

Approved: January 26, 2010
Date

MINUTES OF THE HOUSE INSURANCE COMMITTEE

A joint meeting with the Senate Financial Institutions was called to order by Chairman Clark Shultz at 3:30 p.m. on January 21, 2010, in Room 152-S of the Capitol.

All members were present.

Committee staff present:

Bruce Kinzie, Office of the Revisor of Statutes
Sean Ostrow, Office of the Revisor of Statutes
Melissa Calderwood, Kansas Legislative Research Department
Lauren Douglass, Kansas Legislative Research Department
Sue Fowler, Committee Assistant

Conferees appearing before the Committee:

Joe Thesing, National Association of Mutual Companies (NAMIC)
Joe Woods, Property Casualties of America (PCI)
Lamont Boyd, Fair Isaac Corporation (FICO)
William W. Sneed, State Farm Insurance Companies
Bob Tomlinson, Kansas Insurance Department

Others attending:

See attached list.

Joe Thesing, National Association of Mutual Companies (NAMIC), (Attachment 1), presented an overview on the NAMIC Policy Briefing and commented on Credit-Based Insurance Scoring: Separating Facts From Fallacies.

Joe Woods, Property Casualties of America (PCI), (Attachment 2), discussed the Use of Credit Scores by the Insurance Industry: Iowa Consumers' Perspective.

Lamont Boyd, Fair Isaac Corporation (FICO), (Attachment 3), provided information on FICO Credit-Based Insurance Scores.

Bill Sneed, State Farm Insurance Companies, (Attachment 4), presented information on insurance scoring with a review of the Kansas law and the events that occurred after the 2009 session and its place in the rating of insurance in the State of Kansas.

Bob Tomlinson, Assistant Commissioner, Kansas Insurance Department, (Attachment 5), discussed information and comments on the use of credit based scoring.

The next meeting is scheduled for January 26, 2010.

The meeting was adjourned at 5:30 p.m.

At Mtg w/ Senate Financial Institutions
and House Insurance Committee

Guest Sign In Sheet
Thursday, January 21, 2010

Name	Representing
James Forbes	Benchmark Communications
Alex Kobayantz	KS. Ass. of Professional Insurance
Lori Church	KAPCIC
LAMONT BOYD	FICD
David Hanson	PCI / KS Assn P&C Cos
Rick Wilborn	Farmers Alliance
Lee Wright	Farmers INS
Tamara O'Connor	State Farm
Michelle Butler	Cap. Strateges
Joe Tesij	NAIIC
Haley Dakee	KCUA
Terri Spielman	KATA
Bill Sneed	State Farm
Jim Welch	K.T.D
Bob Tomkinson	K.T.D.
Joe Woods	PCI
David Monaghan	American Family Ins.
Shawn Mitchell	Community Bankers
Walter Jew Math	ICM HA
John Meek	KID
Dag Magee	Allstate
Vandia Braden	CDIA, GBA

NAMIC Policy Briefing

March 2009

Credit-Based Insurance Scoring: Separating Facts From Fallacies

Introduction

Credit-based insurance scores have been used by insurance company underwriters and actuaries for nearly two decades to more accurately assess risk and price coverage for automobile and homeowners' insurance policies.

The use of insurance scores encourages competition and enables insurers to offer coverage to more consumers at a fairer price. Furthermore, consumers benefit from insurance scoring because it keeps the insurance marketplace competitive, resulting in lower prices, better service, and more product choices. Insurance scores provide an objective, fair, and consistent tool that insurers use with other information to better predict the likelihood of future claims and the cost of those claims.

During the 1990s, lawmakers and regulators in several states began enacting laws and regulations that established procedures for insurers to follow in using an individual's credit information. In 2002, the National Conference of Insurance Legislators (NCOIL) created a "Model Act Regarding Use of Credit Information in Personal Insurance," which became the basis for additional legislation in other states. Today, 47 states have laws or regulations pertaining to credit-based insurance scoring.¹

In spite of an apparent consensus on this issue, some public officials and advocacy groups have continued to press for further restrictions on the use of insurance scores, or to prohibit the practice entirely.

This *Policy Briefing* provides a review of the evolution of credit-based insurance scoring, the laws governing its practice, some misconceptions about insurance scoring, and studies that have examined the impact of insurance scoring on consumers. It is intended to educate legislators and other policymakers who may be unfamiliar with insurance scoring and its utility as a predictive tool that benefits insurers and consumers alike.

Credit Scores and Insurance Scores: An Important Distinction

Insurance scores are not credit scores. Credit scores predict the likelihood that an individual will default or be delinquent in paying a credit obligation. By contrast, a credit-based insurance score predicts the likely "loss ratio relativity" of a particular individual. A loss ratio is the amount paid out by an insurance company in claims divided by the amount collected in premiums. Loss ratio relativity measures whether an individual will experience more or fewer losses than average.²

Another important distinction between a credit score and a credit-based insurance score is that the latter is only one of more than two dozen factors that are used by insurers to make an underwriting or rating decision about an individual. Other factors typically include an individual's motor vehicle report, claims history, or the condition of one's home.

The NCOIL Model

As noted above, NCOIL adopted a model law in 2002 (updated in 2005) that imposes conditions on insurers' use of credit information in personal insurance transactions. Twenty-seven states have adopted

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Founded in 1895, the National Association of Mutual Insurance Companies (NAMIC) is a full-service national trade association serving the property/casualty insurance industry with more than 1,400 member companies that underwrite more than 40 percent of the property/casualty insurance premium in the United States. NAMIC members are small farm mutual companies, state and regional insurance companies, risk retention groups, national writers, reinsurance companies, and international insurance giants. Together, we are NAMIC.

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House Insurance
Date: 1-21-10
Attachment # 1

EFFECTIVE ADVOCACY
STRATEGIC PUBLIC POLICY
VALUABLE MEMBER SERVICES

the model while other states have adopted at least portions of the model in their statutes.³

The model imposes at least eight specific restrictions on how insurers use credit information in underwriting or rating risks. For example, the model prohibits insurers from using an insurance score that is calculated using income, gender, address, zip code, race, ethnicity, religion, marital status, or an individual's nationality.

The model also prohibits an insurer from denying, canceling or non-renewing a personal insurance policy solely on the basis of credit information. An insurer cannot deny insurance coverage solely on the grounds that the consumer does not have a credit account. Significantly, given the state of the economy, the model allows for exceptions for extraordinary life events that may affect a consumer's credit rating.

One provision in the model outlines a process for insurers to follow if they raise a policyholder's premium or decline to renew coverage based on credit information. Other provisions lay out procedures that a consumer can follow in challenging a credit report or in challenging an adverse action taken against them by an insurer.

Insurance Scoring Misconceptions

The issue of credit-based insurance scoring can lead to emotional debate among competing interest groups, which can often result in several misconceptions about how insurers use insurance scores. As a general matter, such misconceptions lose sight of the fact that insurance is a competitive business, and insurers use insurance scores because they want to offer products to more individuals at the lowest price possible.

Some critics have argued that credit-based insurance scoring should be prohibited because it unfairly discriminates against minorities. This is a specious claim because insurance scoring does not consider characteristics such as race, ethnicity, gender, national origin, or income level.

Every empirical study has concluded that insurance scoring is neutral on its face with respect to race, ethnicity, and income, and is applied neutrally by insurers. The use of insurance scoring is not motivated by a desire to discriminate based on race, ethnicity, or income nor do insurers collect or use this information. Nevertheless, some critics contend that even if the correlation between credit scores and loss history is statistically valid, insurance scoring should be banned if it produces a disproportionate or disparate impact on particular racial, ethnic, or income groups.

Insurance Scoring and the Financial Crisis

In some recent published reports, critics of insurance scoring have suggested that the practice is particularly problematic due to the current economic crisis. However, this contention is based on unproven assumptions and a lack of understanding regarding why insurers use credit-based insurance scores. In fact, this underwriting tool remains an effective and important risk assessment mechanism.

Scores have remained very stable

Fair Isaac, a leading provider of credit-based insurance scores, found in a recent countrywide study that average scores have remained virtually the same for the general population. Noting the significance of this finding during an economic downturn with a growing number of people who are delinquent, Fair Isaac suggests that the "overall stability of scores may be caused by a greater number of consumers making certain to pay all bills on time, paying down outstanding balances, and perhaps not seeking more credit obligations." In other words, "more and more consumers appear to be realizing the value of prudent financial and credit management practices."

Not all credit-related incidents will affect insurance underwriting and rating

It is undeniable that a growing number of consumers are experiencing credit-related incidents such as loan defaults and foreclosures, but it is important not to make assumptions or generalizations about the impact of such incidents on insurance underwriting and rating. Some individuals who experience such incidents may not see an impact because they previously had credit issues that were already reflected in scores. And it is important to remember that insurers use scores in a variety of ways to differentiate applicants and insureds on a relative basis in terms of insurance risk, not credit risk, to compete for and price business appropriately. Fair Isaac found in its most recent score performance studies that its insurance scores "continue to appropriately rank-order consumers based on insurance risk." Even if credit scores were to deteriorate in general, those with the higher insurance scores would still benefit, and there is no reason to expect that the percentages of those who benefit would change.

The financial crisis demonstrates the importance of risk assessment

While there has been much discussion over assignment of blame for the current economic crisis, it is apparent that it is rooted in a failure to properly assess risk. It is only due to insurers' recognition of credit-based insurance scoring as a highly valuable risk assessment tool that it has become a common practice. It would be both ironic and inappropriate for a financial crisis caused by failure to assess risk to prompt policymakers to take a valuable risk assessment tool out of the hands of insurers.

“Disparate impact” is a legal term that refers to situations in which a policy or practice has the effect of disproportionately harming or excluding members of a group defined by race, ethnicity, disability, or gender—even though the challenged practice makes no reference to these characteristics and even though the resulting adverse group impact was unintentional.

Disparate *treatment*, on the other hand, refers to situations in which a decision-maker intentionally discriminates against people *because of* their race, ethnicity, disability, or gender. Intentional discrimination based on such characteristics is what most people think of when they hear the term unfair discrimination, and it is generally illegal under federal and state law.

Credit-based insurance scoring does not involve disparate treatment of customers based on race, ethnicity, income, or any other legally prohibited characteristic. To the contrary, insurers apply the same credit standards to all consumers—in other words, insurance scoring is a means of affording equal treatment in the underwriting process to all individuals regardless of race, ethnicity, or income. Policymakers should consider which form of discrimination is truly unfair—disparate impact on groups or disparate treatment of individuals.

Even if one is inclined to accept the notion that disparate impact somehow equates to unfair discrimination, it is important to note that as used in the courts, a showing of disparate impact serves only to establish a *rebuttable presumption* that illegal discrimination has occurred. Moreover, courts have generally confined use of the disparate impact theory to cases involving allegations of employment discrimination. In employment cases, defendants may rebut the presumption of unfair discrimination by demonstrating that the practice having a disparate impact is justified by “business necessity.”

In the few instances where disparate impact analysis has been applied to settings similar to insurance underwriting and pricing—e.g., mortgage lending and the granting of credit—the courts have upheld challenged practices where defendants have shown a “legitimate business justification” for the practice.

Because of its proven validity as an underwriting variable, it is undeniable that insurers have a legitimate business justification for using credit-based insurance scores.

Furthermore, insurer use of insurance scores is subject to the protections of the Fair Credit Reporting Act, federal and state anti-discrimination laws, and state insurance rating laws. These laws prohibit insurers from discriminating on the basis of race, religion, or national origin and include strong penalties for any violations.

Another popular misconception is that an individual’s insurance score will be affected if too many requests are made to examine the individual’s credit information. This is not an issue in states that have adopted the NCOIL model, as it expressly prohibits insurers from treating as a negative factor credit inquiries not initiated by the consumer or inquiries requested by consumers to examine their own credit information.

Research and Reports on Credit-Based Insurance Scoring

Since 1999, at least a dozen studies have examined credit-based insurance scoring. They have tended to fall into two broad categories: those studies that have looked at the predictability of insurance scores on loss performance or insurance risk and those that have examined the impact of insurance scoring on consumers, especially minority or low-income populations.

Among the studies worth noting are three that employed multivariate analysis techniques. In 2003, EPIC Actuaries, in the largest and most comprehensive study ever undertaken at the time, found that a consumer’s credit-based insurance score is directly connected to that consumer’s propensity for auto insurance loss. Even more significant, the EPIC study found that insurance scores are consistently among the most important rating variables used by insurers. The EPIC study looked at 2.7 million automobile insurance policies and found that the propensity for loss decreased as the insurance score increased.⁴

In 2005, the Texas Department of Insurance (TDI) completed an exhaustive study based on data obtained from six leading insurers for approximately two million automobile and homeowners’ policies. The TDI report concluded that “for both personal auto liability and homeowners, credit score was related to claim experience even after considering other commonly used rating variables. *This means that credit score provides insurers with additional predictive information distinct from other rating variables. By using credit scores, insurers can better classify and rate risks based on differences in claims experience.*”⁵

In July 2007, the Federal Trade Commission (FTC) released a study that reached conclusions virtually identical to those of the TDI report. It also found that when credit-based insurance scoring is used, 59 percent of consumers pay less for insurance.⁶

In 2005, the Arkansas Department of Insurance began an annual survey of the effect of the state's insurance scoring law, which is based on the NCOIL model, on insurance consumers.⁷ Similar to the results of the 2005 and 2006 surveys, the 2007 survey concluded that of 3,026,092 personal lines policies written or renewed in that year, 32 percent of customers received a discount, 9 percent received an increase, and the remaining 59 percent of consumers saw a neutral impact due to insurer use of insurance scores. In other words, 91 percent of personal lines customers either received a discount for credit or it had no impact on premium. For policies where credit played some role in determining the final premium, those receiving a decrease outnumbered those receiving an increase by a ratio of 3.44 to 1.

Conclusion

Effective underwriting allows insurers to operate profitably and to compete in the marketplace. Likewise, appropriate underwriting ensures that consumers benefit by not subsidizing other policyholders who pose worse insurance risks, resulting in unfair cross-subsidization among risk classes.

Banning or limiting the use of any valid underwriting or rating factor that is known to be predictive of insurance losses leads to decreased coverage availability and higher insurance prices. A legislator or regulator considering a prohibition on the use of credit-based insurance scoring should be prepared to explain to constituents, including those of every ethnic background and income level, why he or she decided they should pay more for insurance.

Experience has shown time and again how limitations on insurers' use of proven risk factors such as geography and age of driver have destroyed competitive markets and increased prices. A ban on the use of credit-based insurance scores would be counterproductive and would harm, rather than benefit, consumers.

Endnotes

¹The National Association of Mutual Insurance Companies has compiled a chart showing the actions taken in various states with regard to credit-based insurance scoring. The chart can be found at www.namic.org/compliance/CreditBasedInsuranceScoring.pdf

²The Fair Isaac website (www.fairisaac.com/ficx/) provides an excellent explanation of how credit risk and credit-based insurance scoring models work.

³A copy of the NCOIL Model Act Regarding Use of Credit Information in Personal Insurance can be ordered at the NCOIL website (www.ncoil.org/).

⁴Michael J. Miller and Richard A. Smith, "The Relationship of Credit-Based Insurance Scores to Private Passenger Automobile Insurance Loss Propensity: An Actuarial Study (June 2003). www.ask-epic.com/Publications/Relationship%20of%20Credit%20Scores_062003.pdf

⁵"Supplemental Report to the 79th Legislature: Use of Credit Information by Insurers in Texas: The Multivariate Analysis," Texas Department of Insurance (Jan. 31, 2005), p. 2. (Emphasis added.)

