

Living Without Credit Scoring

Sometimes you don't know what you've got until it's gone.

PERSONAL LINES INSURERS IN MOST STATES are currently able to use credit scoring, a solid predictor of an insured's risk. The day might come, however, when insurers will no longer be able to use this extremely valuable approach to segmenting risk.

This is a very real possibility. Credit scoring is undergoing growing scrutiny from public advocacy groups, state insurance regulators and legislatures, and even the judicial system. The concern is that the practice causes a disparate impact on certain minorities and low-income policyholders. Several states are studying credit scoring, limiting credit scoring, or considering banning it altogether. Even the Federal Trade Commission is looking into whether credit scoring is unfairly discriminatory, and the results of that study could lead to further public debate and legislation.

How would insurers survive in a post-credit-scoring environment? The answer lies in maximizing the potential of already available information.

Transforming Risk

Insurance score was not widely used in the insurance industry until the mid to late 1990s, with some companies not implementing the use of credit until the early 2000s. Credit scoring has grown in popularity because of its segmentation power.

Figure 1 shows a typical spread in loss potential possible only with the use of credit score. The loss costs of insureds with the best insurance scores can be as much as 50 percent lower than the loss costs of insureds with the worst insurance scores. Insurers have thus implemented rate differences of magnitudes such as the one shown. Banning the use of credit scores, therefore, could very well lead to a significant rate disruption.

Without corrective action, other possible results could include: classification inequity; risks with better-than-average credit scores paying a premium higher than their expected loss costs; and, risks with worse-than-average insurance scores paying premiums lower than their expected loss costs.

Why Insurance Scoring Works

There has generally been one central question regarding the use of credit in the insurance industry: What is the

relationship of credit to auto accidents or homeowners insurance claims? Actuarial principles dictate that a causal relationship doesn't have to be established for a particular variable to be used for insurance rating or underwriting. When there is a logical connection between the variable being used for insurance rating with losses, however, it tends to increase the level of comfort in using the variable with insurers and the insurance-buying public. Most people accept that their insurance will go up, for example, if they cause a car accident.

Other reasons for why credit is related to insurance, put forth by insurers and insurer trade associations, are:

- Responsibility. People who manage their finances well also tend to manage other aspects of their lives responsibly.
- Limited financial resources. People with low credit scores are more likely to file claims because they don't have the money to make the repairs.
- Additional stress. The added stress of financial pressure may lead to less care in driving or taking care of the home.
- Risk-taking behavior. Financial difficulty indicates a tendency to take more risks.
- Stability. Good insurance scores demonstrate policyholder stability.

Evaluation Techniques

There can be and has been significant debate as to whether any or all of the reasons help explain how credit relates to personal lines insurance. Regardless, the key to operating in an environment where credit cannot be used is to identify current and potential factors that can be used to identify the characteristics that credit helps measure.

This approach can and should be employed by insurers now to truly understand the risk potential they're undertaking and to possibly decrease their reliance on credit as a rating factor. At the same time, it must be understood that using additional factors won't replace the full value that credit supplies, but it can replace some of the value if credit is lost or enhance the rating and underwriting of insurance even with credit.

Maryland provides a real-life example of what happens when credit can no longer be used to rate homeowners insurance. Based on homeowners' rate filings of companies

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in Maryland, insurers use additional information such as education, occupation, number of occupants, and years with prior insurers.

There are many approaches that can be taken to identify additional factors that may assist in replacing some of the value of credit. They include recalibrating current factors, using additional factors that may have been rejected previously, and considering additional factors that haven't been previously considered.

Recalibrating Current Factors

Because insurance rating analysis in today's property/casualty arena is more sophisticated than in the past, recalibrating current factors is a logical first step. Many insurers are now using multivariate analysis techniques such as generalized linear modeling to realize the true impact of the factors used for rating. Multivariate analysis techniques take into account all the other variables present in the analysis.

If a factor as significant as insurance score is removed, other variables currently being used for the rating of insurance should be reviewed and adjusted appropriately. Consider the use of prior bodily injury limits for rating or tiering purposes. Insureds with higher prior liability limits tend to have better subsequent loss experience. It has been theorized that insureds who select higher liability limits are showing more responsibility in protecting their assets. If that's the case, there should be a relationship between credit and prior limit.

Figure 2 shows the impact on the change in the indicated prior bodily injury limits rating factors when credit is removed from an analysis. The chart shows that the rates for prior limits of 50/100 and less would increase relative to the rates for limits of 100/300 and higher. This seems to support the theory that prior bodily injury limits are related to insurance score in some way.

