



**Reimagining Market Analysis and Market Regulation
Through Enhanced Data Collection and Analytics**

**Presentation to NAIC Market Regulation and
Consumer Affairs (D) Committee**

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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

About Birny Birnbaum

Birny Birnbaum is the Director of the Center for Economic Justice, a non-profit organization whose mission is to advocate on behalf of low-income consumers on issues of availability, affordability, accessibility of basic goods and services, such as utilities, credit and insurance.

Birny, an economist and former insurance regulator, has worked on racial justice issues for 30 years. He performed the first insurance redlining studies in Texas in 1991 and since then has conducted numerous studies and analyses of racial bias in insurance for consumer and public organizations. He has served for many years as a designated Consumer Representative at the National Association of Insurance Commissioners and is a member of the U.S. Department of Treasury's Federal Advisory Committee on Insurance, where he co-chairs the subcommittee on insurance availability. Birny is also a member of the U.S. Federal Reserve Board's Insurance Policy Advisory Committee.

Birny served as Associate Commissioner for Policy and Research and the Chief Economist at the Texas Department of Insurance. At the Department, Birny developed and implemented a robust data collection program for market monitoring and surveillance.

Birny was educated at Bowdoin College and the Massachusetts Institute of Technology. He holds Master's Degrees from MIT in Management and in Urban Planning with concentrations in finance and applied economics. He holds the AMCM certification.

Why CEJ Works on Insurance Issues

Insurance Products Are Financial Security Tools Essential for Individual and Community Economic Development:

CEJ works to ensure ***fair access*** and ***fair treatment*** for insurance consumers, particularly for low- and moderate-income consumers.

Insurance is the Primary Institution to Promote Loss Prevention and Mitigation, Resiliency and Sustainability:

CEJ works to ensure insurance institutions maximize their role in efforts to reduce loss of life and property from catastrophic events and to ***promote resiliency and sustainability*** of individuals, businesses and communities.

What is Transaction Data? What is Summary Data?

Transaction Data – separate data records for each transaction.

In insurance, transaction data means separate records for each quote/sales transaction and separate records for each claims transaction.

Insurers maintain sales and claims transaction databases to:

- Track interactions with the consumer; and
- Employ their analytics on transaction data sets.

With transaction data, new data elements can be added to the data record without disturbing the existing data elements.

With transaction data, the insurer can associate great detail – e.g. many characteristics and outcomes – to individual consumer records.

Summary Data – experience grouped into pre-defined categories, e.g. MCAS

Benefits of Transaction Data

More Effective for Market Analysis and Market Regulation

- More granular analysis / Discover, not confirm / Multi-variate
- More timely analysis – MCAS data are stale, compare to mortgage, workers comp¹
- Ability to employ predictive analytics / AI / Machine Learning
- Ability to identify proxy discrimination and disparate impact
- More consistent – compare STLDI and Travel MCAS Blanks
- More efficient and effective – compare STLDI transaction data collection with final summary data blank.

¹ See “Minnesota’s workers’ compensation response to COVID-19” at https://www.dli.mn.gov/sites/default/files/pdf/MN_work_comp_response_to_COVID-19.pdf and California Workers Compensation Institute Interactive App at <https://www.cwci.org/CV19claims.html>

Benefits of Transaction Data

More Efficient for Insurers and Regulators

Less Costly for Insurers

- Simpler Data Reports / Consistent with Other Insurer Uses
- Less Costly to Revise, Add Data Elements
- Dramatically Reduce Special Data Calls
- Dramatically Reduce Regulatory Inquiries

Less Costly for Regulators

- More Reliable Data / Less Time on Data Reporting Issues
- More Refined Market Analysis / Better Targeting of Regulatory Resources
- Fewer Special Data Calls
- Utilize Existing Statistical Agent Framework Instead of New Data Infrastructure

MCAS: 20th Century Technology Applied to 21st Century Industry Practices

Industry Data Sources and Uses circa 2004 versus Today

2004:

- Third-party data – predominantly consumer credit information
- Growing adoption of early predictive models using multiple regression of historical data
- Growing use of generalized linear models.

Today:

- Third-Party Data – dozens of non-insurance sources;
- Enhanced, real-time consumer insurance data;
- Real-time data access and decision-making;
- Micro-segmentation for marketing, pricing, claims settlement, anti-fraud
- Advanced data analytics -- data mining, generalized additive models, neural networks, machine learning, AI

MCAS: 20th Century Technology Applied to 21st Century Industry Practices

Market Regulator Data Sources and Uses circa 2004 versus Today

2004:

- Complaints
- Enforcement Actions
- News Reports
- Lawsuits
- MCAS for personal auto, homeowners, life and annuity

Today:

- Complaints
- Enforcement Actions
- News Reports
- Lawsuits
- MCAS for some additional lines

Contrast the absence of change in market regulation data collection with the significant increases in financial regulation data collection since 2004.

Transaction Data Collection on Consumer Market Outcomes is the Single Most Important Action to Fulfill the Promise of Market Analysis

Around 2000, the NAIC embarked on a “reinvention” of market regulation that promised to move away from the auditing model of market regulation to a more data-driven, analytic approach – market analysis. That promise has not been fulfilled. MCAS has become just another piece of the auditing approach.

There Has Been Transaction Data Reporting for Decades in Insurance and Other Financial Service Industries

Transaction data already reported in some insurance lines:

- Workers Comp – at least 1980s
- TX – since at least 1996 – monthly for homeowners, quarterly for personal auto and commercial lines
- ISO- and AAIS-reporting companies
- NAIC PBR for life insurance and, eventually, annuities and long-term care

Standard in other financial service regulators:

- CFPB and other members of FFIEC – HMDA
- OCC – Mortgage Metrics Report -- monthly
- SEC – Monitoring Securities Trading

Resources and Collectibles

1. CEJ July 21, 2021 Presentation to NAIC MIS R&D WG
2. CEJ 2011 Presentation at NAIC E-Reg Conference, “Data Mining and Predictive Analytics for Insurance Regulators: The Promise of Market Analysis”
3. CEJ 2008 Presentation to NAIC Consumer Liaison Committee, Centralized MCAS Data Collection
4. CEJ 2005 Presentation to NAIC E-Reg Conference, “Data Mining for Insurance Regulatory Market Analysis”
5. CEJ 2004 Proposal for Centralized Data Collection