⁶Federal Trade Commission, "Credit-Based Insurance Scores: Impacts on Consumers of Automobile Insurance," (July 2007). www.ftc.gov/os/2007/07/P044804FACTA_Report_Credit-Based_Insurance_Scores.pdf

⁷Information about the annual credit-scoring reports can be obtained by accessing the Arkansas Insurance Department website at: <http://insurance.arkansas.gov/>

Use of Credit Scores by the Insurance Industry: Iowa Consumers' Perspective

St. Ambrose University, December 2009

**Randy L. Richards, Thomas J. Quinlan, Jr.,
and Patrick F. O'Leary**

Acknowledgement

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These people have offered us help, guidance and advice. The contents of the report are those of authors alone and may not reflect the opinions of these people nor of St. Ambrose University.

Introduction

In May of 2009, the Iowa Insurance Commissioner's Office contracted with the report authors through St. Ambrose University to conduct a survey of 1,200 Iowa consumers regarding their attitudes, knowledge and beliefs about the use of insurance based credit scoring. The Insurance Commissioner's Office was interested in gathering more data and information on consumers and the practice of insurance based credit scoring.

Using credit scores to determine eligibility and price of insurance is a widely used, though controversial, practice. Many insurance companies believe that an individual with a low credit score has a greater propensity to file an insurance claim.¹ Consumer advocates, state legislators and state insurance regulators believe that this is not true (Cruise, 2003). Several consumer groups want states to ban the use of credit scores in setting premiums for auto and homeowner insurance.² Insurers reply that credit behavior is strongly correlated with the tendency to file claims. Other opponents of the use of credit histories charge that the credit history records are full of errors and misinformation.³ Advocates respond by citing the peripheral nature of most of the errors, on-going attempts to correct them, and methodological problems with these studies.

The insurers' position is supported by actuarial analysis (Miller & Smith, 2003). Critics feel that use of credit scores for insurance policy premiums is unfair (Sage, 2009). Consumer and civil rights groups assert that the use of credit scores discriminates against low-income people and some minorities because their scores tend to be lower (McQueen, 2009; PR Newswire Association LLC, 2007). Perhaps the most important criticism raised is that there exists no convincing causal picture connecting poor credit history with high insurance loss potential (Wu & Guszczka, 2003).

The Federal Trade Commission (FTC) found that credit based insurance scoring was an effective predictor of risk and is useful in setting premiums to match the level of risk. The FTC has stated that it lacked sufficient evidence to explain the correlation between claims and credit history (Mohl, 2007). They examined more than two million auto policies.

¹ The following organizations have defended the fairness of insurance credit based scoring: National Association of Mutual Insurance Companies, Property and Casualty Insurers, Insurance Information Institute, The list is not meant to be exhaustive.

² The following organizations have questioned the fairness of insurance credit based scoring in whole or in part: Center for Economic Justice, Consumer Federation of America, National Consumer Law Center, National Council of La Raza, National Fair Housing Alliance, Consumers Union of U.S., Inc. The list is not meant to be exhaustive.

³ (Consumer Federation of America and National Credit Reporting Association, 2002)

Insurance commissioners from many states have filed legal briefs against the use of credit scoring by insurance companies. The states have contended that some insurance companies violate the Federal Fair Credit Reporting Act if they do not send consumers adverse action notices when their rates are affected by their credit scores (Total Lawyers, n. d.). These actions by the states suggest that the use of credit scores in the determination of eligibility and rates are considered unfair.

Background

The research questions for this study are:

1. Do Iowans believe that credit scores are valid predictors of risky behavior and insurance claims?
2. What do Iowans know about credit scores generally?
3. Do Iowans believe that using credit scores to determine insurance eligibility and rates is fair?
4. Do minorities receive a disproportionate share of “adverse action” letters from insurers?

To answer these questions we created a survey of 29 questions and distributed it to a randomized, cross-sectional sample of Iowans over 18 year of age. A pilot survey was conducted using a sample size of 96 respondents to establish face validity of the instrument. It resulted in the revision and elimination of some questions. Format and scales were similarly affected and revised accordingly.

Major content includes sections on automobile insurance, homeowner insurance, demographics, and a section covering the use of credit scores.

Table 1
Overview of Survey

Variable name	Research Question	Survey Item
Predictor	Is the use of credit scores a valid predictor of risky behavior and claims?	Questions 5, 10
Knowledge	What do people know about credit scores generally?	Questions 3, 4, 11, 14, 15
Fairness	Is the use of credit scores by the insurance industry fair?	Questions 6 – 9, 13, 16, 17, 28, 29
Adverse	Do minorities receive a disproportionate share of “adverse action” letters from insurers?	Questions 26-27

Using a combination of telephone and Internet approaches, we distributed the final survey and received a total of 1,240 complete responses. Data sources included:

1. MarketTools, Inc. (Zoomerang) (Sparandara, 2009),
2. Personal Market Research (PMR) (Personal Marketing Research, 2009),
3. A supplemental survey of insurance agents that is part of a continuing education study (O'Leary, Quinlan, & Richards, 2009).

Descriptive Statistics

We received a total of some 1300 responses, of which 1,240 were usable: 859 from Zoomerang and 381 from PMR. We removed any cases that showed no ZIP code, and any that provided an out-of-state ZIP code. There was no way of knowing whether these respondents were temporarily living out-of-state or they were individuals who did not follow survey instructions.

Because our survey was a sample, as opposed to a census, the possibility of sampling error is always present. A different sample will likely yield different results. To minimize this, we have established confidence limits of 95 percent around any estimate that we have provided. This means we are 95 percent confident that any sample we might have obtained would have included the values we would have obtained had we taken a census.

In the tables below, we contrast the sample percentage with the state percentage for the variables cited. The state's demographic percentages were read directly, or computed from, the Iowa Data Center tables.

Table 2
Race Distribution

Count	Races	Sample %	State %
1,152	Caucasian (White)	92.90%	93.90%
88	Minorities	7.10%	6.10%
1,240	Total	100.00%	100.00%

**Table 3
Age Distribution**

Count	Age	Sample %	State %
98	18-24	7.90%	6.42%
161	25-34	12.98%	15.73%
189	35-44	15.24%	21.06%
310	45-54	25.00%	19.47%
482	55 and over	38.87%	37.32%
1,240	Total	100.00%	100.00%
Median		50.55*	

* Higher than state median because it does not include anyone under 18

**Table 4
Gender Distribution**

Count	Sex	Survey %	State %
474	Male	38.23%	49.30%
766	Female	61.77%	50.70%
1,240	Total	100.00%	100.00%

**Table 5
Income Distribution**

Count	Income range	Survey %	State %
195	Less than \$20,000	15.73%	21.78%
288	\$20,000 - 39,900	23.23%	28.89%
296	\$40,000 - 59,900	23.87%	22.43%
203	\$60,000 - 79,900	16.37%	19.62%
258	\$80,000 or more	20.81%	7.28%
1,240	Total	100.00%	100.00%
Median*		\$49,256.76	\$47,292.00

*As an open ended frequency distribution, only the median for household income can be computed. Although it is a precise computation, the result is an estimate. The median income is estimated as \$49,256.76.

Table 6
Metro/Non-metro

Count	Metro/Non-metro	Survey %	State %
801	Metropolitan	64.60%	55.20%
439	Non-metropolitan	35.40%	44.80%
1,240	Total	100.00%	100.00%

Source for state percentages: (State Data Center, 2009)

Grouping of variables: Four groups are identified via deliberate design: 1. Predictor; 2. Knowledge; 3. Fairness; and 4. Adverse.

Data analysis:

Cronbach's alpha (0.687) was used as a reliability check for the survey questions. This is an acceptable result.

For the entire study, the margin of error = $\pm 2.6\%$.

Chi-square goodness of fit tests was used on questions 30 – 39 to determine whether the demographics of the survey matched those of the State of Iowa. These tests were also used for question 5 to ascertain whether male and female respondents answered similarly, and for questions 26 and 27 to determine whether adverse actions were disproportionate by race, age, and income.

A two-way analysis of variance (ANOVA) was conducted for the questions where this technique was applicable (questions 11 and 14). As a confirmation, the non-parametric Wilcoxon matched-pair signed-rank test of differences was applied.

Results

Synopses are provided here. Detailed development of these results is in the discussion section below:

Research question #1: Do Iowans believe that credit scores are valid predictors of risky behavior and insurance claims?

A majority (55%) of respondents disagree that credit scores are good predictors of the tendency to file claims. Only 8.7% of respondents believe that insurance companies use credit scores as an indicator of a tendency to file claims. This does not reflect reality (Miller & Smith, 2003; Mohl, 2007; Rejda, 2008), and it suggests a need for consumer education (Government Accountability Office, 2005). A separate survey of Iowa insurance professionals shows them to be about evenly divided as to whether credit scores are valid predictors of a tendency to file claims (O'Leary et al., 2009).

Research question #2: What do Iowans know about credit scores generally?

Iowans' knowledge of the purpose of credit scores is inadequate. A 2005 Government Accountability Office (GAO) report found that most consumers knew what a credit score was, and approximately one-third had obtained their credit scores, but many did not know that some behaviors – such as using all their available credit – could negatively affect their scores. The report also found that several factors were associated with consumers' knowledge. For instance, having less education, lower incomes, and less experience obtaining credit were associated with lower survey scores, while having certain types of credit experiences – such as an automobile loan or a mortgage – were associated with higher scores (Government Accountability Office, 2005). Results obtained in this survey showed that 40% of Iowans had obtained their credit scores, compared to the GAO's finding that one-third of its respondents had done so. Consumer Federation of America and the Providian Financial groups' nationwide studies in 2004 and 2005 of 1000 adults reported that 24% and 31% respectively had obtained their credit reports. Both were below the Iowa study (Consumer Federation of America and Providian, 2005).

Contrary to the GAO's findings, however, our survey found no significant association of credit knowledge with either income or educational levels. 69.2% of our respondents did not select the correct answer when asked the meaning of credit scores. These responses were scattered across the income and education level demographics generally in proportion to their representation. We found no evidence of any disproportionate representation across these demographics.

Research question #3: Do Iowans believe that using credit scores to determine insurance eligibility and rates is fair?

When asked on a personal basis "Do you think **your** personal credit score should affect..." their own ability to purchase insurance or the rates they themselves are charged, the answers were overwhelmingly "No." Respondents seem to think that credit scores should have no bearing on their ability to purchase insurance, nor should credit scores have any relevance to the rates charged. When asked similar questions on an impersonal basis, the results still showed "No," but it was not as definitive or overwhelming. It is possible that any sense of fairness in some respondents might be somewhat offset by hypocrisy. In other words, respondents might expect rules to apply to others, but not to self.

Research question #4: Do minorities receive a disproportionate share of 'adverse action' letters from insurers?

Sixty respondents acknowledged receiving an adverse action notification. A visual inspection of the survey numbers (57 white, 3 minorities) compares very closely with the expectations (56.3 white, 3.7 minorities) based upon the Iowa demographics showing the population to be 93.9% white. The study did not show any evidence of racial bias.

However, we did find adverse actions disproportionate to their numbers in the 25-34 age group, and the \$40,000 - \$59,999 income group.

Discussion

Research question #1: Do Iowans believe that credit scores are valid predictors of risky behavior and insurance claims?

Two survey questions address this issue.

Question 5: Which of the following best describes insurance companies' use of credit score? Select ONE only

Summary	
Predicts the likelihood of risky behavior	459
Predicts the likelihood that a person will not be able to pay for insurance	360
Predicts the likelihood that a person will file an auto or homeowners' insurance claim	108
Predicts the likelihood that a person will file false auto or homeowners' insurance claims	65
Don't know	248

Actually, the answer "Predicts the likelihood of risky behavior" is correct. Credit scoring is not a recent phenomenon. At the beginning of the 20th century, credit ratings were given as "high," "good," "fair," and "limited." The reason for deriving these ratings is because it was apparent then, as it is now, that a person's reputation for prompt payment of debts does not necessarily depend upon his estimated financial worth (Huebner, 1916). In other words, risk is different from ability to pay. This concept has stood the test of time.

The answer "Predicts the likelihood that a person will file an auto or homeowners' insurance claim" is also correct, but the respondents did not rank it near the top. It relates to the next question:

Question 10: A person's credit score is a good predictor of how likely they are to file an auto or homeowners' insurance claim.

Agree: 174

Disagree: 686

Neutral: 380

Margin of error = $\pm 1.9\%$

There is general agreement with the related choice from question #5 above. The respondents in general do not believe the predictive capabilities of the credit score. It

also supports our contention that Iowans in general are aware that credit scores have an effect, but are generally unaware of how extensive that effect is.

There is extremely strong evidence that the incorporation of the use of credit history increases the predictability of claims behavior. A brief review is all we need for our purposes here.

Let's begin with three of the most widely know and publicized studies.

The 2003 EPIC Actuaries study, "The Relationship of Credit-Based Scores to Private Passenger Automobile Insurance Loss Propensity", reviewed more than 2.7 million auto policies (Miller & Smith, 2003). It found that credit based insurance scores are strongly related to an insured's likelihood of filing a claim, and that the use of the scores added significant accuracy to the risk assessment process. Further, these scores measured risk not previously measured by other known rating factors and that they were among the top predictors of risk, outperforming more traditional underwriting factors.

The 2005 Texas Department of Insurance Study, "Use of Credit Information by Insurers in Texas: The Multivariate Analysis", examined hundreds of scores and rating factors for over two million auto and homeowners' policies (Texas Department of Insurance, 2004). "For both personal auto liability and homeowners, credit score was related to claim experience even after considering other commonly used rating variables. This means that credit scores provide insurers with additional predictive information distinct from other rating variables. By using credit score, insurers can better classify and rate risks based on the differences in claim experience."

The 2007 Federal Trade Commission study, "Credit-based Insurance Scores: Impacts on Consumers of Automobile Insurance" found that credit based insurance scoring was an effective predictor of risk under automobile policies (Federal Trade Commission, 2007), and that they were predictive of the number of claims and the total cost of those claims. They examined more than two million auto policies.

Also in 2003 at the request of the NAIC, the American Academy of Actuaries evaluated four studies on insurance credit scoring. The studies were:

1. The Impact of Personal Insurance Credit History on Loss Performance in Personal Lines by James E. Monaghan (2000).(Government Accountability Office, 2005)
2. Insurance Scoring in Personal Automobile Insurance - Breaking the Silence by Conning & Company (2001).(Government Accountability Office, 2005)
3. Predictiveness of Credit History for Insurance Loss Ratio Relativities by Fair, Isaac (1999).(Government Accountability Office, 2005)
4. Use of Credit Reports in Underwriting by the Commonwealth of Virginia, State Corporation Commission, Bureau of Insurance (1999).(Government Accountability Office, 2005)

Based on their review of the four studies and their expertise in the development and review of rating models based on credit history, the Academy members that reviewed *the studies believe that credit history can be used effectively to differentiate between groups of policyholders. Therefore, they believe credit scoring is an effective tool in the underwriting and rating of personal lines of insurance.*" (our emphasis) (Serio, 2003)

Finally, we call attention to the study by Peter Wu and James Guszczka, "Does Credit Scoring Really Explain Insurance Losses? Multivariate Analysis from a Data Mining Point of View" (Wu & Guszczka, 2003). In their Introduction they note:

One of the more important recent developments in the U.S. insurance industry has been the rapidly growing use of credit scores to price and underwrite personal auto and homeowners insurance. But this development has not come without controversy. Perhaps the most important criticism raised is that there exists no convincing causal picture connecting poor credit history with high insurance loss potential [1-5]⁴. Partly for this reason, many insurance regulators and consumer advocates have expressed doubts that the observed correlations between credit scores and insurance loss history truly reflect an underlying reality. Some critics have suggested that these correlations might be spurious relationships that would not survive more sophisticated (multivariate) statistical analyses.

