

# FICO Successfully Defends Insurance Industry's Use of Credit

The correlation between credit risk management patterns and insurance loss is statistically proven—and helps insurers make faster, fairer underwriting and pricing decisions

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## » Summary

In recent months FICO has aided the insurance industry in successful defenses of credit-based insurance scores against regulatory and legislative restrictions in more than two dozen states across the nation. In almost every instance, decisions were made in favor of allowing insurers to use credit-based insurance scores in underwriting and pricing decisions. In one state recently, a court decision prevented that state's department of insurance from arbitrarily denying insurer rate filings that included insurers' planned use of credit-based insurance scores.

Why is this type of scoring being challenged, and why has it been overcoming these challenges? You'll find the answers in this paper, which will:

- Define what a credit-based insurance score is, and how it's different from a credit risk score
- Debunk the three biggest misconceptions about credit-based insurance scoring
- Discuss the benefits of scoring for the insurance industry and its customers

## » What Is a Credit-Based Insurance Score?

When insurers are allowed to use credit-based insurance scoring to more accurately assess the likely risk of loss, most consumers qualify for premium discounts, and they're more likely to pay premiums that equitably reflect the level of risk they present to the insurance provider.

Let's start by clarifying exactly what we're talking about.

A credit-based insurance score is an analytic model that analyzes current credit report data to predict the likely loss ratio relativity of an insurance applicant or policyholder.

- *Loss ratio* is the ratio of losses (and allocated loss adjustment expenses) to premiums for an individual or book of business. For example, if in a given policy period an insurance company paid \$700 in claims for a policyholder who had paid \$1000 in premiums, the loss ratio for that policy holder would be 70%.
- *Loss ratio relativity* (generally expressed as a number) is the ratio of an individual or subgroup's loss ratio compared to that of the entire group. For example, if a policyholder has a loss ratio of 140%, and the overall population of the group has a loss ratio of 70%, the policyholder has a loss ratio relativity of 2.0. That means the loss rate for this individual is two times that of the average loss rate for the overall population.

It's important to understand that credit-based insurance scores are not credit risk scores. As shown below, they have entirely different purposes. In addition, while both types of scores use credit report data and calculations as inputs, how they analyze these inputs, and the models that perform the analyses, are quite different.

SCORE	PREDICTS	EXAMPLES
Credit-based insurance score	Loss ratio relativity of an insurance applicant (at the time of application) or policyholder (at the time of renewal)	CPLS™ score at Equifax, Canada InScore® at Equifax, USA Experian/Fair Isaac® Insurance Score at Experian (available from ChoicePoint) Fair Isaac® Insurance Risk Score at TransUnion
Credit risk score	Likelihood that an individual will become delinquent on a credit obligation (e.g., loan, charge account, equity line) in the near future	FICO® Score

## » How Do Insurers Use Credit-Based Insurance Scores?

Scores are not used in isolation to set pricing for an individual consumer or to make a determination as to whether insurance coverage will be offered to an individual. Nearly all of the top US P&C insurers use credit-based insurance scores *as one factor among many* when evaluating the risk of loss. Typically, insurers will use scores along with application data, motor vehicle reports, claim histories, inspection reports, demographic data and other types of information in underwriting decisions.

A key point here is that even before FICO introduced the first credit-based insurance score in 1993, insurers took credit information into consideration in their decision-making processes. Before scoring, however, insurers relied on the manual review and interpretation of credit reports by individual underwriters. Scoring replaced this slow, costly, subjective and highly variable process with a fast, efficient, objective and consistent process. It also provided a quantifiable, comparable measure of risk, which provides additional benefits we'll discuss later in the paper.

## » The Three Biggest Misconceptions About Credit-Based Insurance Scoring

### 1. "A consumer's past credit performance is unrelated to his/her future insurance performance."

In fact, credit behavior and the risk of insurance loss are related. We believe one reason for this correlation may be that people with good credit habits also demonstrate careful behavior in other areas of their life, including driving habits, care of their automobiles and maintenance of their homes. Scoring proves the truth of this observed relationship. It provides an empirical, statistically provable correlation between credit behavior and insurance loss based on the actual loss experience of individuals with similar financial patterns. (See the sidebar on how scoring models are developed.)

This correlation between credit behavior and insurance loss has been validated many times by different sources, including the Texas Department of Insurance (TDI), the University of Texas, Tillinghast Towers-Perrin, EPIC Consultants and others.

