Fairness in Consumer Credit Markets

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Fairness in Consumer Credit Markets

Strong growth in consumer credit markets

→ How is credit allocated?

based on perceived default risk

→ How is this credit risk calculated?

US: credit scores

Europe: government credit registries, internal models

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Trends: ever more data used, improved prediction technologies

→ Questions:

Do better data and technologies improve the allocation of credit ?

Who is left out of credit markets, why and what are the consequences?

Can we reduce default risk while increasing access to credit?

Fairness in Consumer Credit Markets

How do we define fairness?

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Algorithmic notions:

1. Anti-classification $\rightarrow$ protected attributes not used
2. Classification parity $\rightarrow$ predicted performance equal across groups
3. Calibration $\rightarrow$ outcomes independent of protected attributes

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Economic notions:

4 Access to credit

5 Price of credit

6 Access to information, transparency

Fairness in Consumer Credit Markets: USA

Credit allocation mainly based on credit scores

1. Anti-classification: mandated by law
   (Fair Credit Reporting Act 1970, Equal Credit Opportunity Act 1974)
2. Classification parity: very little public information
3. Calibration: large body of evidence that outcomes are very unequal across protected groups

$\rightarrow$ access and price of credit, financial literacy

4. Low perceived transparency

$\rightarrow$ despite legally mandated disclosure requirements

Fairness in Consumer Credit Markets: USA

Unequal outcomes justified based on credit scores

Concerns:

1 Historically biased features lead to low credit scores for some groups

2 Potential for self confirming cycle of low credit scores, costly credit and high default rates

3 Large number of unscored consumers

Who are the unscored?

Fairness in Consumer Credit Markets

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1. Young
2. Low income

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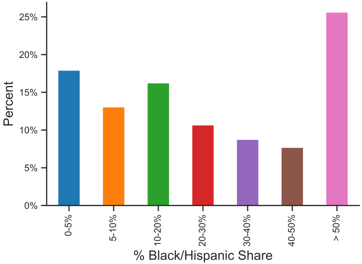
The Unscored: No updates or reports on credit file in past 6 months, or no accounts at least 6 months old

1. Young
2. Low income
3. Minority



Fraction of unscored by race. Source: Albanesi and Vamossy (2019).

Fairness in Consumer Credit Markets

- Large fraction of unscored among minority customers $\Longrightarrow$

1. limited access to credit
2. low accuracy of score

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Lessons

- Credit scores key in enhancing fairness
- Similar concerns apply to Europe as consumer credit expands and societies become more diverse