They reviewed the prior findings of two studies Tillinghast's, "Credit Reports and Insurance Underwriting," NAIC White Papers, 1997 and James Monaghan's, "The Impact of Personal Credit History on Loss Performance in Personal Lines," CAS Forum, Causality Actuarial Society, 2000 in light of their own research using multivariate analysis and data mining.

Ultimately, they analyzed hundreds of possible predictive variables that they created from the internal and external data sources. Their goal is to create as many variables as possible that might be related to insurance loss and profitability. These variables would represent as wide a range of characteristics as possible about each policyholder.

We have performed several large data mining projects that included credit variables and credit scores. Similar to the Tillinghast study and Monaghan's study, we have studied data from various sources, different

⁴ 1. "Insurance Scoring in Personal Automobile Insurance – Breaking the Silence", *Conning Report*, Conning, (2001). 2. "Insurers Battling Credit-Scoring", *National Underwriter*, March 5th Issue, (2002). 3. "Insurers Lose a Credit Scoring Battle", *National Underwriter*, February 21st Issue, (2002). 4. "Credit Reports and Insurance Underwriting", *NAIC White Papers*, National Association of Insurance Commissioners, (1997). 5. Monaghan, J. E., "The Impact of Personal Credit History on Loss Performance in Personal Lines", *CAS Forum*, Casualty Actuarial Society, (2000). (All as cited in (Wu & Guszczka, 2003).

distribution channels, and different geographic concentrations. Our studies are very large in size, similar to Monaghan's study, usually with several hundred thousand data points that contain a total of hundreds of millions of dollars of premium. Our approach is tailored to the use of large datasets, the use of train/test methodology, the use of lift curves to evaluate models, and the exploratory use of a variety of modeling techniques. These are all hallmarks of the data mining approach to statistical problems. We believe that our analyses are true multivariate analyses that yield very robust and credible results. It is precisely this kind of analysis that makes it possible to decisively answer the question: does credit really help explain insurance losses and profitability?

Their analysis and study confirm what Tillinghast and Monaghan had found. Credit variables effectively predict insurance losses and add measurable and non-reductive predictive power to the other variables. They make it clear that this does not mean that these credit variables "cause" the losses, only that they are undeniably predictive of the losses in the aggregate. "From a statistical and actuarial point of view, *it seems to us that the matter is settled: credit does bear a real relationship to insurance losses.*" (our emphasis).

We think the current evidence for the predictive power of insurance credit scoring is overwhelming. However, perhaps some future research will indicate otherwise but for now we believe reasonable persons must conclude *on the basis of the evidence* the case in favor of the predictive power of insurance credit scoring. Given the predictive power of insurance credit based scoring, the Iowa consumers' opinions about the efficacy of this method are at odds with the available evidence. Some special attention should be given to educating Iowa consumers about the current facts regarding the strength of this method to predict claims filing behavior because their beliefs about this will have a strong influence on their sense of the fairness of this practice.

Research question #2: What do Iowans know about credit scores generally?

Questions 11 and 14 are a perception/expectation pair. These questions are useful in ascertaining respondents' knowledge of the factors that are used to compute insurance premiums.

Question 11: (The perception question) A person's auto insurance premium IS based primarily on their: RANK TOP THREE by selecting 1, 2 and 3 next to them

Summary	
Age	2,508
Gender	1,133
History of auto accidents and/or moving violations	2,756
Credit score	594
Number of miles driven annually	991
Other	251

Question 14: (The expectation question) A person's auto insurance premium SHOULD BE based primarily on their: RANK TOP THREE by selecting 1, 2 and 3 next to them

Summary	
Age	2,051
Gender	625
History of auto accidents and/or moving violations	3,130
Credit score	390
Number of miles driven annually	1,427
Other	327

The scores for questions 11 and 14 are weighted. First choice is multiplied by 3; second choice is multiplied by 2; and third choice is counted. The intention of the weighting is to give credibility to the respondents' choices relative to importance.

Questions 14 and 11 represent a perception/expectation pair. It appears that there are different responses between perceptions (IS) and expectations (SHOULD BE).

To ascertain whether this is so, a two-way analysis of variance (ANOVA) was conducted using the weighted scores (p-value = 0.788), and again using the unweighted scores (p-value = 0.831). The result was the same. The hypothesis that perceptions differ from expectations is not supported. As a confirmation, the Wilcoxon matched-pair signed-rank test of differences was conducted with the same result. Perceptions and expectations are not different. It is clear that history of accidents is perceived to be primary in both and the respondents have effectively rank-ordered these elements. (The third and fourth places change rank order between questions 11 and 14).

These items are all considered in rate setting, but the methodologies used by insurance underwriters are different. The rank order perceived, and expected, by the survey respondents indicates what they believe to be the most important factors in rate setting. This does not reflect reality (Rejda, 2008).

Questions 3 and 15 were posed to ascertain whether Iowans were interested in knowing their credit status.

Question 3: Do you know your credit score?

Yes: 501
No: 739

Question 15: Have you ever obtained a copy of your credit report (in addition to or separate from your credit score)?

Yes: 730
No: 464
Don't know: 46

The general answer is "Yes," based upon the results of question 15. Credit scores, question 3, are not provided at "no cost." This could explain why a similar number of respondents have not obtained their scores.

Question 4: To your knowledge, which of the following does a credit score MAINLY indicate? RANK TOP THREE

Summary	
Knowledge of consumer credit	1,026
Attitude toward consumer credit	710
Amount of consumer debt	1,969
Risk of not repaying a loan	1,980
Financial resources to pay back loans	1,515
Don't know	347

Again, the scores for question 4 are weighted. First choice is multiplied by 3; second choice is multiplied by 2; and third choice is counted. The intention of the weighting is to give credibility to the respondents' choices relative to importance.

Currently, credit scores are derived through mathematical formulas that assign weights to various credit factors and summarize the results as a three-digit number. Such formulas are proprietary, and usually include outstanding debts, amounts past due, late payments and payment patterns (Rejda, 2008). They also include information from public records, such as bankruptcies and liens.

Those who selected "risk" on this survey have it right. However, they are in the minority. Those who selected "Financial resources" above miss the point that risk and ability to pay are quite different. Misconceptions such as this imply that knowledge of the fundamentals of insurance rate setting is lacking.

Research question #3: Do Iowans believe that using credit scores to determine insurance eligibility and rates is fair?

The questions of fairness standouts as one of the most controversial aspects of the use of insurance credit based scoring for rating and pricing of auto and homeowner's insurance. Mostly simply, "Is it fair to use a consumer's credit history as part of the decision on both the acquisition and the rating of auto and homeowners insurance?"

We thought it would be important to use the survey to get a sense of the moral intuition of Iowa consumers about the fairness of the use of insurance credit based scoring. Now let's be clear from the start, because a person or persons have certain opinions or beliefs about what is fair or not fair does not mean that they are correct.

First, our opinions about what is fair or unfair often are determined by whether we are advantaged or disadvantaged by some decision, policy or practice. Think about how most people evaluate taxes. If they personally benefit from the tax code, they see it as fair. If they feel burdened by it, they decry how unfair it is.

Second, fairness is a complicated concept and one almost entirely contextually driven. Is the concept of fairness in this case one that depends on merit, need, desert or some other factor? I might think it is unfair because I think fairness in this case should depend on merit as a measure and you think it fair because you think fairness in this case should depend on need.

Third, we might be talking about either fair processes or fair outcomes. People are not always clear about which they are referring to nor even be aware of the distinction. When a rich person wins the lottery, we can understand why some people will see this as fair – it is a fair process – random selection. We can also understand why others might say that it is not fair since the winning person does not need the money and so many others were more needy or deserving of the money. In the first case, people look at the process and determine that the lottery is fair. In the second case, they look at the outcome – who won – and declare it is not fair.

Fourth, in referring to the fair distribution of benefits and burdens in society, what criteria do we apply in assessing the relative weights of either the benefits or burdens? Should our measures be relative to all parties in the distribution or against some other independent factor? Should fairness be determined by strict equality – say as in a flat tax like a sales tax. It is fair because everyone pays the same 5%. Or should fairness be determined by equality of burden – say as in progressive income tax. It is fair because everyone makes an equal sacrifice relative to his/her income.

Fifth, is fairness to be rooted only in the effects on particular individuals or can we extend the concept of fairness to society as a whole? If a zoning change will economically benefit the vast majority of people in our area by placing a hog lot operation in the county is it fair to burden the three families whose farms adjoin the hog lot and cannot escape the negative effects? Is it fair for the aesthetic benefit of a mere three families that everyone else in the county be deprived of economic and financial growth?

Sixth, our opinions about fairness will be significantly affected by our depth of knowledge about the issue, and the depth and quality of reflection we have exercised on the issue. The less we know and understand methods and processes of distributions of the benefits and burdens in society the more likely we are to be suspicious of it.

Seven, our sense of what is fair and unfair is also subject to influence by our biases, prejudices and ideological commitments prior to examining the issue. If we are opposed on principle to government intervention, then any government intervention will more likely appear arbitrary and unfair regardless of its justification or effects. If we see government itself as a social mechanism to control and balance the competing forces in society, the government intervention will likely appear as establishing fair and equitable regardless of its justification or outcome.

So as we examine peoples' opinions about fairness, we need to do so carefully. Nonetheless as the Insurance Commissioner's Office and elected representatives consider how to respond to the controversies surrounding the use of insurance credit scoring, we believe they would find it valuable to understand the various opinions Iowans hold. We should, however, make a careful evaluation of these opinions of fairness and critically examine the issues at stake.

Our approach to this difficult problem was to first ask a few questions about some standard insurance practices in rating auto and home owners insurance. We wanted some context to compare Iowa Consumer responses to the practices surrounding insurance credit based scoring.

Let's begin with the practice of charging youthful drivers higher rates. Charging for youthful drivers is and has been standard insurance practice for many years. The rationale?

Rates for auto insurance for teenage drivers are always higher than any other drivers because they pose a higher risk of accidents than more experienced drivers. Adding a teenager to an insurance policy can mean a 50 percent or even 100 percent increase in the parents' insurance premium (Insurance Information Institute, 2009).

Insurers justify the practice of charging higher rates for youthful drivers based on the simple fact that youthful drivers, *as a group*, pose a higher risk of accidents and claim

activity. Many people point to "lack of experience" as the most plausible explanation for this higher likelihood of claims activity. Others will indicate youthful driver show a lack of judgment, forethought, and understanding of effects of their risky behavior. Obviously, these three vices are not limited to youthful drivers. Some more "experienced" drivers also show lack of judgment, forethought and an understanding of the effects of their risky behavior. We can also agree that some youth drivers do not share these characteristics with their youthful brethren. Yet, they still get charged a higher rate *because they belong to a group* that we can show statistically poses a significantly higher accident and claims behavior.

Generally speaking this is not considered a highly controversial issue. We do not have consumer groups or others lobbying the insurance commissioner's office or legislature about prohibiting insurance companies from charging youthful rates because it is unfair. Yet the practice does raise an issue of fairness. We posed the question this way to test respondents' moral intuitions:

Question 16: It is fair practice to charge law-abiding and low-risk individuals higher insurance rates simply because they are part of a group that engages in risky behavior (for example, teenage drivers)?

Agree: 367 (30%)
Disagree: 570 (46%)
Neutral: 303 (24%)
Margin of error = $\pm 2.5\%$

Frankly, we were surprised by this response because there has been little or no controversy surrounding this practice. Less than one third of Iowa consumers think it fair to charge an individual a higher premium merely because he/she is a member of a group that engages in risky behavior. Almost half sees it as unfair.

The question gets at the issue of the fairness of ascribing to me, as an individual, the characteristics of the group of which I am a member. Further, in this case, it is a membership over which I have no control. Since I personally do not possess these characteristics, to ascribe them to me, and then to penalize me (with higher rates) because I belong to this group, may appear patently unfair. Indeed we might argue this is a classic example of bias and prejudice, i.e., because I am a young man, I am likely to engage risky behavior. In our sample, 46% saw this as unfair. Interestingly, this practice, which is universally accepted in insurance underwriting practice as 'fair' because it is aimed at young people, would not be allowed if the group upon which it were based was one of race or ethnicity.

Pursuing consumers' opinions of fairness further,
Question 13: People with a higher likelihood of filing insurance claims should pay higher premiums

Agree: 568 (46%)
Disagree: 296 (24%)
Neutral: 376 (30%)
Margin of error = $\pm 2.7\%$

The results were almost the opposite. Is this an example of sheer inconsistency? Perhaps. Perhaps not. We think the difference lies in the fact that in this case, respondents understood this to mean the higher likelihood of filing a claim was attributable to *the person as an individual and not a group member*. In such a case where a person as an individual would have a higher chance of filing a claim, then in the opinion of almost half the respondents, it is considered fair that a person pay a higher premium. This opinion is perfectly consistent with the answers on 16. *The rates such people pay should be a function of his/her individual behavior, not some group characteristic.*

Although, we think it is worth remarking that still fewer than half the Iowa consumers agree that those with a higher likelihood of filing claims should pay higher premiums. This was also surprising. We think this should be understood as related to the phrase "higher likelihood." This implies a projection into future behaviors. This person, however, has *not yet filed* a claim so he/she should not pay the higher rates. There may be a higher chance that he/she will file a claim, but there is also some likelihood that he/she will not file a claim. The objection to the fairness of this, we conclude, is based on *the projection of likelihood claim activity into the future.*

Understood in this way, the intuition of fairness, for these respondents, would be that the rate I am charged should be based on what I *as an individual have done*. It is unfair to attribute *all of the group characteristics* to me merely because I possess some of the group's characteristics. It is also unfair to charge me rates based on what I might do in the future but have not yet done. It appears to us that these two intuitions are driving many of these responses. It should be noted that these same intuitions will inform respondents' evaluation of the fairness of insurance credit scoring.

Unfortunately, these opinions indicate that Iowa consumers do not have a clear notion of what it means to spread the risk that is at the heart of the law of large numbers and what theoretically drives insurance as a business. Individuals are surcharged based on what they individually have done, but the base premium is determined by the law of large numbers built around large group characteristics. If the large numbers are reduced to smaller groups of individuals based on increasingly isolated variables, then the base premium of insurance becomes unaffordable to those who need it the most.

This interpretation is reinforced by the responses on Question 29 which is a re-wording of Question 13 except that instead of the more generic “people” we substituted the more personal ‘you’ in the question.

Question 29: If some factor in your background indicates that you are more likely to file an insurance claim than other people, then it is FAIR that you pay a higher rate for the same insurance product.

Agree: 361 (29%)
Disagree: 499 (40 %)
Neutral: 380 (31%)
Margin of error = $\pm 2.5\%$

Our intention in constructing this question was to contrast the difference in people’s answers with Question 13. The results comparing the two show what we expected. When Iowa Consumers were asked in 13 the more generic question using “people” should pay higher rates if they have a higher likelihood of filing claims 46% replied affirmatively. But when asked if there was something *in their own background* that indicated that ‘you’ were likely to file a claim that number drops to 29%. As we indicated above in our opening remarks, intuitions about fairness can be driven by whether I am benefited or burdened by some practice or policy. The responses to this question demonstrate that tendency.

But, beyond that, once again we see *this resistance to the fairness of the practice of using my behavior in the past as a basis for projecting the likelihood of my filing claims in the future*. In question 13, 54% considered this practice either unfair or were not sure of its fairness. In question 29 where we apply this to ‘you’ that percentage jumps to 71%. Most Iowa consumers do not think it is fair to base auto and homeowners rates on a person’s past behavior as a means of determining the probability of their future claims filings. And an overwhelming percentage is opposed *when that person is themselves*.

