Who are your consumers? Understanding selection bias into government programs

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Overview

- Complaints are widely used across the CFPB and among third parties
- We don’t fully understand why some people complain and some do not
- Our study uses a case-control methodology and a survey instrument developed and extensively tested in cognitive interviews.
- Our findings show the ways in which consumers who complain differ from those who have similar problems, but do not.
- Case-control surveys can help you to understand how people select into your programs

Complaints at the CFPB

- One of the primary functions of the CFPB is collecting, investigating, and responding to consumer complaints



- Complaints and company responses are used to monitor risk in financial markets, at companies, and guide agency actions
- Complaints are shared with other regulators, and a subset of complaints are shared with the general public

Understanding selection into complaints is a major barrier to creating value from complaint data

- Complaint data utility is hindered by *selection bias*
- Given that someone has a problem with a financial product or service and has not received satisfactory help from the provider, what distinguishes those who do and do not submit complaints?
- Without knowing about those selection biases, we are limited in our ability to generalize from complaint data to the broader financial marketplace.

Hypothetical example

Regional Bank A



Year 1: 500 complaints
Year 2: 500 complaints

Regional Bank B



Year 1: 50 complaints
Year 2: 500 complaints

Bank serves a community that received affordable, reliable broadband at the end of year 1

Maximizing value from complaint data by understanding selection bias

- Long-term objective:
  - Provide a set of weights that can be used to adjust analyses of complaint data to account for various forms of selection bias
- Nearer-term objective:
  - Quantify characteristics of selection bias for one product over one year

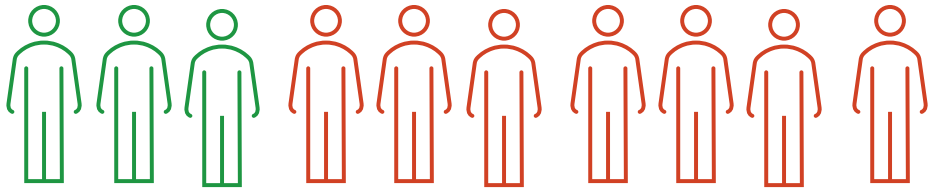
Case Control surveys to study infrequent events

- Complaining to the CFPB is a relatively rare event
  - ~1.3 million complaints in 2022
- It would be cost prohibitive to understand selection by randomly sampling and surveying American households to identify individuals who have complained.
- Case-control methodology allows us to understand selection by surveying two separate groups:
  - Cases – individuals who have already submitted a complaint
  - Controls – individuals who are comparable to those who submitted a complaint (i.e., they have a problem with a financial product or service), but did not actually do so

Hypothetical example: Problem with a purchase shown on your statement

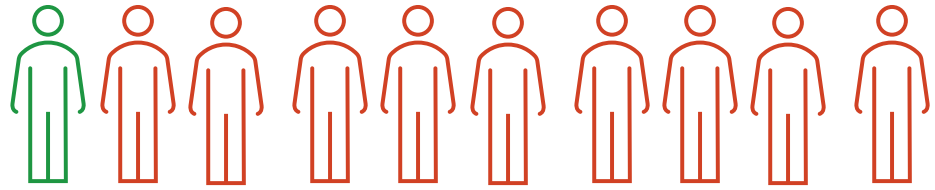
Cases (People who complained)

30% of cases surveyed report being younger than 26



Controls (people from the general population)

