of the consultation was to promote dialogue on human rights issues in insurance raised in the Paper as well as issues raised by industry, government and consumer representatives. Representatives of the auto insurance industry are of the view that age, sex and marital status continue to be *bona fide* and reasonable factors in assessing driver risk in accordance with the 1992 Supreme Court of Canada decision in *Zurich*. Although other variables, like personal driving records, years of driving and average loss history of vehicles by make and model, are also used, the industry's

review to date (confirmed in a June 2000 study) concludes that there are currently no suitable alternatives to replace age, sex and marital status. At the same time, there are other jurisdictions such as British Columbia and Massachusetts that do not rely on age, sex and marital status in risk assessment. The industry contends, however, that such public schemes have led to rate dislocation (higher costs not proportionate with risk for certain groups) and product availability problems.”

**15. Hunstad, Lyn, California Department of Insurance, December 1993**

Abstract

“This paper modifies an existing rating plan to eliminate the age, marital status, and gender rating factors. A substitute factor based on years licensed was developed to minimize premium dislocation. Significant premium changes were mostly confined to consumers under 25 years old. When just age and marital status were eliminated, 74% of consumers had new premiums within +/- 5% of their old premiums. Young marrieds experienced average increases of 8% to 12%. Young singles experienced average decreases of 5% to 6%. Removing gender tended to level premiums among the young but did not drastically change the overall results. Again, 74% of all consumers had premiums within +/- 5% of their old premiums. Young married experienced average increases of 11%. Young singles experienced average decreases of 3% to 9%.”

**16. Insurance Bureau of Canada, “Nova Scotia Regulation of Underwriting Criteria: A Response From the P&C Industry,” May, 2004.**

Abstract

This paper presents the Insurance Bureau of Canada’s opinion on the recent ban on the use of age as an underwriting variable in Nova Scotia. While not specifically targeted to gender issues, the paper does discuss “fairness” issues and the different perceptions of fairness. It also presents some estimates of the impact on rates should both age and gender be removed from the rating process.

**17. Insurance Information Institute, “Hot Topics and Insurance Issues, Rates and Regulation,” March 2004; <http://www.iii.org/media/hottopics/insurance/ratereg/>**

Abstract

This article covers topics of current interest in automobile and homeowners insurance and briefly summarizes the issues regarding use of age, gender, and territory in the rate setting process.

**18. Insurance Information Institute, “Hot Topics and Insurance Issues, Rates and Regulation,” April 2004;**

**<http://www.iii.org/media/hottopics/insurance/teendrivers>**

Abstract

This article states that NHTSA data shows that “girls between the ages of 16 and 19 are driving 70 percent more than 20 years ago.”

**19. Insurance Institute for Highway Safety (IIHS), “Fatality Facts: Gender, 2002”;**

**[http://www.hwysafety.org/safety%5Ffacts/fatality\\_facts/gender.htm](http://www.hwysafety.org/safety%5Ffacts/fatality_facts/gender.htm)**

Abstract

This website provides data on automobile deaths by gender based on analysis of data from the [U.S. Department of Transportation's](#) Fatality Analysis Reporting System.

**20. Insurance Institute for Highway Safety – Status Report, “Women Drivers aren’t riskier; they’re in more fatal crashes these days because they’re driving more,”**

**Volume 36, No. 10, November 15, 2001;**

**<http://www.hwysafety.org/srpdfs/sr3610.pdf>**

Abstract

Information from 1975 to 1998, based upon Canada’s Traffic Injury Research Foundation shows “fatal crash involvements are increasing among women ... accounted for by the fact that women are driving much more ...”

- 21. “Gender Rating Explored in Kentucky,” Insurance Journal, November 5, 2001;**  
<http://www.insurancejournal.com/magazines/southcentral/2001/11/05/features/18453.htm?print=1>

Abstract

This article outlines the impact of eliminating gender from automobile rating in Kentucky: “Youthful female drivers state-wide would pay 6.8 percent more ... to subsidize a 6.1 percent premium decrease given to your male drivers.”