We are now ready to turn to the intuitions on the fairness of the use of credit scores in securing and rating of auto and homeowners insurance. Let’s begin with Questions 17 and 7 that surveyed beliefs about auto insurance rates and credit scores.

Question 17: People with poor credit scores should pay higher auto insurance rates

Agree: 144 (12%)
Disagree: 802 (65%)
Neutral: 294 (24%)
Margin of error = $\pm 1.8\%$

Question 7: Do you think your personal credit score should affect the rates you pay for auto insurance?

Yes: 291 (23%)
No: 878 (71%)
Don't know: 71 (6%)
Margin of error = $\pm 2.4\%$

Once again we have paired similar questions but one asks about the generic "people" and the other about the more personal "you." The surprising thing about this pair of responses is that higher numbers of Iowans consider fair to have the increased rates for lower credit scores when they applied it to themselves. We believe this explained by the fact that in 17 the issue was poor credit scores means higher rates but in 7 the issue was simply that credit scores would *affect your rates*. The difference being that in 7, I might see that my rates would go down if I had a high credit score. However, the more important thing to notice is that in both cases the number opposing this practice is very high, 71% and 65%.

The numbers on homeowners' insurance ratings are remarkably similar to those regarding auto insurance. We paired Questions 28 and 9.

Question 28: People with poor credit scores should pay higher homeowner insurance rates

Agree: 133 (11%)
Disagree: 779 (63%)
Neutral: 328 (26%)
Margin of error = $\pm 1.7\%$

Question 9: Do you think your personal credit score should affect the rates you pay for homeowner's insurance?

Yes: 285 (23%)
No: 880 (71%)
Don't know: 75 (6%)
Margin of error = $\pm 2.3\%$

Once again we have paired similar questions but one asks about the generic "people" and the other about the more personal "you." Here, too, higher numbers of Iowans consider it fair to have the increased rates for lower credit scores when they applied it to themselves. Again, we believe this to be partly explained by the fact that in 28 the issue was poor credit scores means higher rates but in 9 the issue was simply that credit scores would affect your rates. The difference being that in 9, I might see that my rates would go down if I had a high credit score. However, as before, in both cases the number opposing this practice is very high, 71% and 63%.

The numbers change only slightly when considering credit scoring should affect the ability to buy auto or homeowners insurance.

Question 6: Do you think your personal credit score should affect your ability to buy auto insurance?

Yes: 237	(19%)
No: 906	(73%)
Don't know: 97	(8%)
Margin of error =	± 2.2%

Question 8: Do you think your personal credit score should affect your ability to buy homeowner's insurance?

Yes: 208	(17%)
No: 966	(78%)
Don't know: 66	(5%)
Margin of error =	± 2.1%

Whether we are referring to auto or homeowner's rates or the ability to buy either auto or homeowners, between 63 and 78 percent of Iowans oppose the practice of using credit history. Why are these numbers so high? What causes people to see this practice as unfair?

We have already seen in our prior discussions about more traditional insurance rating that many hold that it is unfair to use information about one's past history as a basis for projection about whether one is likely to file a claim in the future. Additionally, we have seen that many people hold it is unfair to increase their rates based on a calculation of future likelihood of claim activity based on my membership in a particular demographic group. I should only be accountable for what actually has occurred and is attributable specifically to me.

Understanding these prior opinions on fairness helps us to better understand the reaction to insurance credit based scoring. First past behaviors and histories are being used to project the likelihood I will file a future claim. As we saw earlier, there are strong opinions among many Iowans that this is unfair. But the numbers rejecting this particular practice of insurance credit scoring are higher and less ambiguous than when we were simply using past "information." In the prior cases the percentages finding it outright unfair and rejecting it were much smaller than in this case.

The sense of unfairness in this case is clearly more sharply felt. But is this opinion of unfairness justified? Or, would a deeper look at the issue and practices change our opinions? To look into this issue we need to examine four questions:

1. Does Insurance Credit Based Scoring accurately predict personal lines losses?
2. Is it plausible to believe that the choices persons make in managing their financial risk are connected with the choices they make managing the risks associated with driving and owning a home?
3. Do the items used by the rating agencies and insurance companies identify financially responsible and financially risky behavior?
4. If the outcomes of the process do not produce results that mimic random distributions, then is that process *ipso facto* unfair?

Let's examine each issue in more closely.

1. Does Insurance Credit Based Scoring accurately predict personal lines losses?

We begin with the question, "Does insurance credit scoring accurately predict claim filing behavior?" If the use of credit scores does not accurately predict future claim filing behavior, then it seems clear that the case for their use falls apart. In section above on the research results of our first question (pages 6-9), we provided extensive documentation that insurance credit based scoring does accurately predict personal lines losses. So to the extent to which someone's opinions about fairness is based on the belief that this method does not work, then that opinion needs to be revised accordingly.

2. Is it plausible to believe that the choices persons make in managing their financial risk are connected with the choices they make managing the risks associated with driving and owning a home?

So let's assume for the moment that the use of insurance credit scoring does accurately predict claim-filing behavior in the future. Can we grant this and still reasonably claim it is arbitrary and unfair? Maybe. We need to ask, Is there any reasonable, plausible and research supportable explanation for how it does this? What if we found a connection between my voting behavior in prior elections and my claim filing behavior? Hypothetically, let's say it turns out that we can show that a pattern of not voting in the prior six local and national elections will show a strong correlation with my claim filing behavior. Those who vote less, regardless of party affiliation, file more claims. Those who vote more file fewer claims. Would it then be unfair for insurance companies to gather and analyze people's voting behavior as part of an insurance rate setting method? If there is little to explain the connection, then it is likely that most people would oppose such practices as unfair even if there was a strong statistical correlation between the two.

Is there a plausible and understandable connection between my credit history and my claim filing behavior or is the connection arbitrary and capricious? Is there any evidence or research that might give some credence, some plausible belief that how I have managed my financial affairs might be predictive of whether or not I will likely file a claim in the future? Is it plausible that how I behave and react to and manage my risk-related affairs in one area of my life may be strongly indicative of how I will behave, react and manage my risk related affairs in other aspects of my life? Might we be looking

at patterns of risk management behavior in a person's life that are generally consistent and predictable across broad areas?

Patrick Brockett and Linda Golden argue there is a solid, plausible and research supported explanation as to why credit scoring predicts auto insurance claims. In their 2007 article, "Biological and Psychobehavioral Correlates of Credit Scores and Automobile Insurance Losses: Toward an Explication of Why Credit Scoring Works," they connect increased auto claims with a life pattern of risk-taking behavior across a multiple dimensions of a person's life (Brockett & Golden, 2007). They note in their Abstract:

However, in spite of its obvious success as an underwriting tool, and the clear actuarial substantiation of a strong association between credit score and insured losses over multiple methods and multiple studies, the use of credit scoring is under attack because there is not an understanding of why there is an association. ... Credit scoring can give information distinct from standard actuarial variables concerning an individual's biopsychological makeup, which then yields useful underwriting information about how they will react in creating risk of insured automobile losses.

Brockett and Golden review in specific detail the biological, psychological, and behavioral literature searching for characteristics of individual risk taking and sensation seeking behaviors and connect these characteristics with both financial decision making and risky driving habits. They argue that certain biochemical and psychobehavioral elements of risk taking attitudes and behavior are not confined to a specific area in life. Rather, these behaviors extend across multiple areas of a person's life. They note, citing the studies of Kellison et al, 2003, Miller and Smith, 2003 and Wu and Guszczka, 2003, that the correlation between credit scores and insurance losses persist even after the effects of traditional underwriting variables are factored out. They conclude that credit scores are, therefore, revealing a new and distinct aspect of individual risk-taking behavior.

Credit scoring "works" because it provides a numerical proxy for the biopsychobehavioral makeup of the individual that affects insurance losses. It yields additional information about one's responsibility and stability, stress level, and distractibility, all of which influence the amount of insured losses paid by the insurance company.

While Brockett and Golden focused their attention on the connection between risk taking and sensation seeking behavior in driving and financial management, Winfred Arthur, Jr. and William Graziano found a connection between driving accidents and lack of conscientiousness (Arthur & Graziano, 1996). To appreciate their study, we need some brief background on the Five Factor Model (FFM).

In 1958 and again in 1961, Ernest Tupes and Raymond Christal conducted seminal studies of Air Officers revealing that five basic factors of personality were responsible for describing a wide range of behavior (Tupes & Christal, 1958; Tupes & Christal, 1961). Subsequent studies, with minor variations, have discovered these same five factors among different subjects, regardless of age or gender and in different languages and cultures. Other studies have shown the five factors to be valid and systematically related to behavior, and to endure across decades in adults. In the last two decades, dozens of studies have used the FFM to describe and explain a wide variety behavior across multiple realms of human activity. FFM proponents believe they have discovered the basic dimensions of personality rooted in both heredity and environment.

The acronym CANOE sets forth the names of the five factors: Conscientiousness, Agreeableness, Neuroticism, Openness, and Extroversion. For purposes of this paper, it is only necessary to explain Conscientiousness. Conscientiousness is characterized by feelings of competence and capability, neatness, attentiveness to duties and responsibilities, diligence, purposefulness, self-discipline, persistence, and cautious deliberation.

In their article "The Five-factor Model, Conscientiousness, and Driving Accident Involvement." in the 1996 Journal of Personality, Arthur and Graziano employ the Five Factor Model to understanding automobile accidents. Their research revealed that in a sample 477 respondents, that results generally showed a significant inverse relationship between those who rated themselves as more disciplined, reliable, and dependable (characteristics of Conscientiousness in the Five Factor Model) and automobile accidents. This finding is consistent with a large number of other studies demonstrating a consistent pattern of relationship between Conscientiousness and other positive tasks and behavioral outcomes. Persons scoring high on the Conscientious scale tend to regulate themselves during instances of frustration and stress (Digman & Takemoto-Chock, 1981). Those prone to criminal behavior show an absence of self-control in such instances (Gottfredson & Hirschi, 1990). Conscientious persons have the lowest likelihood of a history of family alcohol abuse, and tend not abuse alcohol themselves (Martin & Sher, 1994). Lower conscientiousness was part of the profile of workers with higher absenteeism from the job (Furnham & Bradwell, 2006). One of the characteristics of pathological gamblers was a low score on the Conscientious scale (Bagby et al., 2007). Highly conscientious individuals were more likely to wear seat belts, utilize alcohol-related harm reduction, exercise, get enough sleep, and consume fruits and vegetables (Raynor & Levine, 2009).

The research on the Five Factor Model (FFM) is robust and has been shown to be effective across cultures. The evidence is clear that conscientiousness extends broadly across multiple aspects of a person's life and affects choices and behaviors consistently. So, like the research by Brockett and Golden, the FFM would indicate *there is a connection between one's financial choices and the choices one makes in one's driving (and homeownership), and those choices are driven by the degree of conscientiousness one exercises in both realms.* In this way, if insurance credit scoring is indicative of the financial choices one makes, then we would expect the behavioral basis of those choices

to be reflected in one's driving and homeowner's behavior. If this is so, then our opinions of fairness may change to reflect that recognition of the connection.

The fact that insurance credit scoring does predict claim filing behavior, together with the research on behavioral patterns that are consistent and explanatory across different aspects of our lives, strongly suggest that such a connection exists between risky behavior in one area with risky behavior in another.

Auto accidents are caused by one or more of the drivers making an error in judgment – someone took an unnecessary and unwarranted risk. If they had it to do over again, likely they would choose a different course of action because *they can now see clearly the consequences of their choices*. They would slow down, proceed with more caution, be more attentive to what is going on around them, not consume alcohol, not text-message or eat while driving. They would make better driving adjustments to the conditions instead of treating all environments as if they were sunny afternoons with high visibility, a dry pavement and no other drivers on the road. They would exercise greater awareness of their situation and cautious decision-making in their driving. In short, they would be more conscientious in the driving behavior.

Is it possible to find predictors of those who would exercise more or less conscientiousness while driving? Underwriting is in part a search for and application of the findings of those predictors. As Brockett and Golden point out:

Many underwriting variables are clearly related to the losses they are designed to predict (e.g., automated sprinkler system installation for insured fire loss, seat belt and security alarms for automobile insurance, employment activity for workers compensation insurance, etc.) and have been used for decades. Others (e.g., marital status, gender, and "good student" status in automobile insurance) are also of long standing; however, the relationship between the variable and the loss it is intended to predict is less readily apparent. *In fact, their usefulness as an underwriting variable stems from their being a proxy for stability and responsibility not from their direct link to automobile accidents.* (our emphasis). (Brockett & Golden, 2007).

The parallel case can be made with a person's financial credit choices. In retrospect, regardless of what the bank or realtor said, was it really wise for me to borrow 100% of the money for my house? How much of my monthly pay should go to my house – perhaps 50% is too much? Is it really smart to buy and charge all of these things on my credit card? How will I pay the bills if I unexpectedly get sick, injured, or fired? Are my savings sufficient to protect me in these situations? Do I need the latest of everything? I would not act as if I was on an economic highway that was sunny, with dry pavement, no curves and no others "drivers" out there. I would plan for and adjust my financial behavior based on knowing that there are very real risks out there: the economic highway has rain, curves, ups and downs and dangerous intersections. In short, now that I see the

consequences of my actions, I would do things differently. *I would exercise more conscientiousness and attentiveness to my finances.*

If we could pick out the people who do this who give more forethought, deliberate more reflectively on the choices given the financial risks they faced, then the expectation is that these same folks will also be more conscientious drivers and homeowners confronting the risks they face. Given the behavioral and statistical evidence, it is a plausible, though not an absolutely certain expectation. It would depend on a number of other factors, but certainly it is plausible to see this *as one of the factors to consider.*

3. Do the items used by the rating agencies and insurance companies identify financially responsible and financially risky behavior?

Now it is beyond the scope and expertise of the authors to know if the dozens of factors that are used in insurance credit based scoring by its various practitioners actually identify financially responsible and financially risky behavior. Some may and some may not. However, if those with this kind of expertise determine that these factors are able to pick out these financially cautious, risks averse, conscientious people then we believe the case for the fairness of the practice increases, otherwise, not.

4. If the outcomes of the process do not produce results that mimic random distributions, then is that process *ipso facto* unfair?

Since the insurance credit based method does not use race or ethnicity as a factor, there can be no direct discrimination. But there is some evidence, inconclusive and mixed, that, although racial and ethnic minorities are found at all levels of insurance credit scores, they are "over represented" in the bottom scores, "over represented" being under defined. This taken by critics that this is, *de facto*, unfair. Borrowing a concept from employment law and practice, they claim it amounts to either adverse impact or adverse selection or both. Defenders of insurance credit based scoring counter by saying that clearly there is no overt discrimination and that it is improper to import employment-based concepts into the insurance area and that if turns out that it is proper then under the employment practices model, adverse impact/selection is allowable so long as there is a valid business reason.

Rather than address this question directly, we would like to explore why people may have different opinions about what is fair under such a situation as this.

Let's begin with the question: Does fairness mean that an equal percentage of each and every ethnic /economic group be represented in each category? That their representation in each category would be roughly the same as in the general population?

Suppose,

1. The Coodbeyoo represent 15% of the population of Welivehere.

2. There are 10 rating categories – from the worse to best categories of insurance rates.

Does fairness require that roughly 15% of each category be composed of Coodbeyoos? Suppose there are 100,000 people in Welivehere. Most simply, 10,000 people would be found in each of the ten categories. Hence, do you expect that if the distribution were fair then roughly 1,500 Coodbeyoo would be in each category?