10% of controls surveyed report being younger than 26



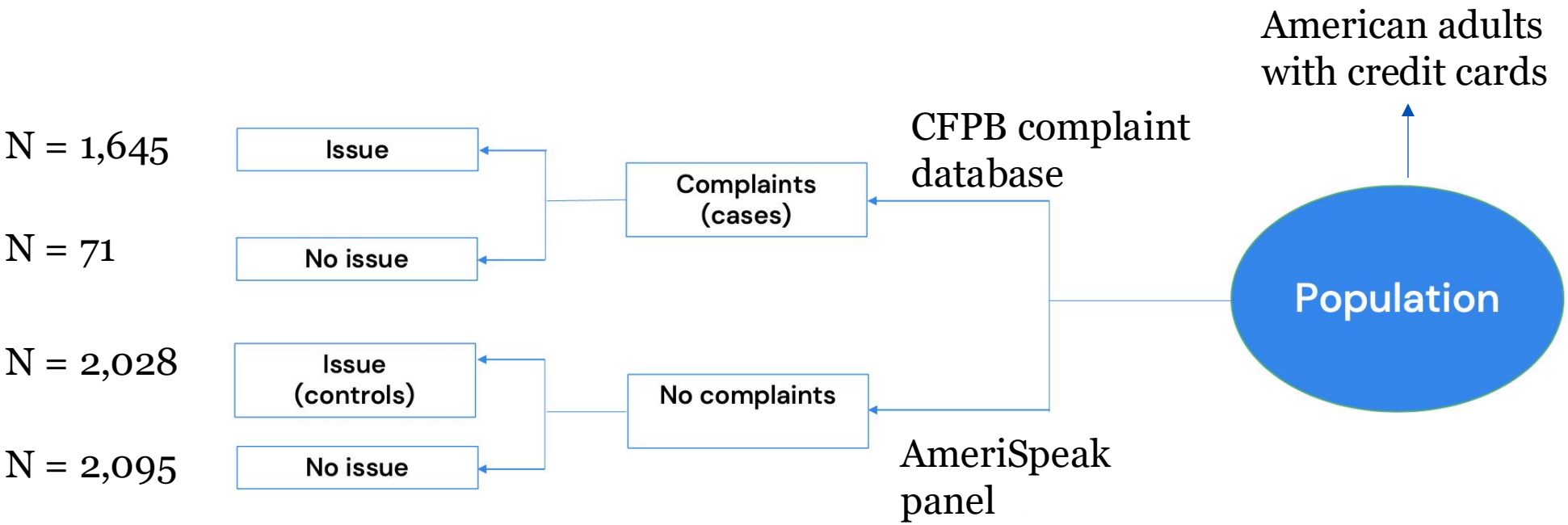
- Age is a "risk factor" for submitting a complaint about this issue. Being younger than 26 is associated with submitting a complaint
- BUT, this methodology cannot uncover *causal* relationships only associations.

Sampling plan

- The current study is intended as a trial-run for us to assess whether this approach can be useful on an ongoing basis, across all products covered by the CFPB
- We are focusing on credit card users. To complete the full survey, they must have experienced problems related to one of the following issues over the previous 12 months:

Getting a card	Advertising and marketing, including promotional offers	Fees or interest
A purchase shown on your statement	Making payments	Trouble using your card
Struggling to pay your bill	Closing your account	Credit report or credit score
	Other features, terms or problems	