For instance, a 2005 study<sup>1</sup> by TDI included these findings:

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

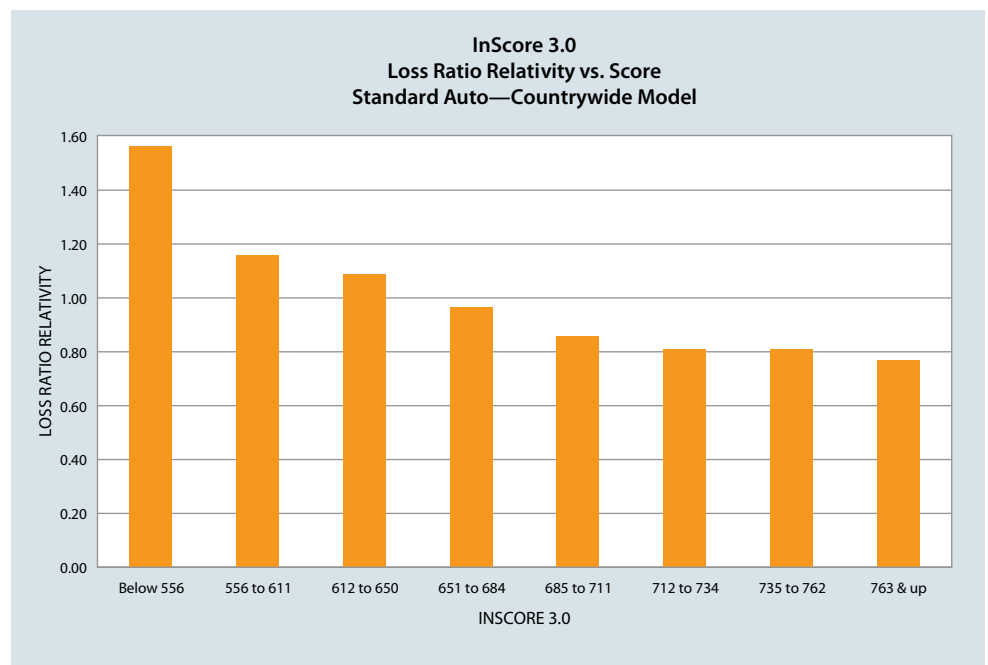
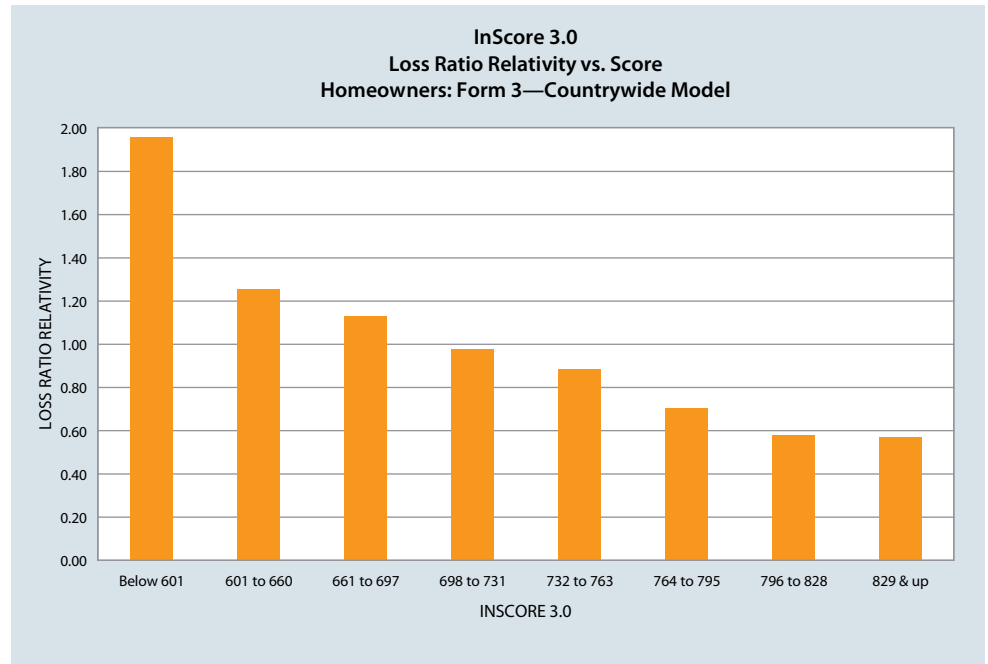
The Federal Trade Commission stated in its landmark 2007 report,<sup>2</sup> based on a comprehensive study of insurance scoring, that:

"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."