So that we think that fairness in the distribution of Coodbeyoos should approximate what we would produce if we randomly dropped marbles into a set of ten boxes. If we had 100,000 marbles of which 15,000 were blue marbles, we would about 1,500 blue marbles in each box. Fairness under this understanding is closely tied with a strong notion of numerically equal distributions.

What if Welivehere was an elite university and the Coodbeyoo were those students whose parents did not go to college. We rank student performance in 10 performance categories. Would we expect those students to be equally distributed in each one of the performance categories?

What if the evidence showed that Coodbeyoo were more likely to be in the bottom categories, although there were Coodbeyoo in all categories and the professors had no records indicating who the Coodbeyoo in their classes were. No one knows exactly why the Coodbeyoo are over represented (in comparison to a random selection distribution). Speculations abound on the reason behind the correlation.

Would this be an indication of an unfair grading system? Does this non-random distribution indicate some hidden bias against the Coodbeyoo? Have the Coodbeyoo been treated unfairly as a group? Should we change the grading system so that the distribution of Coodbeyoo more closely resembles the random distribution of blue marbles?

Let's say we did change the grading system and now we have a distribution of Coodbeyoo that more closely resembles the random distribution of blue marbles.

So now we ask you to vote choose between the two systems on the basis of what is more fair?

Which would you choose between the two? Do you choose the original grading system where Coodbeyoo were "over represented" in the bottom groups? Or do you choose the new grading system that distributes the Coodbeyoos more equally across the performance categories?

Does the fact that the new system produces a more random like result *make it appear to be more fair*? We think most people's intuition would be that it does and they would choose the second system.

But, suppose we understand that grades are meant to distinguish among students who perform well or poorly on a variety of academic tasks. Let's say the second system does that, but it does not do it as well as the first system: it looks at fewer tasks, aggregates the performance differently, etc. Then we might plausibly argue it less fair because those that performed the academic tasks better would not be properly measured and rewarded. In that case, people's intuitions may be that the first system was more fair.

But that may not hold true with everyone. Suppose it turns out that student grades have a big impact on who gets hired and what they are paid following graduation. *Then the effect of each system on the lives of the Coodbeyoo will be significantly different.* Under the first system, Coodbeyoo alumni, as a group, are not as likely to earn as much over their lifetime, as their non-Coodbeyoo classmates. Does our intuition on fairness still hold?

Could we hold that yes the first system does a better job of distinguishing academic performance but the second one a) still distinguishes academic performance and b) the difference between the two grading systems is not so large that we should allow it determine a person's life time earnings? We think many of us would hold, looking at the whole picture not just what happens the university, the second system would be more fair.

But this assumes that the effect on the non-Coodbeyoo is neutral. What if the change in the grading system negatively affects their postgraduate earning power? If we implement the second system then their earning potential drops by a significant percent because it does not accurately report their true abilities. Suddenly we might lurch back in the other direction.

The Coodbeyoo example reflects the situation with ICBS. Proponents believe the method is fair because *the process is the most accurate predictor of claims filing behavior* and the method, like the Coodbeyoo professors, does not have information on race or income levels. That they use a fair process allows them to call the results fair. Not only that, but we will not be able to benefit those with lower scores without increasing the rates of the others in the pool which would be unfair to them. So the process is fair and so is the outcome.

Some opponents believe that because the distribution of certain groups does not resemble a random dropping of blue marbles into multiple boxes *then ipso facto the system is unfair in its outcomes* as it relates to *the consequences* for low-income insureds.

These differences of the intuitions of fairness are difficult to reconcile and overcome.

We think all should agree that the process itself must be impartial and do what it says: it does not identify race, ethnicity or income and it does predict losses. If these are true, *then we have a fair process and that is important.*

But what about the outcomes? It is hard to imagine that we would not consider the effects of the process if for no other reason than to see if it can be improved. But in examining the outcomes, we cannot escape the fact that those with higher credit scores will pay more if we abandon their use. We also think we would be hard pressed to find any system where the distribution of the benefits and burdens of social cooperation end in a distribution pattern that mimics random selection.

Perhaps, we might ask, "Do we think of fairness as a yes/no matter – like an on/off switch or is fairness to be thought of as matter of degree – like a dimmer switch?" Upon reflection, we think most people would see it as a matter of degree. We do not expect any process to produce perfect results. *Rather, we are looking to see if this rating process generally and for the most part picks out those people whose behavior creates extra losses in the system for which they are, at least in part, responsible.* We can believe this and still believe that certain individuals are being unfairly burdened by the process because it takes no account of their personal situation.

Credit scores play "...an increasingly critical role in determining the financial fortunes of consumers:..." (Washington Post, 2009). Use of credit scores in making the determination of risk and subsequent pricing is often justified by the belief that low credit scores are a result of a series of bad decisions (Glater, 2009). While true, it is only one cause of low credit scores. Low credit scores can also be caused by death, divorce, incarceration, military deployments, major medical problems, etc. Some of these are not the fault of the individual, and could possibly be traced to insensitivity or even vindictiveness on the part of entities reporting to the credit agencies.

Can we find a way to address this? Let's return to case of youthful driver rating and the unfair way in which our exemplary youth is treated by being lumped in with his less than conscientious brethren. Insurance companies do find ways to make allowances for this through a variety of mechanisms: good student discounts (which signal more conscientious behavior in school and suggest more conscientious behavior behind the wheel), reduction in rates for extended periods of time without accidents or moving violations (again suggestive of more conscientious behavior), etc.

Could we not find a comparable mechanism in these cases – a few objective indicators that this person did not act in a less than conscientious fashion but was a victim of circumstance beyond his/her control? If such a method could be developed, then we might believe that the process was more fair.

We would also expect the careful and constant examination of the factors that are used in insurance credit based scoring by its various practitioners to ensure they actually identify financially responsible and financially risky behavior. This, too, would make the system more fair.

Research question #4: Do minorities receive a disproportionate share of "adverse action" letters from insurers?

With respect to the question whether minorities are disproportionately receiving adverse insurance actions based on their credit scores we asked in Question 26: Have you ever received a letter from your insurance company stating that your insurance rates had been raised due to your credit score? The results were:

Yes: 60

No: 1,135

Don't know: 45

The 60 who acknowledged receiving an adverse action notification constitute an insufficient sample size upon which to run a chi-square test to compare the results against the racial demographics. However, visual inspection of the survey numbers (57 white, 3 minorities) compares very closely with the expectations (56.3 white, 3.7 minorities) based upon the Iowa demographics showing the population to be 93.9% white.

We did find adverse actions disproportionate to their numbers in the 25 - 34 age group, and the \$40,000 - \$59,999 income group.

Question 27 asked: "Has your insurance agent ever shared with you how your credit score affects your auto and homeowners' insurance rates?"

The results of this inquiry are:

Yes: 82

No: 1,097

Don't know: 61

It should also be pointed out that of the 60 adverse actions noted above, 19 (32%) acknowledged that their insurance professional had shared with them the effects of credit scores on insurance pricing. 39 (65%) stated that they were unaware, and 2 (3%) acknowledged that they did not know whether their agent had shared this information with them. Based on the results of another study, 71% of insurance professionals stated that they share this information with their clients (O'Leary et al., 2009). Across the entire database, only 7% of recipients of adverse actions acknowledged that they had been so notified. This may be a case of selective memory, or the agents believe that perhaps including such information in the fine print constitutes notification. Nothing more can be inferred.⁵

Credit scores play "...an increasingly critical role in determining the financial fortunes of consumers:..." (Washington Post, 2009). Use of credit scores in making the determination of risk and subsequent pricing is often justified by the belief that low credit

⁵ There is litigation concerning insurance companies' handling of adverse actions (Total Lawyers, n. d.).

scores are a result of a series of bad decisions (Glater, 2009). While true, it is only one cause of low credit scores. Low credit scores can also be caused by death, divorce, incarceration, military deployments, major medical problems, etc. Some of these are not the fault of the individual, and could possibly be traced to insensitivity or even vindictiveness on the part of entities reporting to the credit agencies.

Conclusions and Recommendations

As the Iowa Insurance Commissioner's Office and elected representatives consider how to respond to the controversies surrounding the use of insurance credit scoring, we believe they will find it valuable to understand the various opinions Iowans hold. Most Iowans believe that the use of credit scores to set rates is unfair. These opinions seem to be based on widely-held, but incorrect, perceptions that credit scores are not predictive of risky behavior that might lead to a tendency to file claims. There does not appear to be a factual basis for these opinions. For this perception to be true, the following conditions would have to be true:

1. Insurance Credit Based Scoring does not accurately predict personal lines losses.
2. The choices a person makes in managing their financial risk are not plausibly connected with the choices they make managing the risks associated with driving and owning a home.
3. The items used by the rating agencies and insurance companies do not identify financially responsible and financially risky behavior.
4. If the outcomes of the process do not produce results that mimic random distributions then the process is *ipso facto* unfair.

Our examination shows that Item 1 is clearly and demonstrably false. For Item 2, we saw there is plausible behavioral theory and research to connect risk behaviors and management across multiple dimensions of a person life. For Item 3, experts in managing financial risk generally agree these are relevant factors. Item 4, is highly debatable. If any of these conditions changed then we would have to re-examine our conclusion but given what we believe to be the case today, the belief that this is unfair lacks the necessary justification for the claim.

We suggest that the best way to look at the fairness question is not to see the practice as fair or unfair but to look at as more or less fair. For something to be thought of as fair it is not necessary that there be no examples of unfairness. Rather that the process is impartial and produces largely and for the most part fair individual outcomes. Where it does not, then there should exist some mechanism to address the imperfection in the process. We also believe that legislators and policy makers should make a careful evaluation of these opinions, especially as they relate to fairness. It will be necessary to examine critically the issues at stake before pursuing any ban on the use of credit scores to set insurance rates.

Consumers are seriously uninformed about insurance fundamentals. Iowa consumers do not have a clear notion of what it means to spread the risk. Although individuals are surcharged based on what they individually have done, the base premium is built around large group characteristics. If the large groups are reduced to smaller groups of individuals based on increasingly isolated variables, then the base premium of insurance will become unaffordable to those who need it the most. A policy recommendation to the legislature might include a block of instruction at the high school level on both insurance and the wide-ranging effects of credit scores. This need not be a semester length course, but should be included with training for other adult skills like maintaining a checkbook and the use of credit cards, etc.

There is no evidence within this study to suggest that the minority population of Iowa is disproportionately subjected to adverse actions based on the use of credit scores.

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Authors Profile

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Thomas J. Quinlan, Jr. has retired as an Associate Professor of Finance, Economics, and Decision Sciences in the College of Business at Saint Ambrose University. He taught statistics and operations management at both graduate and undergraduate levels. In a prior career, Dr. Quinlan developed the industrial modernization plan for Rock Island Arsenal. He investigated unexplored areas of manufacturing technology and determined independently the technical action necessary to accomplish objectives, facets of which extended beyond available precedents and guidelines. Dr. Quinlan is currently involved in assessing the efficacy of continuing education for insurance professionals. He received his Bachelor of Science degree from Drexel University, and he holds M.B.A. and D.B.A degrees from St. Ambrose University. He joined the St. Ambrose University faculty in 1989 after a career in the United States Army.

Patrick O'Leary teaches management and international business at St. Ambrose University. Born and raised in Ireland, he received his graduate degrees from the Universities of Washington and Iowa. He has taught management in diverse regions of the world, spending several years in Japan and Dubai, and has been a visiting professor at colleges in Russia and Croatia. His research interests are in cross-cultural management as well as service efficiency and effectiveness. Presently he is investigating the efficacy of continuing education for insurance professionals as well as the rationale for different approaches to the valuation of illiquid assets. He has been published in the International Journal of Health Care Quality Assurance, Ivey Publishing, the American Journal of Distance Education, and others.

Appendix

Descriptive results for the individual questions follow:

Question 1: Do you have auto insurance?

Yes: 1,152

No: 88

Question 2: Do you have homeowners insurance?

Yes: 985

No: 255

Question 3: Do you know your credit score?

Yes: 501

No: 739

Question 4: To your knowledge, which of the following does a credit score MAINLY indicate? RANK TOP THREE

Summary	
Knowledge of consumer credit	1,026
Attitude toward consumer credit	710
Amount of consumer debt	1,969
Risk of not repaying a loan	1,980
Financial resources to pay back loans	1,515
Don't know	347

These are weighted scores. First choice is multiplied by 3; second choice is multiplied by 2; and third choice is counted. The intention of the weighting is to give credibility to the respondents' choices relative to importance.

Question 5: Which of the following best describes insurance companies' use of credit score? Select ONE only

Summary	
Predicts the likelihood of risky behavior	459
Predicts the likelihood that a person will not be able to pay for insurance	360
Predicts the likelihood that a person will file an auto or homeowners' insurance claim	108
Predicts the likelihood that a person will file false auto or homeowners' insurance claims	65
Don't know	248

To ascertain whether male and female respondents answered this question similarly, a chi-square goodness-of-fit test was conducted. The test shows that males and females had significantly different answers (p-value = 0.0006). The major difference is that male respondents, disproportionately to female respondents, believed that insurance companies use credit scores to predict the likelihood that a person will file an auto or homeowners' insurance claim. The other, less significant, difference was that a disproportionately higher number of female respondents suggested that they did not know which of the choices best described an insurance company's use of credit scores.

Question 6: Do you think your personal credit score should affect your ability to buy auto insurance?

Yes: 237

No: 906

Don't know: 97

Margin of error = $\pm 2.2\%$

Question 7: Do you think your personal credit score should affect the rates you pay for auto insurance?

Yes: 291

No: 878

Don't know: 71

Margin of error = $\pm 2.4\%$

Question 8: Do you think your personal credit score should affect your ability to buy homeowner's insurance?

Yes: 208
No: 966
Don't know: 66
Margin of error = $\pm 2.1\%$

Question 9: Do you think your personal credit score should affect the rates you pay for homeowner's insurance?

Yes: 285
No: 880
Don't know: 75
Margin of error = $\pm 2.3\%$

Question 10: A person's credit score is a good predictor of how likely they are to file an auto or homeowners' insurance claim.

Agree: 174
Disagree: 686
Neutral: 380
Margin of error = $\pm 1.9\%$

See also question #5. 108 of 1240 suggested this as a potential use by insurance companies.

Question 11: A person's auto insurance premium IS based primarily on their: RANK TOP THREE by selecting 1, 2 and 3 next to them

Summary	
Age	2,508
Gender	1,133
History of auto accidents and/or moving violations	2,756
Credit score	594
Number of miles driven annually	991
Other	251

Question 12: Insurance companies should be allowed to use all publicly available data to determine an individual's insurance risk and premium

Agree: 421
Disagree: 444
Neutral: 375
Margin of error = $\pm 2.6\%$

Question 13: People with a higher likelihood of filing insurance claims should pay higher premiums

Agree: 568
Disagree: 296
Neutral: 376
Margin of error = $\pm 2.7\%$

Question 14: A person's auto insurance premium SHOULD BE based primarily on their: RANK TOP THREE by selecting 1, 2 and 3 next to them

Summary	
Age	2,051
Gender	625
History of auto accidents and/or moving violations	3,130
Credit score	390
Number of miles driven annually	1,427
Other	327

Question 14, along with question 11, represent a perception/expectation pair, and there are visibly different responses between perceptions (IS) and expectations (SHOULD BE). Analysis of variance techniques showed that the differences are not statistically significant. History of accidents is perceived to be primary in both.

