Consumer Perspectives on

Insurance Credit Scoring and
Disparate Impact Standard for Unfair Discrimination

Casualty Actuarial Society
Ratemaking and Product Management Seminar

March 2013

Birny Birnbaum
Center for Economic Justice
The Center for Economic Justice

CEJ is a non-profit consumer advocacy organization dedicated to representing the interests of low-income and minority consumers as a class on economic justice issues. Most of our work is before administrative agencies on insurance, financial services and utility issues.

On the Web:  www.cej-online.org
Why CEJ Works on Insurance Issues

Essential Financial Security Tool for Individual and Community Economic Development: CEJ Works to Ensure Access and Fair Prices for These Essential Products and Services, particularly for Low- and Moderate-Income Consumers.

Primary Institution to Promote Loss Prevention and Mitigation: CEJ Works to Ensure Insurance Institutions Maximize Their Role in Efforts to Reduce Loss of Life and Property from Catastrophic Events.
Overview

1. Insurance Credit Scoring (CS) Is Inherently Unfair

2. CS Has A Disparate Impact on Low-Income and Minority Consumers; CS Reflects and Perpetuates Historical Inequities.

3. Consumer Credit Data Quality, Data Variability and Difficulty for Consumers to Fix Errors Are Additional Concerns.

4. CS Undermines Core Public Policy Goals of Insurance: Universal Coverage and Loss Mitigation.

Insurance Credit Scoring is Inherently Unfair

- Penalizes Victims of Medical, Economic Catastrophes
- Penalizes Consumers for Abusive Lending Practices / Broader Economic Conditions
- Arbitrary and Illogical Results – Unrelated to How Well a Consumer “Manages” Her Finances
Consumers Hammered By Financial Crisis and Recession

- Reckless and Abusive Lending
- High Unemployment
- Wage Cuts
- Credit Limit Reductions
- Increases in Loan and Credit Card Fees
- Increasing Medical Costs

Record or Near-Record Highs in
- Delinquencies
- Foreclosures
- Bankruptcies

Following Charts from www.calculatedriskblog.com
Total Debt Balance and its Composition

Historical Totals Prior to 2011Q2 Exclude Student Loans

Source: FRBNY Consumer Credit Panel/Equifax
BI Pure Premium: Nevada & Multi-State

$300

$250

$200

$150

$100

$50

$0

2006 2007 2008 2009 2010

Nevada

Multi-State
PD Pure Premium: Nevada & Multi-State
Collision Pure Premium: Nevada & Multi-State
BI Pure Premium: Florida & Multi-State
PD Pure Premium: Florida & Multi-State
Collision Pure Premium: Florida & Multi-State
Causes of Bankruptcies

Harvard Study of Bankruptcies in 2001:

- 87% of Bankruptcies Caused by Job Loss, Medical Bills or Divorce
- 46.2% from Medical Problems

Harvard Study of Bankruptcies in 2007:

- 62.1% of Bankruptcies Caused by Medical Problems
- 75% of These Were Families With Health Insurance.
Consumer Credit Data Quality Issues

February 2012 Federal Trade Commission Study

“the study design called for consumers to be randomly selected from the population of interest (consumers with credit histories at the three national CRAs). Ultimately, 1,001 study participants reviewed 2,968 credit reports (roughly three per participant) with a study associate who helped them identify potential errors.”
2013 Federal Trade Commission Study: Findings

- One in four consumers identified errors on their credit reports that might affect their credit scores;
- One in five consumers had an error that was corrected by a credit reporting agency (CRA) after it was disputed, on at least one of their three credit reports;
- Four out of five consumers who filed disputes experienced some modification to their credit report;
- Slightly more than one in 10 consumers saw a change in their credit score after the CRAs modified errors on their credit report; and
- Approximately one in 20 consumers had a maximum score change of more than 25 points and only one in 250 consumers had a maximum score change of more than 100 points.
2013 Federal Trade Commission Study

Findings Understate Number of Errors and Difficulty for Consumers to Fix Errors

Credit Scores impacted as much or more by absence of information than by presence of false information. Consumers are much less likely to identify absence of information as an error.