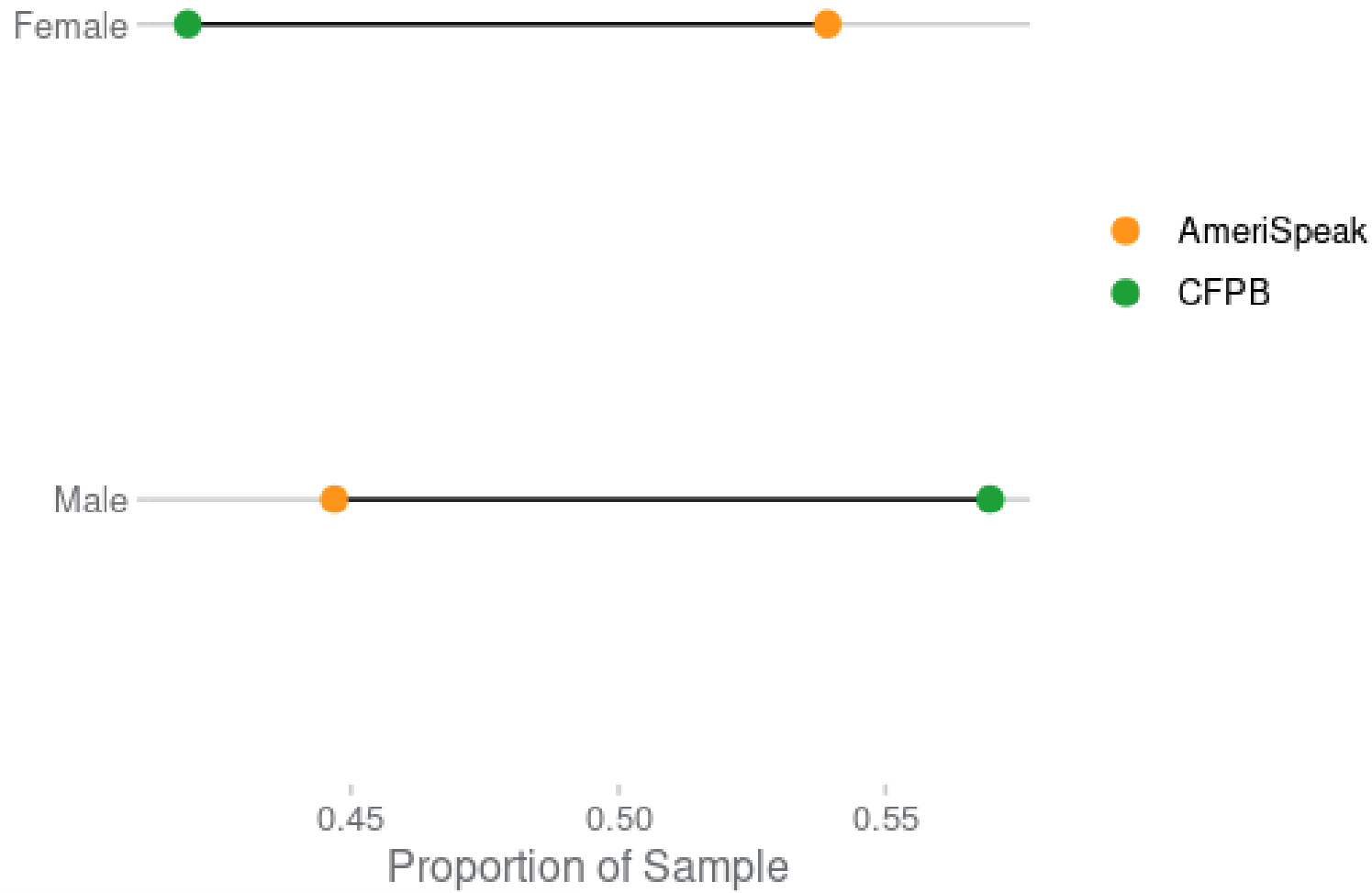
Case Control Study details



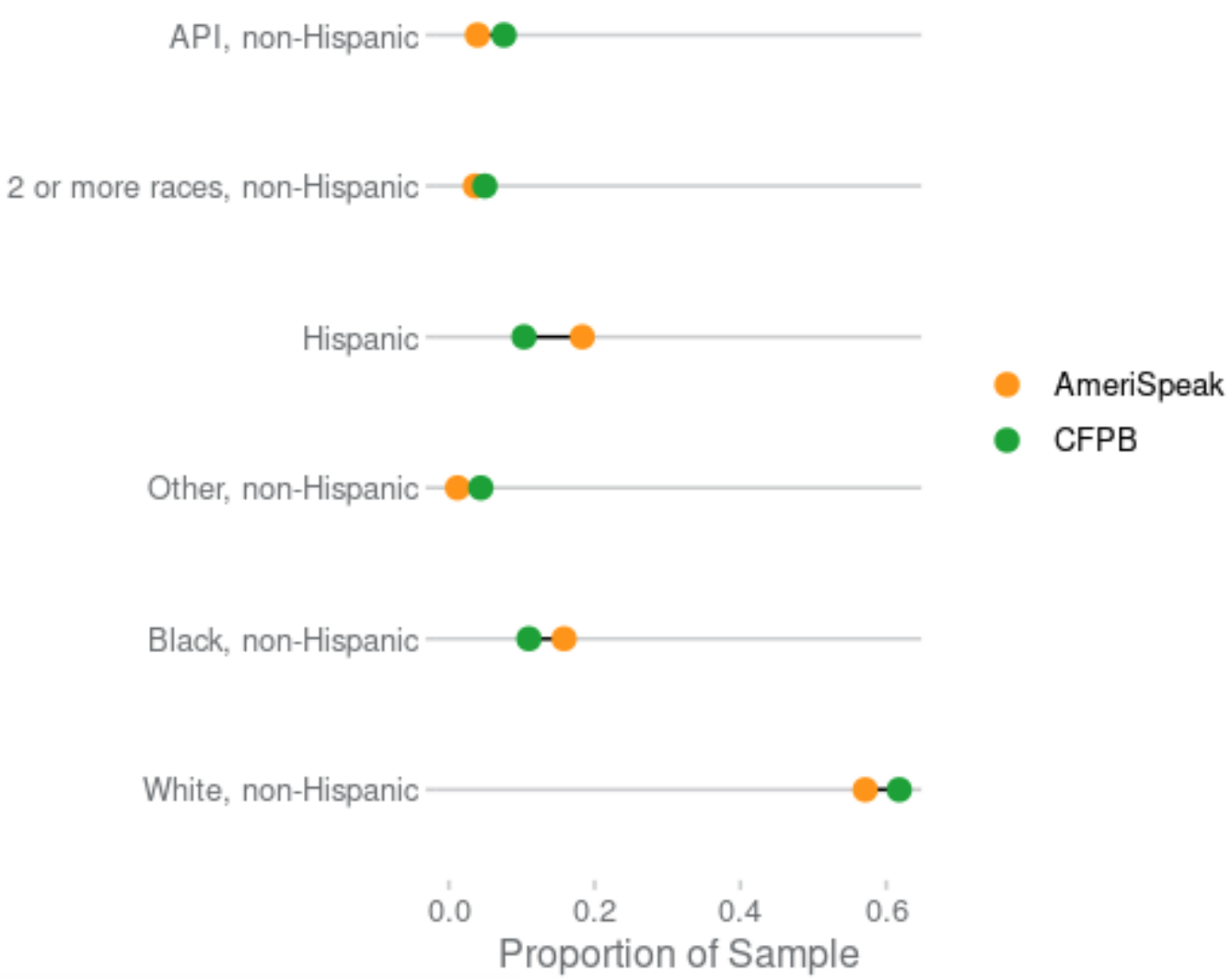
Survey Instrument Overview (*with examples*)