Question 15: Have you ever obtained a copy of your credit report (in addition to or separate from your credit score)?

Yes: 730
No: 464
Don't know: 46

A similar question "Have you ever viewed your credit report?" was asked in a GAO survey (Government Accountability Office, 2005). 58% responded that they had.⁶

Question 16: It is fair practice to charge law-abiding and low-risk individuals higher insurance rates simply because they are part of a group that engages in risky behavior (for example, teenage drivers)?

Agree: 367
Disagree: 570
Neutral: 303
Margin of error = $\pm 2.5\%$

⁶ It should be noted that credit reports can be obtained free annually from <http://www.annualcreditreport.com>

A chi-square contingency table test for this question compared the *Agree/Disagree/Neutral* responses against age groups and found that the age group most adversely affected by this practice (18 – 24) was the only one that had a plurality agreement. It is possible that this result could be attributed to youthful idealism or naïveté. (P-value = 0.0003, a very definitive result).

Question 17: People with poor credit scores should pay higher auto insurance rates

Agree: 144

Disagree: 802

Neutral: 294

Margin of error = ± 1.8%

Question 18: Have you ever had an auto accident for which you did not file a claim?

Yes: 549

No: 691

Question 19: If yes to above question 18, did you

Summary	
Go without repairs?	141
Pay the expenses out-of-pocket?	249
Allow other party to pay?	104

Question 20: If you had an auto accident for which you did not file a claim, approximately how much did the repairs cost?

Based on the frequency distribution, the median is \$401.34. In many cases, the amounts reported as repairs were less than the deductibles. This explains the reason for non-reporting. Because of an open-ended class, neither the standard deviation nor the mean can be estimated.

Question 21: If you had an auto accident for which you did not file a claim -- why did you not report it?

The most common reasons given involved minimal damage and amounts less than deductible (223), fear of premium increases (82), and several reasons with frequencies of fewer than 15 each. These included uninsured, insufficient coverage, the “hassle” of filing claims, and damage that exceeded the value of the vehicle.

Question 22: Have you ever had damage to your home for which you did not file a claim?

Yes: 291

No: 949

Question 23: If yes to above question 22, did you

Summary	
Go without repairs?	57
Pay the expenses out-of-pocket?	57
Allow other party to pay?	0

Question 24: If you had damage to your home for which you did not file a claim, approximately how much did the repairs cost?

Based on the frequency distribution, the median is \$614.55. The amounts reported as repairs were frequently less than the deductibles. This explains the reason for non-reporting. Because of an open-ended class, neither the standard deviation nor the mean can be estimated.

Question 25: If you had damage to your home for which you did not file a claim -- why did you not report it?

The most common reasons given involved minimal damage and amounts less than deductible (152), fear of premium increases (74), insufficient coverage (20), and several reasons with frequencies of fewer than 10 each. These included uninsured, the "hassle" of filing claims, damage that exceeded the value of the property, and ignorance of policy provisions.

Question 26: Have you ever received a letter from your insurance company stating that your insurance rates had been raised due to your credit score?

Yes: 60

No: 1,135

Don't know: 45

Question 27: Has your insurance agent ever shared with you how your credit score affects your auto and homeowners' insurance rates?

Yes: 82

No: 1,097

Don't know: 61

Question 28: People with poor credit scores should pay higher homeowner insurance rates

Agree: 133

Disagree: 779

Neutral: 328

Margin of error = $\pm 1.7\%$

Question 29: If some factor in your background indicates that you are more likely to file an insurance claim than other people, then it is FAIR that you pay a higher rate for the same insurance product.

Agree: 361

Disagree: 499

Neutral: 380

Margin of error = $\pm 2.5\%$

Question 30: Is your age between

18-24: 98

25-34: 161

35-44: 189

45-54: 310

55-65: 321

Over 65: 161

Question 31: Are you

Male: 474

Female: 766

Question 32: Education level

Some High School: 12

High School diploma: 365

Associates degree: 220

Bachelor's degree: 249

Masters: 155

Doctorate: 103

Other, please specify: 136

Question 33: Marital status

Currently married: 679

Formerly married: 379
Never married: 182

Question 34: Number of dependents

Mean = 1.407
Standard deviation = 0.036

Question 35: How would you describe yourself?

Caucasian (White): 1,152
African-American (Black): 46
Hispanic/Latino: 12
Native American (Indian): 7
Asian: 4
Other: 19

Question 36: Employment

Full-time worker: 597
Part-time worker: 141
Student: 43
Homemaker: 95
Retired: 242
Unemployed: 75
Other: 47

Question 37: Job title, if applicable

Not used.

Question 38: Residential ZIP code

Metropolitan area: 802
Non-metropolitan area: 439

Question 39: Household income last year - includes salaries, pensions, social security and other money received.

Less than \$20,000: 195
\$20,000 - 39,900: 288
\$40,000 - 59,900: 296
\$60,000 - 79,900: 203
\$80,000 or more: 258

**A REPORT TO THE LEGISLATIVE COUNCIL AND THE
SENATE AND HOUSE COMMITTEES ON INSURANCE
AND COMMERCE OF THE ARKANSAS GENERAL ASSEMBLY
(AS REQUIRED BY ACT 1452 OF 2003)**

**USE AND IMPACT OF CREDIT IN PERSONAL
LINES INSURANCE PREMIUMS PURSUANT TO
ARK. CODE ANN. § 23-67-415**



**Prepared by: William R. Lacy, Property & Casualty Division Director
Arkansas Insurance Department**

Approved by: Jay Bradford, State Insurance Commissioner

Date Submitted: June 12, 2009

**2009 REPORT TO THE LEGISLATURE REGARDING THE USE AND IMPACT OF
CREDIT IN PERSONAL LINES INSURANCE PREMIUMS PURSUANT TO
ARK. CODE ANN. § 23-67-415 (Act 1452 of 2003)**

INTRODUCTION

Ark. Code Ann. § 23-67-415 (Act 1452 of 2003) requires all property and casualty insurance companies that write certain personal lines insurance products and use consumer credit information to report the effect of the use of credit information on premiums not later than March 31 of each year.

In 2004, the Commissioner issued a Bulletin requiring all companies writing personal lines and using credit to file a report providing the required information¹.

THE ACT

Act 1452 of 2003 (the Act) is commonly referred to as the NCOIL² Model which was developed to address the use of credit and insurance scoring in personal lines insurance. The Act covers both the use of credit in determining a consumer's premium and the use of credit in underwriting. The Act prohibits several types of events from being considered when evaluating a consumer's credit;³ affords many rights to the consumer⁴ consistent with the Federal Fair Credit Reporting Act (FCRA);⁵ requires a specific notice to the consumers who are applying for insurance⁶ and imposes, consistent with existing law, certain actuarial justifications that must be met before a company may use credit⁷.

The effect of credit information derived from a consumer report is outlined in this report. Credit derived from a consumer report may be used in underwriting and rating personal lines of insurance⁸. To the extent credit information is used, it cannot be the sole factor in determining whether someone can obtain insurance or the amount to be paid for the coverage⁹. The FCRA determines what constitutes a consumer report and provides safeguards for correcting errors in a database containing a consumer's credit, personal, or lifestyle information. Arkansas adds an additional notice when a consumer applies for insurance or seeks a quote. This notice informs the consumer that credit will be used in conjunction with other factors to determine whether coverage will be offered and at what price.

¹ Bulletin 14-2004, Use of Credit Information under Ark. Code Ann. § 23-67-415 in Personal Insurance (attached as Exhibit 8 to this report)

² National Conference of Insurance Legislators

³ Ark. Code Ann. §§ 23-67-405 and 411

⁴ Ark. Code Ann. §§ 23-67-406 and 408

⁵ 15 U.S.C. §§ 1681 *et seq.*

⁶ Ark. Code Ann. § 23-67-407

⁷ Ark. Code Ann. §§ 23-67-201 through 212, 405 and Rule 23

⁸ 15 U.S.C. § 1681a(d)(1)(A)

⁹ Other factors considered usually involve past claims history, the specific property to be insured, the value of the property, driving experience and other factors related to the risk. Credit is simply one of the many factors considered.

COMPILATION OF DATA

The Act requires the Commissioner to report to the Legislature in the aggregate¹⁰:

- (1) Policies written during the preceding year;
- (2) Policies that received a premium increase due to credit scoring during the preceding year;
and
- (3) Policies that received a premium decrease due to credit scoring during the preceding year.

All insurers using credit as a rating component for the following lines reported as required by the Act.

- Private Passenger Automobile
- Homeowners
- Motorcycle
- Non-commercial Dwelling/Fire
- Non-commercial Farmowners
- Personal Watercraft
- Boat
- Snowmobile
- Recreational Vehicle

In 2008, 250 companies reported premium derived from personal lines of insurance. Total premium for those lines during 2008 exceeded \$1,960,407,118.

Of those:

- 128 insurers writing \$1,872,885,762 in premium utilized credit in determining the final premium.
- 122 insurers writing over \$87,521,356 in premium did not utilize credit in determining the final premium.

AGGREGATE TOTALS FOR ALL PERSONAL LINES

During 2008 for all personal lines coverages:

- **3,033,996** policies were written or renewed that involved the use of credit as one of the factors contributing to the final premium.
- **1,270,789** policies (**41.9%**) resulted in the premium being **DECREASED**.
- **395,617** policies (**13.0%**) resulted in the premium being **INCREASED**.
- In the remaining **1,367,590** policies (**45.1%**), credit was a **NEUTRAL FACTOR** and did not contribute to or change the final premium.
- For those policies in which credit played some role in determining the final premium, those receiving a decrease outnumbered those who received an increase by **3.21 to 1**.
- **87%** of consumers either received a discount for credit or it had no effect on their premium.

¹⁰ Ark. Code Ann. §23-67-415(b)

PRIVATE PASSENGER AUTOMOBILE INSURANCE AND CREDIT

During 2008 for private passenger automobile coverages:

- 2,038,813 policies were written or renewed that involved the use of credit as one of the factors contributing to the final premium.
- 979,275 policies (48.03%) resulted in the premium being **DECREASED**.
- 302,666 policies (14.85%) resulted in the premium being **INCREASED**.
- In the remaining 756,872 policies (37.12%), credit was a **NEUTRAL FACTOR** and did not contribute to or change the final premium.
- For those policies in which credit played some role in determining the final premium, those receiving a decrease outnumbered those who received an increase by **3.24 to 1**.
- **85.2%** of consumers either received a discount for credit or it had no effect on their premium.

HOMEOWNERS INSURANCE AND CREDIT

During 2008 for homeowners coverages:

- 612,026 policies were written or renewed that involved the use of credit as one of the factors contributing to the final premium.
- 209,347 policies (34.2%) resulted in the premium being **DECREASED**.
- 63,859 policies (10.4%) resulted in the premium being **INCREASED**.
- In the remaining 338,820 policies (55.4%), credit was a **NEUTRAL FACTOR** and did not contribute to or change the final premium.
- For those policies in which credit played some role in determining the final premium, those receiving a decrease outnumbered those who received an increase by **3.28 to 1**.
- **89.6%** of consumers either received a discount for credit or it had no effect on their premium.

OTHER PERSONAL LINES

During 2008, for other personal lines:

- 383,157 policies were written or renewed that involved the use of credit as one of the factors contributing to the final premium.
- 82,167 policies (21.4%) resulted in the premium being **DECREASED**.
- 29,092 policies (7.6%) resulted in the premium being **INCREASED**.
- In the remaining 271,898 policies (71%), credit was a **NEUTRAL FACTOR** and did not contribute to or change the final premium.
- For those policies in which credit played some role in determining the final premium, those receiving a decrease outnumbered those who received an increase by **2.82 to 1**.
- **92.4%** of consumers either received a discount for credit or it had no effect on their premium.

SUMMARY

Act 1452 required each insurance company using credit as a component in determining an insured's premium to report to the Commissioner. A compilation of these reports indicate a little more than half of the insurers writing personal lines insurance utilize consumer credit. The data also indicates that 87% of consumers whose premium involved a credit component either received a lower premium or their premium was unaffected. Overall 41.9% of consumers received some decrease in their premium as compared to only 13.0% who received some increase in their premium.

The companies using credit wrote 95.5% of the personal lines premium volume in Arkansas during 2008.

EXHIBITS

The following are attached as exhibits to this report:

- Exhibit 1: Results for Insurers Using Credit
- Exhibit 2: Results for Insurers Using Credit – Other Lines
- Exhibit 3: Impact of Credit – All Personal Lines
- Exhibit 4: Impact of Credit - Percent
- Exhibit 5: Credit Use in Private Passenger Auto
- Exhibit 6: Credit Use in Homeowners
- Exhibit 7: Changes from 2008 Report (2007 data)
- Exhibit 8: Bulletin 14-2004

**Exhibit 1
Results for Insurers Using Credit**

Personal Lines	Private	Homeowners	Other	Totals
	Passenger Auto			
Policies written during the preceding calendar year	2,038,813	612,026	383,157	3,033,996
Policies that received a premium increase due to credit scoring during the preceding calendar year	302,666	63,859	29,092	395,617
Policies that received a premium decrease due to credit scoring during the preceding calendar year	979,275	209,347	82,167	1,270,789
Policies upon which Credit had no effect	756,872	338,820	271,898	1,367,590

Effect of Credit - Percent	Private	Homeowners	Other	Totals
	Passenger Auto			
No Effect	37.1%	55.4%	71.0%	45.1%
Increase	14.8%	10.4%	7.6%	13.0%
Decrease	48.0%	34.2%	21.4%	41.9%
Total Neutral and Decrease	85.2%	89.6%	92.4%	87.0%

Ratio Decrease:Increase	3.24:1	3.28:1	2.82:1	3.21:1
Decreases as a percent of subset of policies where credit affected the final premium	76.4%	76.6%	73.9%	76.3%

Exhibit 2
Results for Insurers Using Credit – Other Lines

Other Personal Lines Using Credit	Motorcycle	Mobile Home	Non Commercial Dwelling/Fire	Non Commercial Farmowners	Personal Watercraft	Boat	Snow mobile	Recreational Vehicle	Totals
Policies written during the preceding calendar year	69,808	23,740	138,958	4,383	5,629	78,879	404	61,356	383,157
Policies that received a premium increase due to credit scoring during the preceding calendar year	15,465	1,343	3,750	21	361	5,613	0	2,539	29,092
Policies that received a premium decrease due to credit scoring during the preceding calendar year	33,910	5,559	4,049	2,509	1,495	19,548	1	15,096	82,167
Policies upon which Credit had no effect	20,433	16,838	131,159	1,853	3,773	53,718	403	43,721	271,898

Effect of Credit - Percent	Motorcycle	Mobile Home	Non Commercial Dwelling/Fire	Non Commercial Farmowners	Personal Watercraft	Boat	Snow mobile	Recreational Vehicle	Totals
No Effect	29.3%	70.9%	94.4%	42.3%	67.0%	68.1%	99.8%	71.3%	71.0%
Increase	22.2%	5.7%	2.7%	0.5%	6.4%	7.1%	0.0%	4.1%	7.6%
Decrease	48.6%	23.4%	2.9%	57.2%	26.6%	24.8%	0.2%	24.6%	21.4%
Total Neutral or Decrease	77.8%	94.3%	97.3%	99.5%	93.6%	92.9%	100.0%	95.9%	92.4%

Ratio Decrease:Increase	2.19:1	4.14:1	1.08:1	119.48:1	4.14:1	3.48:1	N/A	5.95:1	2.82:1
Decreases as a percent of subset of policies where credit affected the final premium	68.7%	80.5%	51.9%	99.2%	N/A	77.7%	100.0%	85.6%	73.9%