FIGURE 1. Indicated Insurance Score Relativities

One Way vs. Multivariate Analysis

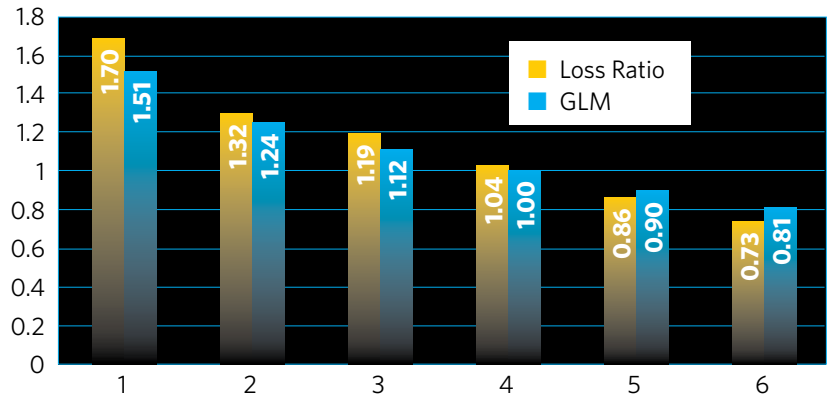


FIGURE 2. Effect of Removing Credit on Prior Bodily Injury Limit Rates

Property Damage BI Limit

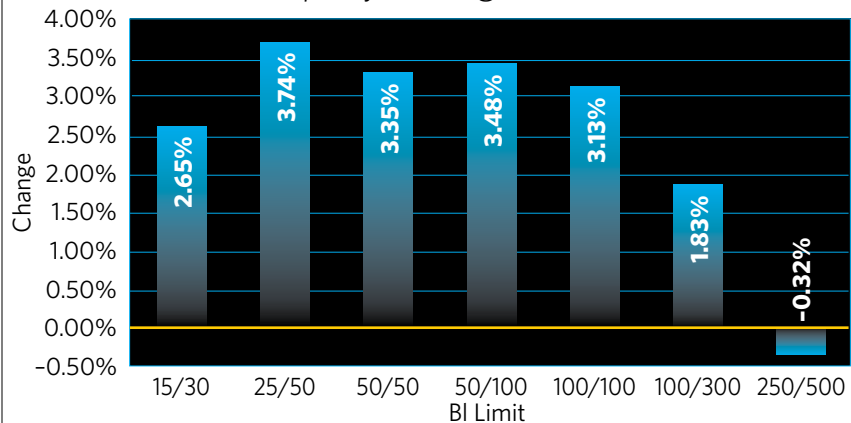
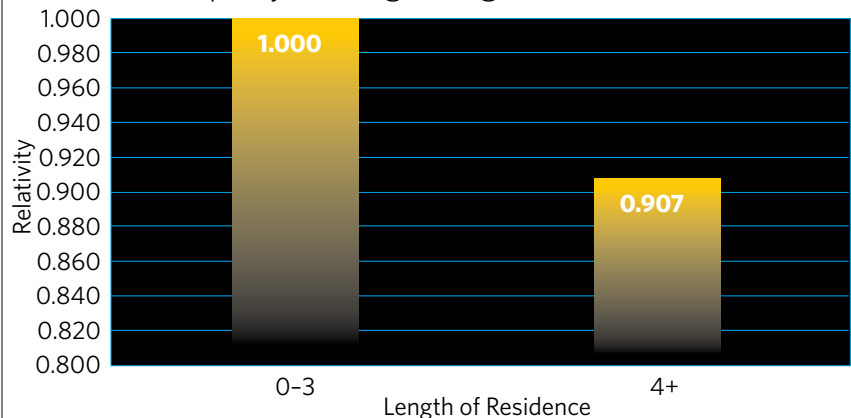


FIGURE 3. Use of Length of Residence When Credit Is Eliminated

Property Damage Length of Residence



Reconsidering Previously Rejected Variables

When a significant factor such as credit is removed, factors previously determined to be insignificant should be reconsidered for the rating and underwriting process.

In this example, length of residence was a factor determined to be insignificant with credit but significant without credit. One of the potential explanations for good credit is that it reflects stability, and stability generally leads to better insurance experience. Length of residence also reflects the stability of an insured, and since credit was no longer used in the analysis, this stability impact was transferred to length of residence, as can be seen in Figure 3.

Using Additional Factors

Considering the above explanations for the relationship between credit and insurance,

insurers can endeavor to find additional variables that are related to these explanations. There are a number of internal and external sources that can be mined to discover new information, including company billing systems, experience and rating factors for other lines of insurance an insured has with the company, and external allowable demographic information.

For example, if good credit reflects an insured's sense of responsibility, then perhaps using the insured's payment history with the insurer would provide similar information. If poor credit reflects risk-taking behavior, then take a closer look at specific prior accidents and violations history, beyond just traditionally chargeable accidents and violations. Even looking at the presence of certain types of high-performance motorcycles or snowmobiles might provide additional insight into the

insured's risk-taking behavior.

Beyond pricing, credit scoring could be used for other purposes. Insurers can use it to determine an optimal marketing plan. Or prior payment history could be used to identify which payment plans could be offered to an insured to minimize a company's credit risk.

Replacing What Could Be Lost

While losing the use of credit score would mean a significant loss of predictive power for rating auto and homeowners insurance, it doesn't mean the end of the world. The Maryland homeowners insurers' experience, for example, shows the market can survive a post-credit-scoring environment. Insurers that make better use of what they have and supplement it with additional information will still achieve significant segmentation of the insurance marketplace. ●

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