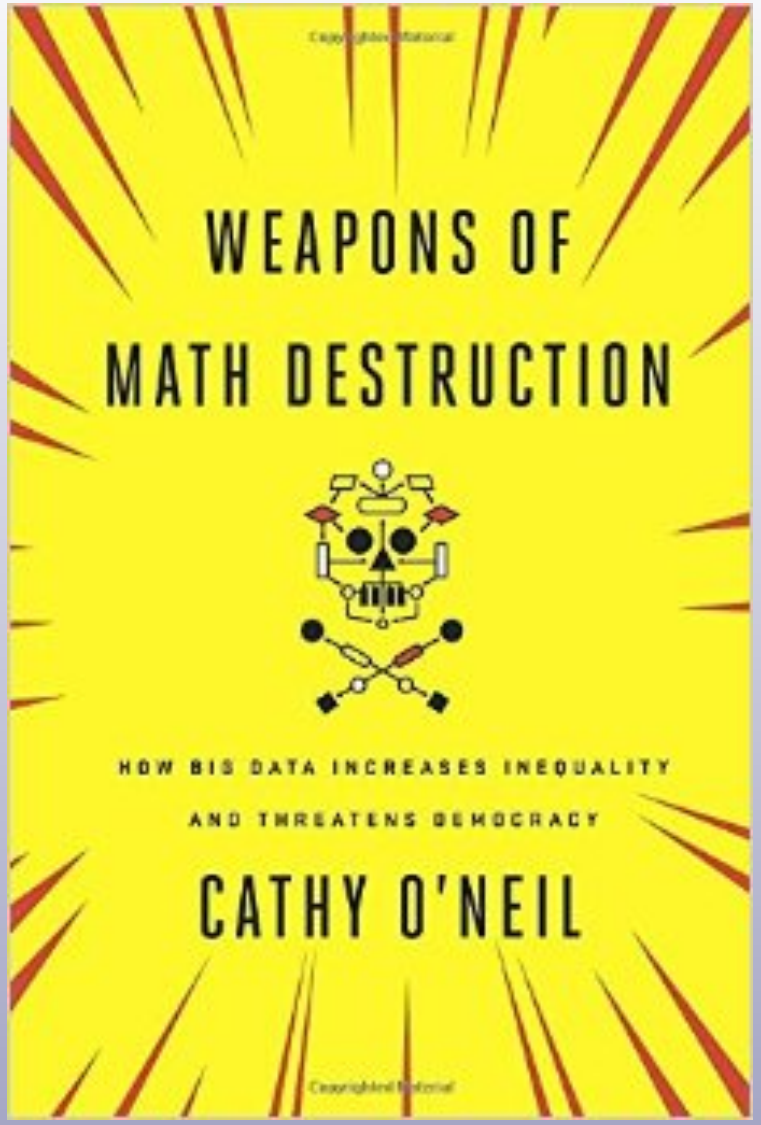
Data mining's impact on consumers in the context of insurance underwriting, pricing and sales

Amy Bach, Esq., Executive Director
United Policyholders
Email: amy.bach@uphelp.org
Website: www.uphelp.org

October 26. 2016
Society of Actuaries
Las Vegas, Nevada


WEAPONS OF
MATH DESTRUCTION
HOW BIG DATA INCREASES INEQUALITY
AND THREATENS DEMOCRACY
CATHY O'NEIL

Dramatic yes, but…

- Legitimate cause for concern on many fronts
- Equal access to data seems a good approach

Unhealthy market segmentation

- *Low/moderate income consumers easy to identify*
- *Less attractive to insurers*
- *Unfavorable pricing (CFA alleges low income households are paying more)*

How Big Data Enables Economic Harm to Consumers, Especially to Low-Income and Other Vulnerable Sectors of the Population, Nathan Newman, J.D., Federal Trade Commission https://www.ftc.gov/system/files/documents/public_comments/2014/08/00015-92370.pdf)

Potential underground use of prohibited rating factors

- Ethnicity/Race
- Political affiliation
- Religion
- Hobbies/Interests unrelated to risk of loss
- Economic status

Insurance is different

- Mandatory and *de facto* mandatory purchase means free market competition is insufficient to protect policyholders

- Less “desirable” customers still have to buy insurance and deserve to pay a fair price

Benefits of big data skew heavily in insurers' favor:

Access to much more detailed info about the risks they're undertaking

Insurers can cherry pick at a granular level

Insureds don't have equivalent new tools to compare quality of coverage/policies and performance of insurance companies

Unequal access to information

- Regulators can’t afford to buy the data
- Are smaller insurers that can’t either unfairly disadvantaged vis a vis risk distribution.
- Unfair competition?

Undermining effective regulatory review of rate filings?

- Regulators can’t penetrate to determine whether there are prohibited factors embedded in the underlying models

How much can we charge before the customer walks?

- McKinsey & Co: “Harnessing the flood of data available from **customer interactions** allows companies to price appropriately—and reap the rewards.” See:

http://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/using-big-data-to-make-better-pricing-decisions

?

How large a deductible can we add before the customer balks?

How much coverage can we carve out via exclusions before a regulator notices?

How can we harm our competitors with what we learn about their customers?

Price Optimization

- Seems unfair when used in the insurance context – Whether or not someone comparison shops is not a fair predictor of risk.

- Penalizes loyal customers
  - Who think they’re getting a benefit by being loyal and don't know they may be overpaying
  - Who may have bundled to get a better deal but aren’t getting one

State prohibitions

Maryland, Ohio, Washington, Vermont, Indiana, Colorado, California, Connecticut, Delaware, Minnesota, Montana, Missouri, Pennsylvania, and Florida, and Rhode Island and other states have restricted or banned the practice through administrative bulletins. Legislation under consideration in Illinois, Oklahoma, and Montana.

- Deem price optimization to be not a legitimate rating factor/no actuarial value as a predictor of risk.

Privacy concerns:

- Pay as you drive products were tagged with privacy concerns from the get-go.
- Consumers routinely give what they consider to be benign data to companies (*e.g*, social media apps) but don't realize that it gets sold to third parties, including insurers
- Insurance is different b/c you have to buy it

The new redlining?

- An increase in redlining by prohibited characteristics (race, ethnicity, income) buried in models. Insurers always prefer clients who are wealthy and have more than one major asset to insure
- Consumers advocates are pushing for FIO data call on auto ins affordability
  - national data collection would be beneficial but state regulators resisting Fed encroachment

NAIC whitepaper:
http://www.naic.org/documents/committees_c_catf_related_price_optimization_white_paper.pdf

Wells Fargo – an illustration of how TMI can lead to abuses

- Data-driven targets/goals (8 accounts per customer) led to abuse of consumer personal information

The art of underwriting

- Flows with humanity as it evolves
- Impacted by social media
- Based on expertise of experts who know people and the math of probabilities too
- Very important to preservation of healthy risk transfer through insurance

Amy Bach, Esq.

- Co-founder of United Policyholders
- Career insurance consumer advocate
- Former insurance litigator, legislative staffer
- Member, Federal Advisory Committee on Insurance
- 7 term NAIC consumer representative