Exhibit 3
Impact of Credit – All Personal Lines

Effect of Credit - ALL Personal Lines

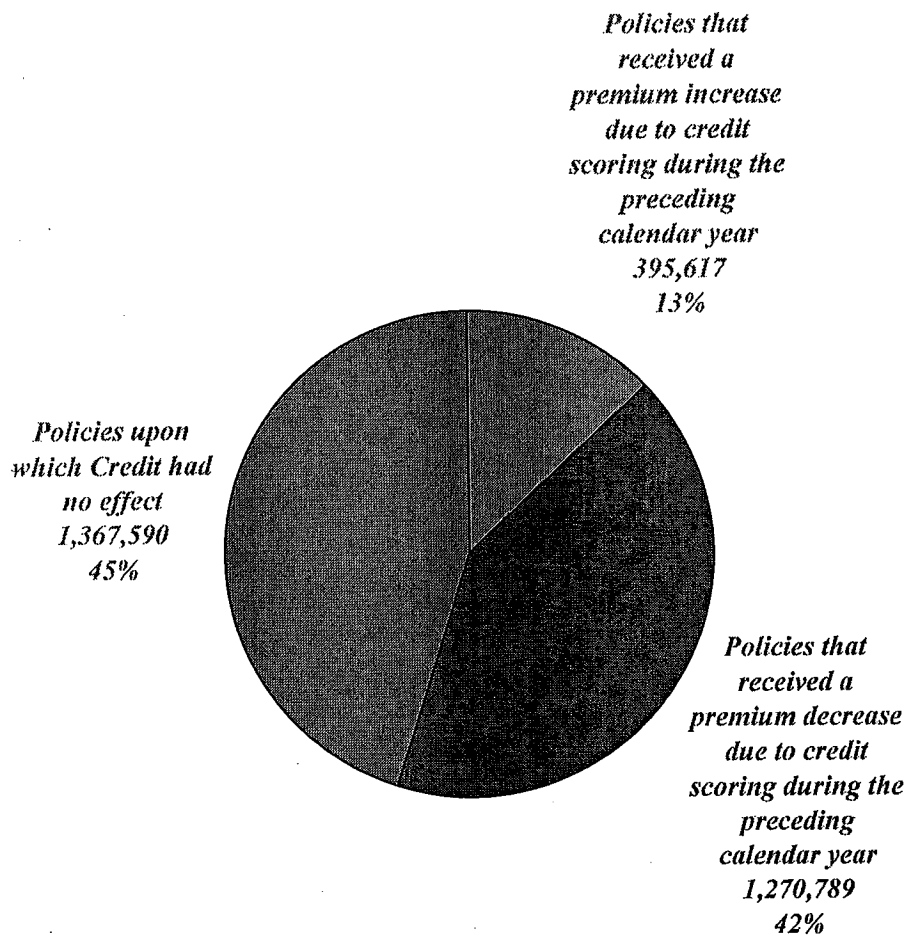


Exhibit 4
Impact of Credit - Percent

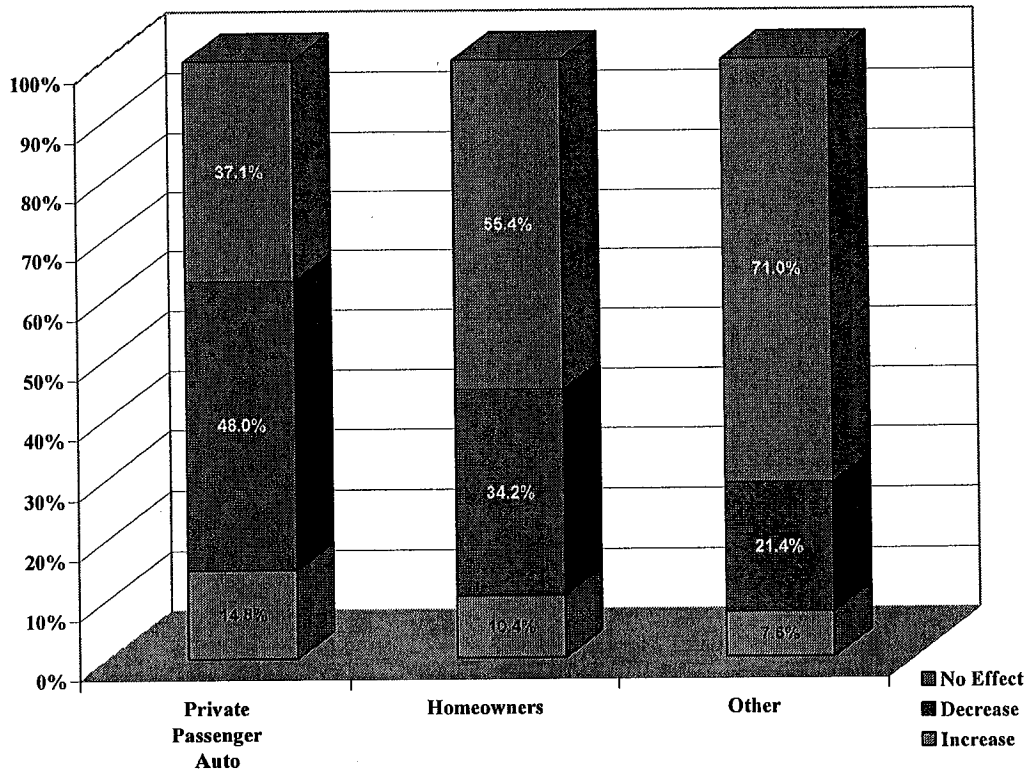


Exhibit 5
Credit Use in Private Passenger Auto

Effect of Credit -Private Passenger Auto

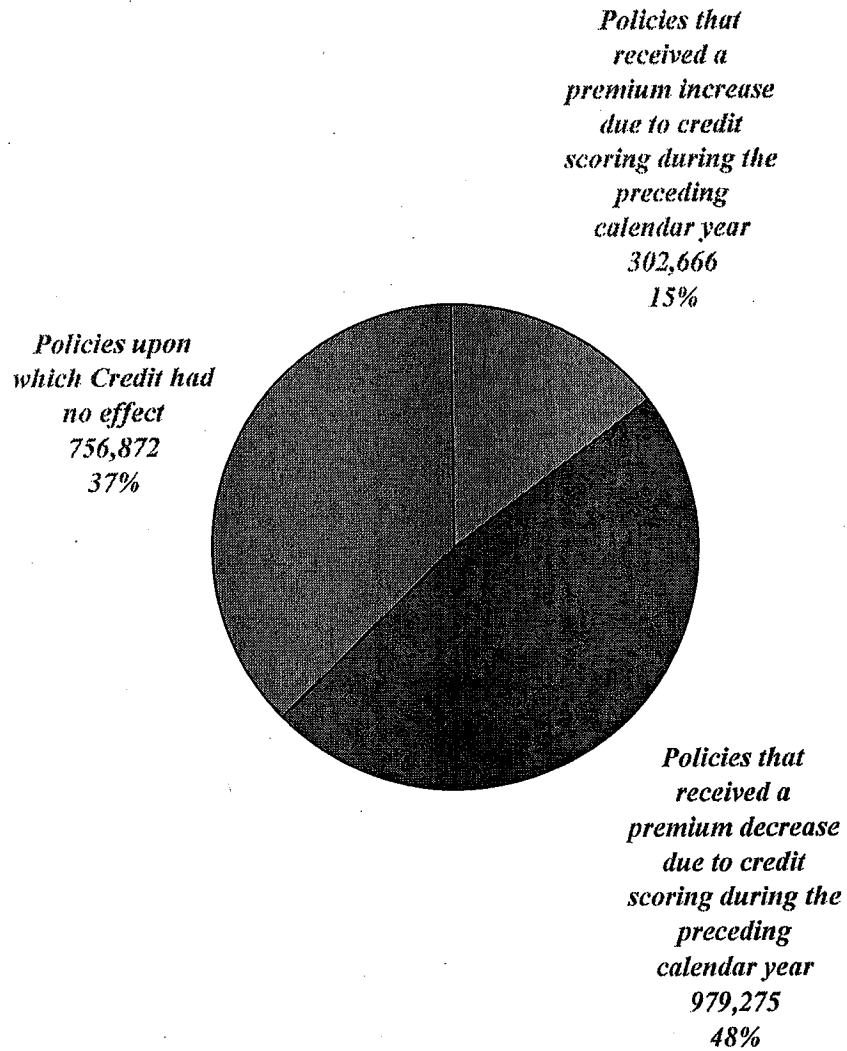
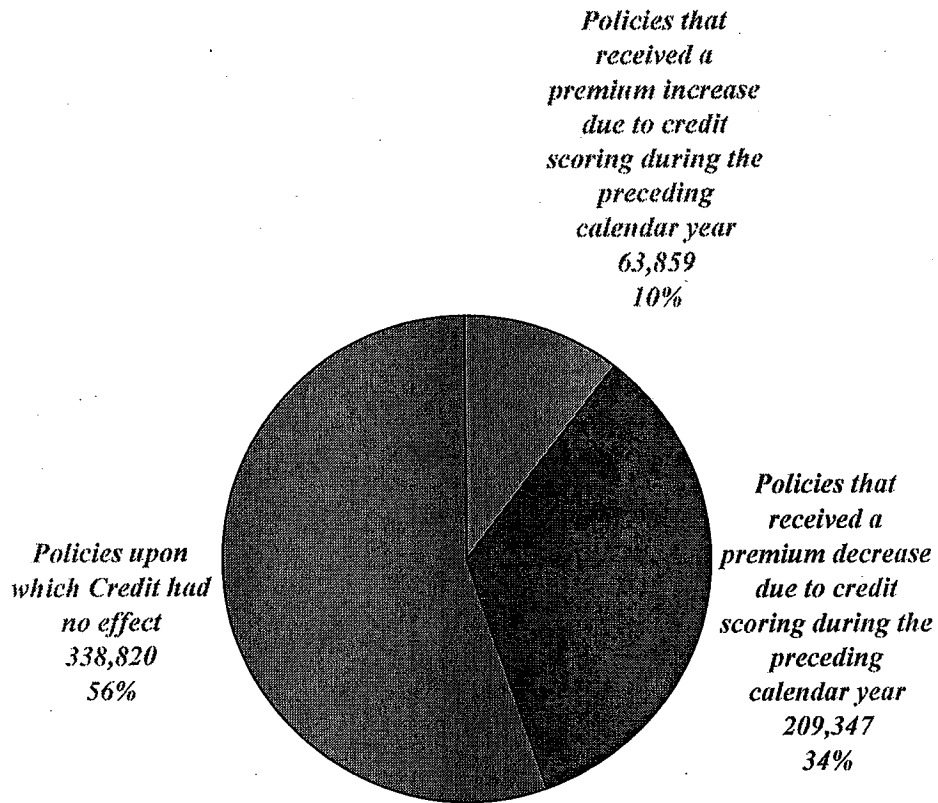


Exhibit 6
Credit Use in Homeowners

Effect of Credit - Homeowners



**Exhibit 7
Changes from 2007**

2007 Data Companies Using Credit Policies	Private Passenger			Totals
	Auto	Homeowners	Other	
Policies	2,040,670	621,712	363,710	3,026,092
Increases	226,397	31,817	19,458	277,672
Decreases	731,320	147,546	77,507	956,373
No Effect	1,082,953	442,349	266,745	1,792,047

2008 Data Companies Using Credit Policies	Private Passenger			Totals
	Auto	Homeowners	Other	
Policies	2,038,813	612,026	383,157	3,033,996
Increases	302,666	63,859	29,092	395,617
Decreases	979,275	209,347	82,167	1,270,789
No Effect	756,872	338,820	271,898	1,367,590

Difference between years Data Companies Using Credit Policies	Private Passenger			Totals
	Auto	Homeowners	Other	
Policies	-1,857	-9,686	19,447	7,904
Increases	76,269	32,042	9,634	117,945
Decreases	247,955	61,801	4,660	314,416
No Effect	-326,081	-103,529	5,153	-424,457

Difference between years Data Companies Using Credit Policies	Private Passenger			Totals
	Auto	Homeowners	Other	
Policies	-0.1%	-1.6%	5.3%	0.3%
Increases	33.7%	100.7%	49.5%	42.5%
Decreases	33.9%	41.9%	6.0%	32.9%
No Effect	-30.1%	-23.4%	1.9%	-23.7%

Exhibit 8



Arkansas Insurance Department

1200 West Third Street
Little Rock, AR 72201-1904
1-501-371-2600
1-800-282-9134
Fax 1-501-371-2618
www.state.ar.us/insurance

Mike Huckabee
Governor

Mike Pickens
Commissioner

December 15, 2004

BULLETIN NO. 14-2004

TO: ALL LICENSED PROPERTY AND CASUALTY INSURERS, NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS, TRADE ORGANIZATIONS, AND OTHER INTERESTED PARTIES

FROM: ARKANSAS INSURANCE DEPARTMENT

SUBJECT: USE OF CREDIT INFORMATION UNDER ARK. CODE ANN. § 23-67-415 IN PERSONAL INSURANCE FOR PRIVATE PASSENGER AUTO, HOMEOWNERS, MOTORCYCLE, MOBILE HOME, NON COMMERCIAL DWELLING/FIRE, NON COMMERCIAL FARMOWNERS, PERSONAL WATERCRAFT, BOAT, SNOWMOBILE, RECREATIONAL VEHICLES

EFFECTIVE DATE: DECEMBER 15, 2004

Arkansas Code Annotated § 23-67-415 requires that no later than March 31 of each year, each insurance company writing any personal insurance that uses credit-scoring information shall report to the Insurance Commissioner for each personal insurance type listed in § 23-67-404(9) the number of:

- (1) Policies written during the preceding year;
- (2) Policies that received a premium increase due to credit scoring during the preceding year; and
- (3) Policies that received a premium decrease due to credit scoring during the preceding year.

This subchapter applies to personal insurance and not to commercial insurance or any other type of insurance. "Personal insurance" means private passenger automobile, homeowners, motorcycle, mobile home owners, noncommercial dwelling fire insurance, noncommercial farm owners, boat, personal watercraft, snowmobile, and recreational vehicle policies. If your company does not write any of the lines of insurance included in this definition of "personal insurance" nor have any policies in force and effect covering said lines at any time during the period covered by the report, please notify the Property and Casualty Division of that fact prior to the March 31st due date. Such notification shall be considered meeting the reporting requirements of the Act.

Information filed with the commissioner under this section by an insurance company shall be treated as proprietary information and is exempt from public disclosure.

Attached to this Bulletin is a suggested form upon which to report the required information. This form will be available on our website at www.accessarkansas.org/insurance/pdf/bulletin_14_2004.pdf and we can furnish it as an attachment to an email as well.

If you should have any questions, please contact Alexa Grissom or Becky Harrington, Property and Casualty Division, at (501) 371-2800 or alexa.grissom@arkansas.gov or becky.harrington@arkansas.gov or fax at (501) 371-2748.

(signed by Mike Pickens)

December 14, 2004

MIKE PICKENS
INSURANCE COMMISSIONER

DATE



Fair Isaac Corporation
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Minneapolis, MN 55402 USA
T 612 758 5200
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www.fico.com

Make every decision count.™

FICO® Credit-Based Insurance Scores

1. Most consumers benefit from the use of insurance scores—

Lower premiums—In its July 2007 report, “Credit-Based Insurance Scores: Impacts on Consumers of Automobile Insurance,” the Federal Trade Commission noted “if credit-based insurance scores are used, more consumers (59%) would be predicted to have a decrease in their premiums than an increase.” According to insurers, up to 75 percent of their policyholders pay lower premiums because of the insurers’ use of credit-based insurance scoring within their underwriting process.