- 22. Karlinski, Frank J. III, “Implications of the Mandatory Elimination of a Rating Variable,” Casualty Actuarial Society Discussion Paper Program, 1990, Volume 2;** <http://www.casact.org/pubs/dpp/dpp90/90dpp697.pdf>

Abstract

The amount of rate classification (rate dislocation) experienced by individual insureds when a rating variable is eliminated depends on the rate relativity associated with the factor and with its distribution. It may be possible to introduce a surrogate rating variable to replace the one eliminated which reduces the total rate dislocation in the system. A mathematical expression for rate dislocation can be used to determine rate relativities for the replacement variable that minimize rate dislocation. A very high correlation is necessary between the eliminated variable and its surrogate for the surrogate to be effective in reducing rate dislocation.

In private passenger automobile, mileage has been cited as a replacement variable for sex. When sex is eliminated alone or in conjunction with marital status and /or age, very little of the rate dislocation is eliminated by the introduction of mileage.

**23. Kim, Karl E, “Differences Between Male and Female Involvement in Motor Vehicle Collisions in Hawaii, 1986-1993**

Abstract

This paper presents the results of a study that was conducted to examine the automobile accident experience of male and female drivers in the state of Hawaii over the period 1986-1993. The study uses police crash data (a database of about 200,000 drivers involved in two-car collisions) to compare male and female drivers in terms of seat belt use, human factors involved in collisions, risky behaviors (such as speeding and alcohol use), and patterns in terms of collision involvement. The study finds that male drivers are 1.4 times more likely than female drivers to be unbelted, 3.6 times more likely to be involved in alcohol related collisions, 2 times more likely to be involved in speed related collisions, and 1.3 times more likely to be involved in head-on collisions. The study also finds there to be a greater likelihood of male drivers being at fault in an accident. The author also states that the effect of gender in automobile accidents is less pronounced than the effect of age.

**24. Litman, Todd, “Distance-Based Vehicle Insurance: Feasibility, Costs, and Benefits,” Victoria Transport Policy Institute, February 3, 2004**

Abstract

This report investigates the feasibility, benefits, and costs of implementing distance-based insurance pricing, and evaluates related concerns and criticisms. The report concludes that distance-based pricing is technically and economically feasible, and can provide significant benefits to motorists and society.



- 25. Mooney, Sean F., “Fooling With Classifications Is Risky Business,” National Underwriter, Property & Casualty /Risk & Benefits Management Edition, August 25, 1997**

Abstract

Sean Moody, vice president and economist at the Insurance Information Institute, authored this brief article contending that elimination of risk classification does not work.

- 26. Moultrie, T. A. & Thomas, R. G., “The Right to Underwrite? An Actuarial Perspective with a Difference,” Actuarial Science Group, Institute of Mathematics & Statistics, University of Kent at Canterbury;**  
<http://www.guythomas.org.uk/pdf/rtu.pdf>

Abstract

“For a very long time, underwriting has formed part of the actuarial canon. With increasing frequency, challenges are being issued against the right of insurance companies to underwrite their applications for new business, arguing that certain aspects of the practice are undesirably discriminatory.” The paper outlines “seven criteria for assessing rating factors in order to decide whether and how their use should be regulated.”

- 27. NAMIC Online, “Use of Risk Classifications in Property/Casualty Insurance,” National Association of Mutual Insurance Companies, January 2001;**  
<http://www.namic.org/PrintPage.asp?ArticleID=3276>

Abstract

The position of the National Association of Mutual Insurance Companies on the question of “Whether risk classifications should be restricted in the interest of achieving social objectives, despite the adverse effect they have on cost-based pricing.” is presented, concluding that “For the good of insurance consumers as well

as insurers, NAMIC believes risk classification and cost-based pricing must be respected and preserved.”

**28. Ontario Human Rights Commission, “Human Rights Issues in Insurance:  
Consultation Report,” October 1999;**

<http://www.ohrc.on.ca/english/consultations/insurance-consultation-report.shtml>

Abstract

“Representatives of the auto insurance industry are of the view that age, sex, and marital status continue to be bona fide and reasonable factors in assessing driver risk in accordance with the 1992 Supreme Court of Canada decision in Zurich. Although other variables, like personal driving records, years of driving and average loss history of vehicles by make and model, are also used, the industry’s review to date (confirmed in a June 2000 study) concludes that there are currently no suitable alternatives to replace age, sex, and marital status. At the same time, there are other jurisdictions such as British Columbia and Massachusetts that do not rely on age, sex and marital status in risk assessment. The industry contends, however, that such public schemes have lead to rate dislocation (higher costs not proportionate with risk for certain groups) and product availability problems.”

