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Redlining or Risk:
A Spatial Analysis of Auto Insurance Rates in Los Angeles

Background. Transportation is one of several major barriers to employment for the poor. In addition to the costs associated with buying a vehicle, the mandate to carry insurance can further inhibit car ownership among low income workers. Residents of poorer areas actually pay higher car insurance premiums than residents of more affluent areas, even when controlling for driving history and other driver characteristics. While some of this disparity can be explained by higher risks of auto theft or accidents in poor or minority neighborhoods, some accuse insurance companies of "redlining" or charging residents of poor and minority communities unfairly high premiums.

Methods. Paul Ong and WCPC Advisory Board member Michael Stoll combine census data, insurance claim information, and accident and crime rates for the year 2000 with internet quotes for car insurance for an identical driver living in each zip code within Los Angeles to investigate variation in insurance rates across geographic areas. By holding the driver characteristics constant, they are able to determine how a driver's location influences his insurance premiums and whether premium amounts can be better explained by the relative risk level in each zip code or the socioeconomic characteristics of those areas. The researchers use bivariate associations as well as regression and multi-level simulation techniques.

Findings. When controlling for an area's socioeconomic characteristics, insurance claims, and accident and crime statistics, both socioeconomic factors and risk factors were significant predictors of insurance premiums. Although risk factors were stronger predictors of quoted insurance rates, the racial and economic profiles of neighborhoods were still significant predictors of variation in premiums.

The importance of redlining factors was more pronounced when the authors used simulations to look at the difference in premiums between non-Hispanic white and heavily-Hispanic and heavily-black areas and between poor and non-poor areas. The authors found that the same driver would pay $154 more annually, on average, if he or she lived in a heavily black neighborhood than in a primarily white, non-Hispanic, non-poor neighborhood, and an average of $48 more in a Latino area. A driver in a poor neighborhood would pay $156 more than in a non-poor neighborhood. Economic and racial factors, not risk factors, explained the vast majority of the observed differences in average premiums.

While these findings appear to show evidence of redlining toward heavily minority and poor areas by auto insurance companies, the authors caution that these analyses are based on publicly available data; it is possible that insurance companies use additional information in setting their rates that might account for the differences in premiums. At the same time, the authors have included measures of the factors upon which insurance companies claim they rely. Based on this evidence, it appears that premiums are higher in poor and minority neighborhoods partly because of increased risks in those areas, but the possibility that insurance companies are also inflating rates based on the racial and economic status of a driver's neighborhood cannot be ruled out.
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New research from Paul M. Ong and Michael A. Stoll

Key findings:

• The cost of carrying insurance can make car ownership more difficult for the poor. Insurance premiums vary substantially across zip codes within Los Angeles, where the median annual insurance policy is $1,028 for a basic liability policy with no deductible.

• Poor and minority drivers pay higher premiums than non-poor and non-minority drivers who have the same driving history and characteristics. Some, but not all, of this disparity can be explained by factors related to the increased risks of owning a car in poor and minority neighborhoods, such as higher claims rates or higher crime.

• In the aggregate, neighborhood risk factors are more important predictors of premiums than are the racial and economic composition of neighborhoods, but both are involved. When comparing the average premiums in heavily minority and non-poor neighborhoods against those in largely non-Hispanic white and non-poor neighborhoods, drivers in heavily black and Latino and in poor areas pay $48-$156 more than drivers with the same characteristics in non-Hispanic white and non-poor neighborhoods.

• The increased premiums cannot be explained by risk factors and appear to be driven by the racial and socioeconomic composition of the driver’s neighborhood.

For more information about this study, see inside.