Objective and timely decisions—The use of scoring enables insurers to make more accurate, objective, consistent and timely underwriting and pricing decisions. Insurance scores are snapshots of consumers’ insurance risk based on information in their credit report that reflects their credit-payment patterns over time, with more emphasis on recent information. An insurance score is the result of an objective, statistical analysis of credit report information identifying the relative likelihood of an insurance loss, based on the actual loss experience of individuals with similar financial patterns.

Most consumers have good scores—Most consumers manage their credit obligations well over time and so have good scores. Insurance scoring helps identify those consumers who present lower risk of loss so insurers can offer them lower insurance premiums. This helps to make insurance coverage more available and affordable to the majority of consumers.

2. Correlation between credit behavior and insurance risk has been proven—

FTC concludes these scores are effective risk predictors—In its July 2007 report, “Credit-Based Insurance Scores: Impacts on Consumers of Automobile Insurance,” the Federal Trade Commission said, “Credit-based insurance scores are effective predictors of risk under automobile policies. They are predictive of the number of claims consumers file and the total cost of those claims. The use of scores is therefore likely to make the price of insurance better match the risk of loss posed by the consumer.”

Independent studies agree—Separate studies by the Texas Department of Insurance (TDI), the University of Texas, Tillinghast Towers-Perrin, EPIC Consultants and others have proven that credit-based history correlates with the risk of insurance loss. The recent TDI study showed that: (*source: Insurance Information Institute, January 2005*)

- The average loss per vehicle for people with the worst insurance scores is double that of people with the best credit-based insurance scores.
- Homeowners insurance loss ratios for people with the worst insurance scores are triple that of people with the best scores.

- Drivers with the best credit history are involved in about 40 percent fewer accidents than those with the worst credit history.

Scores are based on most accurate data—The data at credit bureaus is one of the most accurate sets of consumer data available to insurers. Based on studies, the error rate in credit reports is considerably lower than the error rate found in motor vehicle records.

3. It's common sense that credit habits relate to insurance risk—

Overall behavior is consistent—In general, people with good credit habits demonstrate careful behavior overall. This crosses over into their driving habits, care of their automobiles, and care taken in the maintenance and safety of their homes.

4. For insurers the issue is risk, not race—

FTC finds scores are not a proxy for race—In its July 2007 report, “Credit-Based Insurance Scores: Impacts on Consumers of Automobile Insurance,” the Federal Trade Commission wrote, “Credit-based insurance scores appear to have little effect as a ‘proxy’ for membership in racial and ethnic groups in decisions related to insurance. ...Tests also showed that scores predict insurance risk within racial and ethnic minority groups. ...This within-group effect of scores is inconsistent with the theory that scores are solely a proxy for race and ethnicity.”

Scores are color-blind and objective—An independent study by the Texas Department of Insurance confirmed that credit-based insurance scoring does not discriminate racially or by income. According to that study, a higher percentage of adults in low-income groups and certain minority groups (African-American and Hispanic) have somewhat lower scores compared with the rest of the adult population. However, the study also showed that each group studied receives the full range of insurance scores. This is possible only if insurance scoring is a color-blind, objective process.

5. Scores remain an effective tool during current economic conditions—

Scores have shown to be very stable—In recent countrywide studies of FICO® Credit-Based Insurance Scores, the average scores have remained virtually the same for the general population. This is especially noteworthy during an economic downturn when the number of people who are delinquent in repaying creditors has clearly grown. We suspect the overall stability of these scores may be caused by a greater number of consumers making certain to pay all bills on time, paying down outstanding balances, and perhaps not seeking more credit obligations. In a word, more and more consumers appear to be realizing the value of prudent financial and credit management practices.

Scores may decline for those directly impacted—As a small but growing number of consumers have experienced recent financial hardships, such as mortgage foreclosures, it is impossible to generalize about the impact of such an event on an individual's credit-based insurance score. In each case the scoring formula considers the interrelationship of all credit information in each consumer's credit report, including any foreclosure information reported to the credit reporting agency.

Scores may change when lenders reduce credit limits:

- FICO® Credit-Based Insurance Scores assess a wide variety of data on credit reports, so the impact to the score from a single factor like credit limit reductions will depend on what other data is on the credit report and the amount of line reduction taken by a lender. The consumer's score could be unchanged, it could go down, or in some cases it could go up in combined response to other changes on the credit report.
- Our ongoing research indicates that lenders have reduced the revolving account limits for a relatively small percent of the population, and those line reductions have been a relatively small amount for that population.
- An important FICO principle is to let data—rather than judgmental factors—drive any changes to our CBIS scoring models. Our most recent score performance studies indicate that our scores continue to appropriately rank-order consumers based on insurance risk.
- While credit card holders don't control their credit limits, in many cases, they do control their account balances. Recent data shows that a notable number of consumers have reduced their revolving credit usage, helping to minimize any effect from lenders reducing their account limits.
- FICO plans to periodically analyze this credit industry activity and potential impact on our credit-based insurance scores going forward.

6. FICO® Credit-Based Insurance Scores are fair to consumers—

Evaluate only statistically-proven data—Our insurance models are built with only depersonalized data and our scores evaluate only credit-related information from consumer credit reports. They do not consider the person's income, age, marital status, gender, race, ethnic group, religion, nationality or location. People who are in identical situations would be charged the same amount for auto or homeowners insurance, irrespective of differences in race, ethnicity or levels of income, under a rating plan that permits the use of credit-based insurance scores in underwriting.

Support anti-discrimination laws—U.S. law requires businesses to avoid deliberate bias against minority groups. Through the use of insurance scoring, only individual consumers who represent potentially higher risk pay higher premiums, regardless of their race or income.

Consumers gain control—Consumers with poor credit-based insurance scores can improve their scores by improving their credit habits. Better scores can lead to lower insurance premiums for most consumers.

7. Use of insurance scoring helps stabilize and open the marketplace for consumers—

Competition is good for consumers—The use of insurance scores keeps the insurance marketplace competitive, resulting in the availability of lower prices, better service, and more choices for consumers. Underwriters gain opportunities to identify and write insurance for people who in the past they may have declined because of incomplete knowledge or information. Also, a good credit history can offset negative underwriting factors such as a

poor driving record, thereby enabling someone to get insurance who might otherwise have been denied or charged more.

8. FICO® Credit-Based Insurance Scores are different from FICO® credit-risk scores—

Predict very different things—While both types of scores use information from consumer credit bureau files, they predict very different outcomes. Credit-risk scores such as FICO® scores are built to predict the likelihood of delinquency or non-payment of credit obligations. Insurance scores, by contrast, are built to predict whether a consumer is likely to result in more (or less) insurance losses than the average consumer.

Insurance scores apply to customer groups—Individuals can have low insurance scores without ever having filed an insurance claim. That's because insurance scores are applicable to customer groups. Consider that some teenage drivers will never have an accident. As a group, however, teenage drivers experience many accidents. Similarly, as a group, customers with low insurance scores tend to have more losses than those with high scores.

9. Use of insurance scoring frees insurers to focus on exceptional cases—

More attention for people with unusual needs—Insurers use insurance scoring to help make routine underwriting and pricing decisions. This frees underwriters to spend more time helping applicants who have unusual situations or needs.

10. FICO is committed to helping consumers obtain credit and insurance coverage fairly and affordably—

Free educational resources—We have established web sites such as www.insurancescore.com and educational programs to help consumers become better informed about credit-risk and insurance scores. These programs explain the credit behaviors that will help consumers improve their scores.

Every score includes explanation—Each insurance score based on credit bureau data is accompanied by up to four (4) score reasons to help consumers identify where they may have lost points, again providing insight into how credit behaviors are impacting scores, approval potential and pricing. Consumers who believe these score reasons misrepresent their credit history can examine their credit reports and request investigation of any information that they find to be inaccurate or incomplete.

Opportunities to address issues—We encourage our clients to use scores responsibly. We also welcome opportunities to address scoring issues with credit grantors, insurance companies, regulatory and legislative bodies, consumer advocates, consumers and the media.

11. FICO recommends the following guidelines to help consumers manage their scores in either a stable or volatile economy—

Make all your credit and loan payments on time—The calculation of FICO® Credit-Based Insurance Scores weighs payment history more heavily than any other variable on your credit report. Making all your payments by their due date is a key ingredient for a good score. When money is tight, pay at least the minimum amount due on credit card debt to avoid being

reported delinquent. Overdue bills can significantly lower your score, including unpaid non-medical debts sent to collection agencies.

Keep credit card balances low—Individuals with good scores come from every income level, and in tough times they tend to scale back their use of credit cards and pay down their debts. If your credit card balances are close to your credit limits, budget your finances to make debt reduction a top priority. Your indebtedness is the second most important factor for scores.

Open new credit cards or loans only when necessary—Opening new credit accounts may cause your score to go down so be cautious about taking on new debt. This includes thinking twice before opening a retail store card just to get an extra 10 percent off your current purchase.

Get your free annual credit report from each national credit reporting agency through www.AnnualCreditReport.com, and check your credit history carefully for errors. Contact the reporting agency if you spot an error so they can investigate it.

TO: The Honorable Clark Shultz, Chairman
House Insurance Committee

FROM: William W. Sneed, Legislative Counsel
The State Farm Insurance Companies

SUBJECT: Insurance Scoring

DATE: January 21, 2010

Mr. Chairman, Members of the Committee: My name is Bill Sneed and I am Legislative Counsel for the State Farm Insurance Companies. State Farm is the largest insurer of homes and automobiles in Kansas. State Farm insures one out of every three cars and one out of every four homes in the United States. Please accept this memorandum as our testimony regarding insurance scoring.

We appreciate the opportunity to be a part of this joint hearing to discuss insurance scoring and its place in the rating of insurance in the State of Kansas. You have been presented information on the general issue from a national perspective and have heard from an expert on how mechanically insurance scoring works. Please allow me the opportunity for a quick review of the Kansas law and the events that occurred after the 2009 session.

During 2001 and 2002, there were a multitude of credit scoring bills introduced in the Kansas Legislature (along with other states throughout the country). Although not directly related to the insurance industry, this action commenced a conversation about the use of credit scores in insurance products. Based upon those discussions, the 2002 Kansas Legislature passed S.C.R. 1623. This resolution requested the Kansas Commissioner of Insurance to study the use of insurance scoring reports within the insurance industry. The multi-person task force established under S.C.R. 1623 met four times during the fall of 2002, the results of which were encompassed in a report submitted to the 2003 Kansas Legislature. During that same time frame, the National Conference of Insurance Legislators ("NCOIL") created a model act regarding the use of credit information in personal insurance. Finally, at the beginning of the 2003 session, the Kansas Association of Insurance Agents ("KAIA") also proposed a model bill to cover this subject. During the 2003 session, the Kansas Legislature had S.B. 144, which was the KAIA proposal, and S.B. 177, which was the NCOIL version. The chairs of both the House and Senate FI&I committees requested that the parties continue to meet with the newly-elected insurance commissioner in an attempt to procure a model bill that could be supported by all parties. After numerous meetings with the Kansas Insurance Department, a compromise bill was formulated, and ultimately it was included in H.B. 2071, which was passed by the Kansas Legislature.

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The outcome is the creation of the Kansas Insurance Score Act (K.S.A. 40-5101, *et seq.*). The Act provides the standard applicability and definition sections and outlines several broad areas affecting the use of insurance scores in rate making.

K.S.A. 40-5104 discusses those acts that insurers are prohibited to undertake when using credit information to underwrite or risk rates.

K.S.A. 40-5105 explains how an insurer must re-underwrite or re-rate in the event of any overpayment o premium.

K.S.A. 40-5106 details disclosure requirements that insurers must use when utilizing credit information.

K.S.A. 40-5107 outlines the actions an insurer must take if that insurer is taking adverse action against the insured based upon credit information.

K.S.A. 40-5108 provides for the filing by each insurer of its insurance scoring model and that such model is classified as a trade secret.

K.S.A. 40-5109 requires that the commissioner provide a report to the Legislature by January 26, 2005 on the implementation of the Act.

Finally, K.S.A. 40-5111 defines the prohibition against the use of certain credit information by the credit reporting agency.

We point this out to the Legislature because time has elapsed since this issue has been discussed and there are many new faces in the Kansas Legislature, it is easy to forget how much protection has been included in current Kansas law for the Kansas insuring public.

During last year's session, four bills (S.B. 24, S.B. 172, S.B. 206 and H.B. 2053) were introduced to eliminate or curtail the use of insurance scoring. Those bills were not acted upon, and at the request of both chairs, industry was directed to meet with the authors of the bills to determine what, if any, additional action needed to be taken in this area.

On December 1, 2009, various representatives of the insurance industry met with several legislators to discuss the current state of the law in Kansas and what other additional activities have occurred throughout the country. That meeting resulted in several items that the group believed warranted further exploration and may lend to avoidance of some unintended consequences of the insurance credit score law. Those items are:

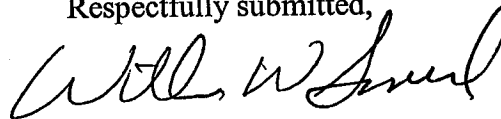
1. consider adding the new extraordinary life circumstances NCOIL amendment to the Kansas law;

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2. eliminate or amend the mandatory three-year look-back statute (K.S.A. 40-5104(g)(3)(C)); and
3. amend or eliminate the mandatory adverse action notice regarding best possible rates (K.S.A. 40-5103(a)(2)).

It is my hope that this information has been helpful to the Joint Committee, and I would be happy to discuss questions at the appropriate time.

Respectfully submitted,



William W. Sneed

WWS:kjb

cc:

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Kansas Insurance Department

Sandy Praeger, Commissioner of Insurance

TESTIMONY ON INSURANCE SCORING

JOINT INSURANCE MEETING January 21, 2010

Mr. Chairman and Members of the Committee,

Thank you for the opportunity to testify before the committee today.

The Kansas Insurance Score Act which took effect on January 1, 2004 essentially allows the Kansas Insurance Department to regulate the use of a person's credit history to determine property and casualty insurance rates. Actuarial studies show that credit history is, in fact, a greater predictor of potential insurance claims than even a person's driving record. Despite this, the practice of credit based insurance scoring is not without controversy, thus my presence before you today.

Our records show that from 2007 to 2009 there were a total of 208 written complaints and inquiries submitted to the Consumer Assistance Division of the Kansas Insurance Department. This represents less than 2% of the total written complaints received by the Consumer Assistance Division during the same time period. The frequencies of these complaints are far more prevalent when an insurance company begins using credit based insurance scoring for the first time. To date, all major insurance companies doing business in Kansas are now using credit based insurance scoring to determine rates. These complaints primarily center around two aspects of insurance scoring. The first is the federal requirement that consumers must receive an "adverse action notice" in the event that they receive a less than optimal rate as a result of their credit score. The second aspect that frustrates consumers is the fact that access to specific information regarding the contents of a credit score is difficult to obtain.

Finally, we have seen two trends appear as the use of credit scoring has proliferated. The first is that the population has generally become more aware of their credit score and how to access its contents. The second is that insurance companies have improved their ability to isolate certain scoring factors so consumers can be made aware why their insurance score resulted in a less than optimal rate.

To conclude, we believe the use of credit scoring is an effective measure of property and casualty claim risk. While we believe that current Kansas law gives the Kansas Insurance Department the ability to appropriately regulate the use of credit scoring so that it is done fairly we are open to the possibility that these talks may yield ideas that may potentially improve upon our current law.

Thank you for the opportunity to appear and I will now stand for questions.

Bob Tomlinson
Assistant Insurance Commissioner

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