Automated Credit Report Dispute System: Credit bureau often limits its role in disputes to little more than assigning codes as to what type of dispute is at issue: the credit bureaus do not examine documents, contact consumers by phone or email, or exercise any form of human discretion in resolving a dispute. The vast majority (85%) of credit reporting disputes are passed on to the company (known as a furnisher) that provided the information.
More than half of the trade lines in the credit bureau databases are supplied by the credit card industry: Credit reporting companies get their information from a variety of industries but more than half of the account information is supplied by credit card companies. Specifically, 40 percent comes from bank cards, such as general credit cards, and 18 percent comes from retail credit cards. Only 7 percent comes from mortgage lenders or servicers, and only 4 percent comes from auto lenders.
More than a third of disputes have to do with collections: In 2011, consumers reached out to the credit reporting companies roughly 8 million times, resulting in disputes of 32 to 38 million items in their credit files. Almost 40 percent of the disputes relate to debt in collections, and debt in collections is five times more likely to be disputed than mortgage information. According to the industry, some of this may have to do with consumers’ incentive to dispute any negative information on their reports.
Fewer than one in five people obtain copies of their credit report each year: The most effective way for consumers to identify errors in their reports is to obtain copies and review them. But only about 44 million consumers per year, or about one in five, obtain copies of their files.

Most information contained in credit reports comes from a few large companies: Most information contained in credit files comes from a small number of large banks and other financial institutions. In fact, the top 10 data furnishers provide 57 percent of the trade lines coming into the credit reporting companies. The top 50 furnishers provide 72 percent. And the top 100 furnishers provide 76 percent.
Most complaints are forwarded to the furnishers that provided the original information: The credit reporting companies resolve an average of 15 percent of consumer disputed items internally, without getting the data furnishers involved. The remaining 85 percent are passed on to the furnishers. Today’s report, however, found that the documentation consumers mail in to support their cases may not be getting passed on to the data furnishers for them to properly investigate and report back to the credit reporting company.
Consumer Credit Data Quality Issues

Scores Vary Significantly by Geographic Area

Differences correlated with income levels, unemployment rates

San Jose-Sunnyvale-Santa Clara, CA. 700
San Francisco-Oakland-Fremont, CA 696
Madison, WI. 694
Honolulu 693
Minneapolis-St. Paul-Bloomington, MN-WI. 691
Bridgeport-Stamford-Norwalk, CT. 690
Boston-Cambridge-Quincy, MA-NH 689
Oxnard-Thousand Oaks-Ventura, CA 685
Portland-South Portland-Biddeford, ME 685
Seattle-Tacoma-Bellevue, WA 685

Memphis, TN-MS-AR. 638
McAllen-Edinburg-Mission, TX 639
Jackson, MS. 642
El Paso, TX 650
Columbia, SC 650
Las Vegas-Paradise, NC 650
Little Rock-North Little Rock-Conway, AR 651
Baton Rouge, LA 651
Lakeland-Winter Haven, FL. 651
Augusta-Richmond County, GA-SC 651

TransUnion, February 7, 2013
Scores Change Significantly Over Short Periods of Time

Roughly 70 percent of credit scores change by up to 20 points in any given 90-day window. Most consumers experience a score improvement rather than a score drop, with 56 percent of consumers shifting higher, 34 percent shifting lower and 10 percent staying the same.
Experian Credit Cornerstone, January 23, 2013
Insurance Credit Scoring Not Objective

- Differences across credit bureaus
- Differences within a credit bureau due to lender choices
- Changes in definitions of credit report items – bankruptcy law change
- Public policy initiatives changing credit scores – moratorium on foreclosures
- Timing of report – balance to limits varies by time of the month
- Decisions of lenders – not reporting limits, changing limits
Insurance Credit Scoring Is Subject to Manipulation

- Invitations/Solicitations for Manipulation
- Piggy-Back on another consumer
- Shift balances from one car to multiple cards

Penalizes Consumer for Rational Behavior

- Shop around for best rates
- Cancel a card when lender acts unfairly
- Get a card to get 10% first visit discount
Correlation to Race and Income – The Missouri DOI Study

- The insurance credit-scoring system produces significantly worse scores for residents of high-minority ZIP Codes.

- The insurance credit-scoring systems produce significantly worse scores for residents of low-income ZIP Code.

- The relationship between minority concentration in a ZIP Code and credit scores remained after eliminating a broad array of socioeconomic variables, such as income, educational attainment, marital status and unemployment rates, as possible causes. Indeed, minority concentration proved to be the single most reliable predictor of credit scores.
Correlation to Race and Income – The Texas DOI Study

The individual policyholder data shows a consistent pattern of differences in credit scores among the different racial/ethnic groups. The average credit scores for Whites and Asians are better than those for Blacks and Hispanics. In addition, Blacks and Hispanics tend to be over-represented in the worse credit score categories and under-represented in the better credit score categories.
The Flawed Federal Trade Commission Study

• Failed to obtain a comprehensive and independent data set for analysis.