1. Supplemental Report to the 79th Legislature: Use of Credit Information by Insurers in Texas, The Multivariate Analysis, January 31, 2005

2. "Credit-Based Insurance Scores: Impacts on Consumers of Automobile Insurance," A Report to Congress by the Federal Trade Commission, July 2007

FICO INSCORE 3.0 LOSS RATIO RELATIVITY TO SCORE CHARTS



As represented in these charts for our InScore 3.0 models, FICO Credit-Based Insurance Scores rank-order the relative risk of both personal auto and homeowner applicants and policyholders. The higher the score, the lower the relative risk of loss.

## Advanced analytic models generate insurance scores

Credit-based insurance score models are developed using rigorous statistical methodology on data from millions of consumers and multi-millions of dollars in premiums and claims. In the model development process, advanced technology is used to empirically determine the correlation of hundreds of credit variables (for example, the number of 60-day delinquencies a consumer has in his or her credit file), with later claim performance. The variables determined to be most predictive of future losses are used to build the models, which are then deployed through the consumer reporting agencies, where the consumer credit data resides. To ensure higher accuracy, separate models are built and deployed for the major types of both property insurance and auto insurance.

## 2. "Scoring raises insurance premiums and is unfair to consumers."

In fact, credit-based scoring lowers insurance premiums for most consumers. As the Federal Trade Commission stated in its previously cited 2007 report:

"The use of scores is likely to make the price of insurance better match the risk of loss posed by the consumer. ...If credit-based insurance scores are used, more consumers (59%) would be predicted to have a decrease in their premiums than an increase."

The truth is that without scoring's ability to more accurately predict the risk posed by particular individuals, many consumers would end up paying premiums that reflect other people's higher risk levels. A case in point: When regulators in Maryland prohibited the use of credit-based insurance scores for homeowner's insurance, in the following year, the average premium rose by up to 26%.

When insurers are allowed to use scoring to more accurately assess the risk of loss for individuals, premiums are more fair because they reflect the customer's own risk level. For some consumers, a good credit history can even offset other, less positive underwriting factors such as a recent traffic violation. Moreover, competition among insurance companies for lower-risk customers creates downward pressure on prices.

And what of higher-risk consumers? These consumers also have the opportunity to lower their premiums, not only by improving their driving record and home maintenance habits, but also by paying closer attention to and better managing their overall credit behavior. Particularly in today's stressed economic environment, many consumers are already taking better control of their credit management practices by obtaining and examining their free annual credit reports (via [www.annualcreditreport.com](http://www.annualcreditreport.com)) and addressing any negative factors that may appear. Any actions that reduce negative factors will improve the consumer's FICO credit-based insurance score.

## 3. "Scoring discriminates against racial and ethnic minorities."

In fact, credit-based insurance scoring models are built with depersonalized data, which makes credit-based insurance scores unprejudiced, objective and applied consistently to everyone, usually through an automated process. They are not affected by human attitudes, biases, workloads or fatigue. They do not consider a person's income, age, marital status, gender, race, ethnic group, religion, nationality or location.

The ability of credit-based insurance scores to differentiate among consumers on the basis of risk of loss alone can be seen in a study published by the Texas Department of Insurance in December 2004/January 2005. While the study found that a higher percentage of adults in low-income groups and certain minority groups have somewhat lower scores than the rest of the adult population, it also found that scores were fully distributed within these groups across the entire scoring range, from low to high. Such a result is statistically possible only if scoring is color-blind and income-blind. In a similar study submitted to Congress in July 2007, the Federal Trade Commission concluded:

"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."

Scoring is not only objective, but highly transparent. While FICO's credit-based insurance scores are not available for consumer purchase, consumers have recourse if there are inaccuracies in their consumer reports. Insurers routinely provide consumers with up to 4 score reasons that identify where they may have lost points. Consumers who believe these score reasons misrepresent their credit history can request investigation of any information they find to be either inaccurate or incomplete using the normal, well-established credit reporting agency procedures. Insurers provide score reasons to help consumers understand where they may have lost points.

In addition, FICO provides full descriptions of our credit-based insurance scoring models to state insurance regulators so they may review and approve the types of credit information considered within the scoring process.

