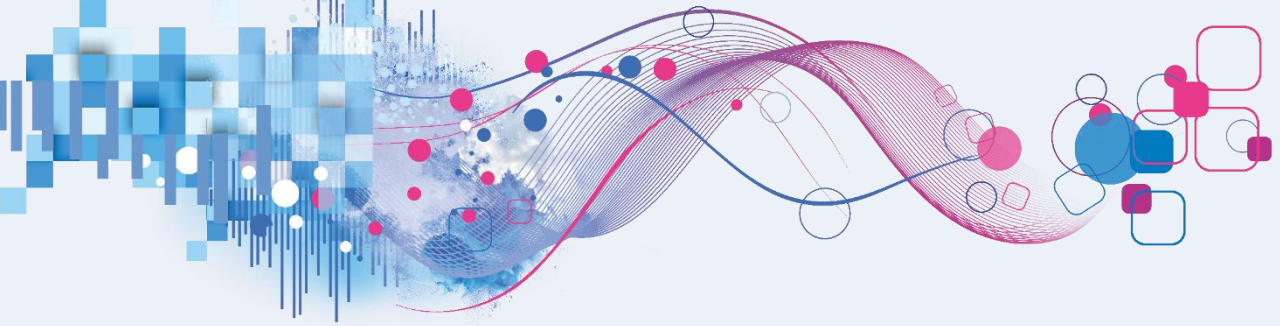# Fairness in Consumer Credit Markets

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Experian, North America
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Powering Opportunities
…and helping to create a better tomorrow

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Agenda

Credit bureau scores
Trends

Fairness

Fair:

'marked by impartiality and honesty **:** free from self-interest, prejudice, or favoritism'

Meriram-Webster https://www.merriam-webster.com/dictionary/fair#h1

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Credit bureau scores

Statistically sound and empirically derived

Race/ethnicity unknown

Credit characteristics to predict credit repayment behavior

Data would have to predict differently

Difficult to find segments with different relationships

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Testing credit bureau scores

Race ethnicity

- Census data

  - **Housing and Urban Development areas of minority concentration**

  - **Census tract level**

- Race proxy

  - **Surname geocoding**

  - **First name/surname geocoding**

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No biases observed

Examine score interpretation

- Controlling for ethnicity

- Bad rate by score

- Confidence intervals

Regression analysis

- Score as independent variable (and attributes)

- Good/bad tag as dependent variable

- Interactive variables based on race/ethnicity

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Trends

Universe Expansion

- VantageScore
  - **Young files**
  - **Occasional credit**

Alternative data

- Experian Boost$_{TM}$
  - **Verified/self reported data**
  - **Telecom, utility payments**
  - **Controlled by consumer**
  - **Thin file/distressed credit**
- Other credit bureau data
  - **Public record information**
  - **DDA/checking data**

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Trends

Credit data

- National Consumer Assistance Program (NCAP)
  - **Public records**
  - **Collections**
- Improved characteristics
  - **Detailed, cross validation of data elements**
  - **Getting it right at the consumer level**

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Trends

Methods

- Machine learned

  - **Extreme gradient boosted decision trees**

  - **Improved performance**

  - **Reduced need for segmentation**

  - **Increased diligence**

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