**29. Stolarz, S., and Tallon, J.M., “Comprehensive Report on Injuries in Nova  
Scotia,” Department of Emergency Medicine, Dalhouse University, May 16, 2002**

Abstract

This report summarizes a study performed of injuries in Nova Scotia to persons 16 years or older. As respects motor vehicle collisions, it found that over the period 1990 – 1999, the death rate was more than twice as high for males as females.

**30. Victoria Transport Policy Institute, TDM Encyclopedia, “Pay-As-You-Drive Vehicle Insurance Converting Vehicle Insurance Premiums Into Use-Based Charges,” updated November 10, 2003**

Abstract

This article explains how a “pay-as-you-drive” insurance premium system would work and its many benefits.

**31. Williams, Walter E., “Discrimination,” The Encyclopedia of Public Choice, The Lock Institute, George Mason University, Rowley, C.K. and Schneider, Friedrich, eds.;**  
<http://www.gmu.edu/departments/economics/wew/articles/recent/discrimination.html>

Abstract

While not specifically about automobile insurance, this article provides insight into “discrimination” and references automobile insurance as an example.

**32. Wortham, L., “Insurance Classification: Too Important to be Left to the Actuaries,” Journal of Law Reform, 1986, 19(2)**

Abstract

“This article classifies most of the public debate about classification as coming from one of two perspectives labeled traditional fair discrimination and antidiscrimination. Proponents of the status quo in classification and its regulation justify that status quo is fair discrimination. They argue that fair discrimination is both desirable and a reflection of a long-standing public policy judgment embodied in state law. Part I finds the assertion that fair discrimination is fair wanting in theory and even more deficient in practice, and rejects the contention that state law reflects a requirement or even a judgment about the wisdom of this approach. Part I develops two alternative

perspectives that should receive prominence in the classification debate ... Part II proposes three objectives for classification regulation.”

**33. Youngman, Marcia, & Wodarczyk, Jean M., “It’s Debatable, Contention: Auto Insurance Rating by Age, Sex, and Marital Status? Unfair!” & “ Response: Equite Demands Groups of Similar Risks,” Contingencies, 1991, Vol:3-2, March/April**

Abstract

“Consumer advocates contend that auto insurance rating principles ought to be fair in this respect: they should obviate discrimination against any individual on the basis of age, sex, and marital status. But actuaries generally think of fairness in ratemaking as demanding the classifications of individuals into groups that share similar risk characteristics ... Insurance actuaries and consumer advocates may be defining the notion of “fairness” in quite different ways.” This pair of arguments was meant to “shed some light on the fairness issue and, at the same time, to illuminate whatever ground does exist for continuing debate.”

**34. 1992 Supreme Court Decision (Zurich Insurance Company of Canada v. Ontario Human Rights Commission [1992] 2 S.C.R. 321)**

Abstract

Presents the findings, as well as a dissenting opinion, of the Supreme Court of Canada regarding its ruling that use of age, sex, and marital status is permitted in determining auto insurance rates.

**Nova Scotia Insurance Review Board**

**GENDER STUDY**

**Questions for Insurance Companies**

1. Does your company plan to eliminate the use of gender as a risk-classification factor at the same time that it eliminates age and marital status as risk-classification factors? If you haven't yet decided, is this an action that you are considering? What data and/or practicalities have led you to your decision?
2. If you plan to, or are considering retaining gender as a risk-classification factor, have you decided how you will do so as respects principal drivers and occasional drivers? If yes, what are your plans?
3. What actions has your company taken to follow the Supreme Court of Canada's decision in *Zurich v Ontario Human Rights Commission* [1992] S.C.R. 321, indicating that the insurance industry should seek an alternative to setting premiums based on gender and restructure its classification system accordingly?
4. When did your company last review the reasonableness of your current gender risk-classification rate relativities (principal and occasional operators)? What data did you consider in performing the review, and what was the source of that data? When did you last change your gender risk-classification rate relativities, and what was the change?
5. Do you believe gender to be an appropriate risk-classification factor that should be retained? Provide data, references to studies that have been conducted, or other information to support your position.
6. What will be the impact of retaining/not retaining gender as a rate classification on your company?

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