## » Added Benefits of Scoring for the Industry and Its Customers

Credit-based insurance scores provide operational efficiencies that enable insurers to reduce costs and thereby reduce upward pressure on premiums.

### **Scoring accelerates decisioning while focusing attention and resources where needed.**

The precision and speed of scoring enables many underwriting and pricing decisions to be made automatically, without requiring costly and potentially subjective human intervention. Consumers as a whole benefit from much faster decisions. Meanwhile, underwriting experts are freed up to give special attention to applications and renewal policies that involve unusual circumstances or a more complete underwriting review. Score thresholds can also be set up to determine when the insurer needs additional information, such as an inspection report, to make a more informed decision, and automatically order it from a third-party provider. The insurer may decide that when the score is above that threshold, it can forego this expense, a savings that can be passed on to policyholders.

**Scoring enables timely decisions reflective of an individual's current risk of loss.** Credit-based insurance scores provide an inexpensive supplement to other sources of external data available to insurers for decisioning. Insurers can affordably access a policyholder's level of risk at any point in the relationship lifecycle, thereby taking into account any changes in the customer's risk level. Timely scores are advantageous to consumers who have taken the opportunity to more closely monitor and enhance their credit management practices. Those with improving scores may now qualify for expanded coverage at lower prices or be offered additional insurance products.

**Scoring supports targeted offers that could benefit consumers.** Based on the initial score of a new policyholder, insurers can craft a plan for managing that customer relationship, including whether the policyholder should be targeted for cross-selling. Because the score quantifies loss ratio relativity, it provides a consistent metric that can be used by all departments—underwriting, customer service, marketing, claims—to talk about customer value and coordinate activities.

**Scoring helps insurers improve the financial health of their core business.** By tracking the actual loss performance of individual policyholders or customer segments against the initial scores, insurers can evaluate and monitor the quality of their book of business or segments of their book. They can use these results to fine-tune their scoring thresholds and underwriting practices. They can also use them to guide measures aimed at improving the quality of the business they're receiving through specific business units or distribution networks. Insurers who have better tools to manage the health of their core insurance business are more resilient under economic pressure—and that strength, as we've learned recently, is advantageous not only to policyholders, but to taxpayers across the country as well.

» **Conclusion:  
Scoring Remains the  
Industry's Most Powerful  
Predictive Tool**

Numerous regulatory, legislative and court rulings, including recently in Michigan and Minnesota, have supported insurers' use of credit-based insurance scores in underwriting and pricing decisions. These actions recognize that statistical evidence shows unequivocally that scoring is fair and objective. They highlight the fact that insurers ought to be able to offer discounted rates to consumers who pose a statistically probable lower risk of insurance loss.

We at FICO believe that our insurance scores, available through the credit reporting agencies, benefit consumers as well as insurers by replacing subjective, costly methods with objective, efficient ones. We, of course, encourage our clients to use scores responsibly, as one factor in decisioning and always in accordance with the law.

To help expand access to credit-based insurance scoring and improve understanding of its benefits, we continue to work with State Departments of Insurance to file scoring models, where required, and we frequently testify on behalf of insurance scores before state legislatures as well as regulatory and judicial bodies. Above all, FICO welcomes opportunities to engage in discussions about scoring with insurance companies, regulatory and legislative bodies, consumers' advocates, consumers and the media.

To learn more about credit-based insurance scores, please access our educational website—  
***[www.insurancescore.com](http://www.insurancescore.com)***.

about FICO

**FICO** (NYSE:FICO) delivers superior predictive analytics solutions that drive smarter decisions. The company's groundbreaking use of mathematics to predict consumer behavior has transformed entire industries and revolutionized the way risk is managed and products are marketed. FICO's innovative solutions include the FICO® Score—the standard measure of consumer credit risk in the United States—along with industry-leading solutions for managing credit accounts, identifying and minimizing the impact of fraud, and customizing consumer offers with pinpoint accuracy. Most of the world's top banks, as well as leading insurers, retailers, pharmaceutical companies and government agencies, rely on FICO solutions to accelerate growth, control risk, boost profits and meet regulatory and competitive demands. FICO also helps millions of individuals manage their personal credit health through [www.myFICO.com](http://www.myFICO.com). Learn more at [www.fico.com](http://www.fico.com). **FICO: Make every decision count™**.

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