• One FTC Commissioner voted against issuing the study out of concern for quality of study.

• FTC has since changed approach for homeowners’ analysis.

• Even with limited data, FTC found racial impact.

• Data on scores of applicants – as opposed to data only for policyholders – would show much greater disparate impact.
• Credit Scoring Reflects / Perpetuates Historical Inequities

“Segregation therefore racialized and intensified the consequences of the American housing bubble. Hispanic and black home owners, not to mention entire Hispanic and black neighborhoods, bore the brunt of the foreclosure crisis. This outcome was not simply a result of neutral market forces but was structured on the basis of race and ethnicity through the social fact of residential segregation.”

Undermines the Core Public Policy Goals of Insurance

- Undermines the goal of universal coverage by worsening the availability and affordability of insurance for those consumers with the least means to purchase insurance; and

- Undermines the loss mitigation role of insurance by
  - Placing great emphasis on a rating factor which has no ability to promote loss mitigation by policyholder; and
  - Encouraging consumers to spend time manipulating credit scores instead of true loss mitigation activities.
Insurance Scoring Is Not Needed

- States Which Ban Insurance Credit Scoring, including California and Massachusetts Have Thriving Markets.

- Insurers Entered The Massachusetts Auto Market After Partial Deregulation, Even Though Insurance Credit Scoring Is Banned.

- Insurance Credit Scoring Not Needed to Avoid Adverse Selection.

- Insurance Credit Scoring Not Needed With Modern Risk Classification.
Claims of Consumer Benefits of Insurance Scoring Are Refuted by Objective, Independent Data

“Allows Insurers to Write More Business”

Fact: Uninsured Motorist Rate Has Increased Countrywide While Uninsured Motorist Rate Has Declined in CA and MA where Insurance Credit Scoring is Banned

Fact: Auto Residual Market Has Declined More in CA than Countrywide

Fact: Creditor-Placed (Force-Placed) Insurance Has Skyrocketed in Past 5 Years

No Objective Evidence to Support This Claim
Industry Claim: “Insurance Credit Scores Reflect Personal Responsibility”

Blaming the Victim Claim is Factually Incorrect

- Actual Causes of Financial Distress Typically Beyond Control of Consumers
- Traditional Credit Reports Missing Information on Financial Responsibility, Let Alone Personal Responsibility
- Recent Actions by Credit Scoring Modelers to Utilize Non-Traditional Credit Information Documents Disparate Impact of Traditional Credit Information on Low-Income and Minority Consumers.
Unfair Discrimination: Intentional vs. Disparate Impact

Actuarial Principles and Standards of Practice – primary limitations on risk classifications are statistical relationship to expected costs and statutory or regulatory prohibitions. If race were not a prohibited factor and insurers found a statistical relationship between race and likelihood of claims, insurers would be compelled to use race.

Public policy prohibits use of race regardless of any statistical relationship to claims. Some states prohibit use of other characteristics, including consumer credit information, gender and being a legislator.
Department of Housing and Urban Development

Disparate Impact Rule

(a) Discriminatory effect. A practice has a discriminatory effect where it actually or predictably results in a disparate impact on a group of persons or creates, increases, reinforces, or perpetuates segregated housing patterns because of race, color, religion, sex, handicap, familial status, or national origin.

(b) Legally sufficient justification. (1) A legally sufficient justification exists where the challenged practice:
   (i) Is necessary to achieve one or more substantial, legitimate, nondiscriminatory interests of the respondent . . . and
   (ii) Those interests could not be served by another practice that has a less discriminatory effect.
HUD Disparate Impact Rule: Insurance Trades Apoplectic

NAMIC says that, if allowed to stand, “this rule could undermine the entire process of insurance underwriting, effectively blinding insurers as they attempt to determine potential risks and appropriate pricing, and needlessly raising costs for all consumers.”

[NAMIC] interprets the rule as codifying the use of disparate-impact analysis to prove allegations of unlawful discrimination with regards to homeowners insurance, “meaning any factor used by insurers to assess risk could be challenged if it produces statistically disproportionate outcomes among particular demographic groups.”
HUD Disparate Impact Rule: Insurance Trades Apoplectic

Leon Buck, PCI’s assistant vice president, federal government relations, notes, “States already prohibit discriminatory practices and have comprehensive enforcement, but the HUD rule puts in jeopardy the use of longstanding, sound, state-approved actuarial factors that are the foundation of responsible insurance underwriting.”

NAMIC: Businesses should not be penalized "because of a statistical disparity," "As long as it could be shown that there was no intent to discriminate racially or ethnically, there should be no controversy."
Example of Disparate Impact Complaint:
National Fair Housing Alliance against [Company X]

[Company X] refuses to insure homes with flat roofs in and around Wilmington, DE. NFHA sent testers seeking insurance quotes for homes in the Wilmington area to six agencies, two of which were [Company X]. [Company X] agents refused, indicating [Company X] does not insure homes with flat roofs. Other non-[Company X] agencies offered quotes.

NFHA referenced research by University of Delaware Center for Community Research and Service. Research shows very high correlation of percentage of flat roofs in a given area and the percentage of African American or minority owner-occupied units in the area.
NFHA Disparate Impact Complaint 2

“CCRS’s study employed geographic information systems and statistical software to investigate the correlation between race and roof type at the census tract level (by considering the percentage of minority households and the percentage of homes with flat roofs within a given census tract). Demographic and other housing data were obtained from the 2000 Census of Population and Housing. Data on roof type was based on tax parcel information, which included both information on roof type and grid number (a defined, geographic area that is larger than a block but smaller than a census tract). There were a total of 648 grids, with 164,963 dwelling units, that had roof type data within the relevant area.”
## NFHA Disparate Impact Complaint 3

Correlation of Key Racial Variables with Percentage of Flat Roof Owner-Occupied Dwelling Units by Census Tract

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Correlation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwelling units owned and occupied by African-American and non-Hispanic households as a percent of all owner-occupied dwelling unit</td>
<td>0.723</td>
<td>0.000</td>
</tr>
<tr>
<td>Dwelling units owned and occupied by White and non-Hispanic households as a percent of all owner-occupied dwelling units</td>
<td>-0.753</td>
<td>0.000</td>
</tr>
</tbody>
</table>
NFHA Disparate Impact Complaint 4

Simple Bivariate Regression of Percentage of Owner-Occupied Flat Roof Dwellings and Race/Ethnicity of Housing Unit Households by Census Tract

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Adjusted R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwelling units owned and occupied by African-American and non-Hispanic households as a percent of all owner-occupied dwelling unit</td>
<td>0.799</td>
<td>0.518</td>
</tr>
<tr>
<td>Dwelling units owned and occupied by White and non-Hispanic households as a percent of all owner-occupied dwelling units</td>
<td>-0.802</td>
<td>0.563</td>
</tr>
</tbody>
</table>
NFHA Disparate Impact Complaint 5

“Additional analyses demonstrated that homes within Wilmington proper have a disproportionate share of flat roof residences as compared to non-Wilmington census tracts. The researchers inserted a variable to indicate whether a census tract was inside or outside of Wilmington. The adjusted $R^2$ value for each was over 0.84, which establishes that location inside or outside of Wilmington and the race/ethnicity of owner-occupied households together accounted for over 84% of the variation of the percentage of owner-occupied flat roof dwelling units in a census tract. Wilmington’s population was 54% African-American and 36% white as of the 2000 Census (the data relied upon in the study).”
NFHA Disparate Impact Complaint 6

“The statistical evidence proves that [Company X]’s policy disproportionately impacts African-American and minority communities, as there is a statistically significant relationship between minority populations and homes that have flat roofs. Coupled with NFHA’s testing, which illustrates that [Company X] refuses to insure homes with flat roofs in Wilmington, Delaware and surrounding areas, Complainant has established a prima facie case that [Company X]’s no flat roof policy has a racially disparate impact on African-American and minority communities in violation of the Fair Housing Act.”
“NFHA’s testing also reveals the absence of any business justification for [Company X]’s practice of refusing to write insurance policies for homes with flat roofs in Wilmington and surrounding areas. [Company X] agents did not disclose any business reason for [Company X]’s refusal to write homes with flat roofs. Other insurers offered coverage for homes with flat roofs. Finally, NFHA tested [Company X] insurance companies in Washington, DC and Philadelphia, Pennsylvania. NFHA testers, purporting to seek information about homeowners’ insurance for homes with flat roofs, each contacted two, separate [Company X] insurance companies in each jurisdiction. The investigation revealed that [Company X] does not have a policy against insuring homes with flat roofs in these cities.”
Disparate Impact:
A Statistical Test Appropriate for Insurance

If a statistical relationship is justification for use of a risk classification, it makes sense that the same statistical relationship test is a valid measure of discrimination on the basis of protected classes.

As a public policy matter, if insurers are prohibited from intentionally discriminating on the basis of race, it follows that non-intentional discrimination that has the effect of discriminating on the basis of race is also prohibited – unless there is a business justification and no less discriminatory alternative.

How Can Actuaries Identify and Mitigate Disparate Impact?