- Ask respondents about 6 general topics:
- Credit Card Overview
  - *Approximately how many times have you contacted your credit card company in the last 12 months about your credit card?*
- Credit Card Behavior
  - *During the last 12 months, did you carry an unpaid balance on any credit card from one month to the next?*
- Attitudes & Perceptions
  - *My credit card company/companies provide good service [Strongly disagree to strongly agree]*
- Problems with Credit Card
  - *[After prompting to think of a recent problem] In the last year, how much time did you spend trying to fix this problem?*
- Stress Appraisal Measure
  - *Did this problem tax or exceed your coping resources?*
- Demographics

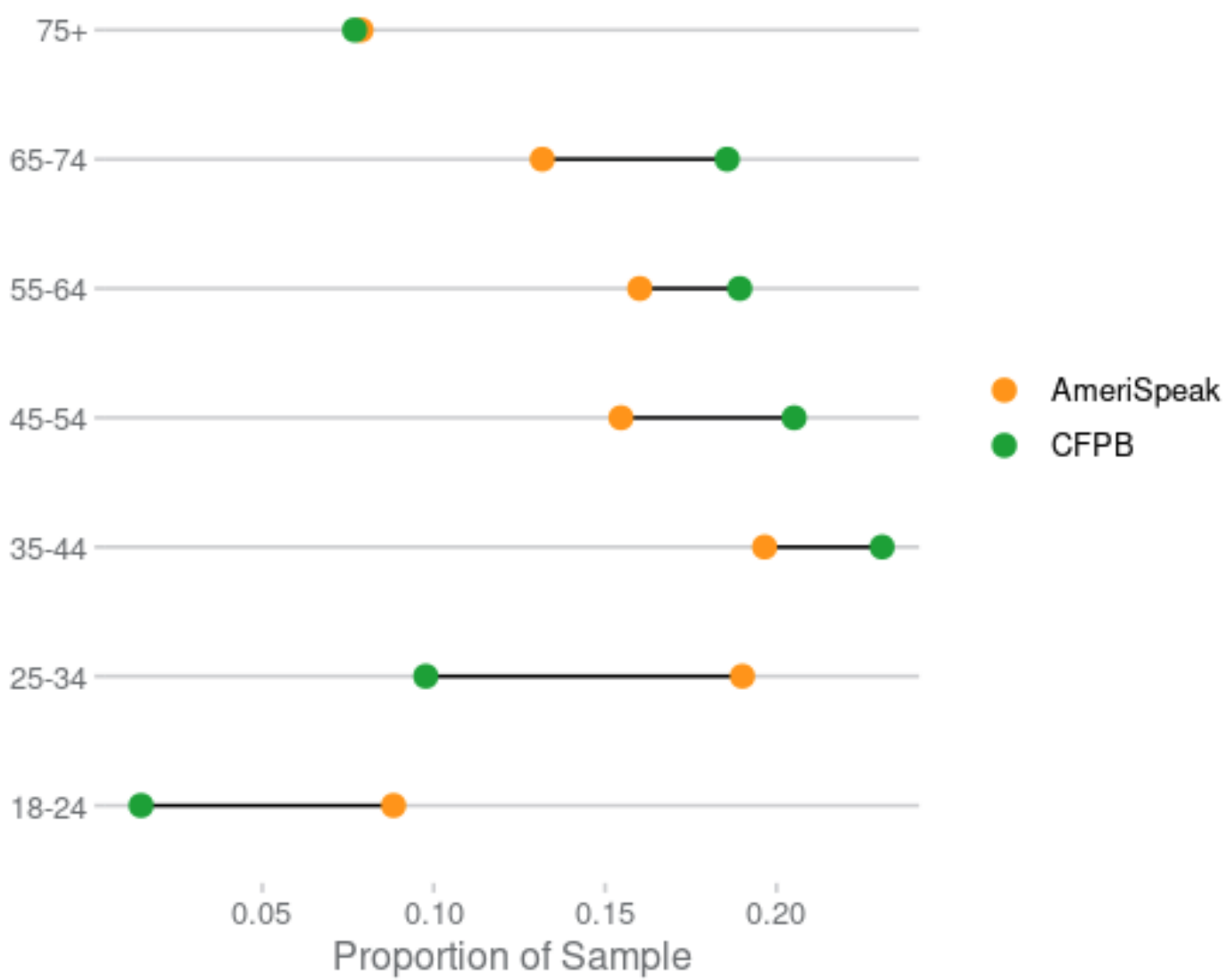
Gender differences



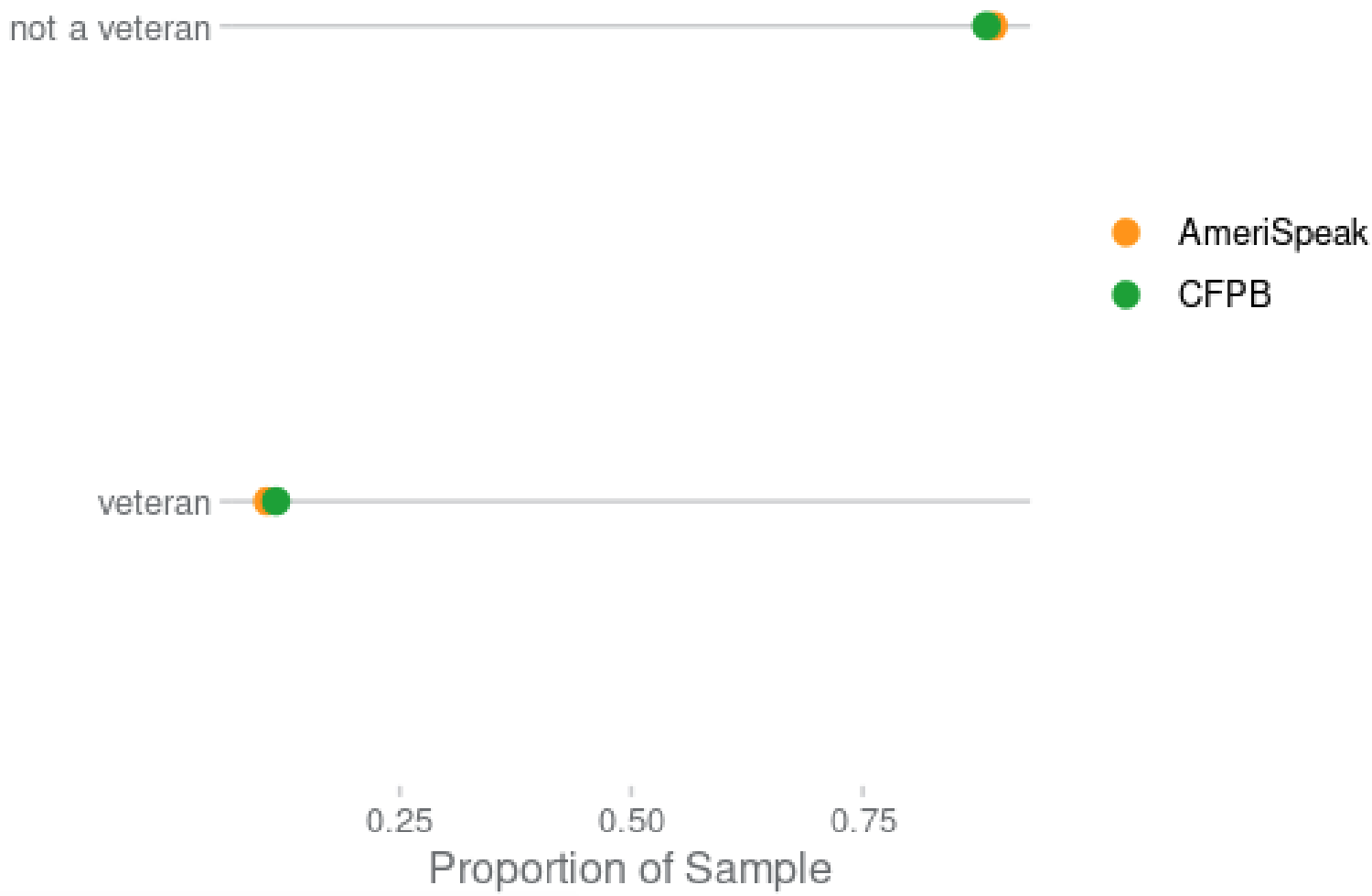
Race & Ethnicity



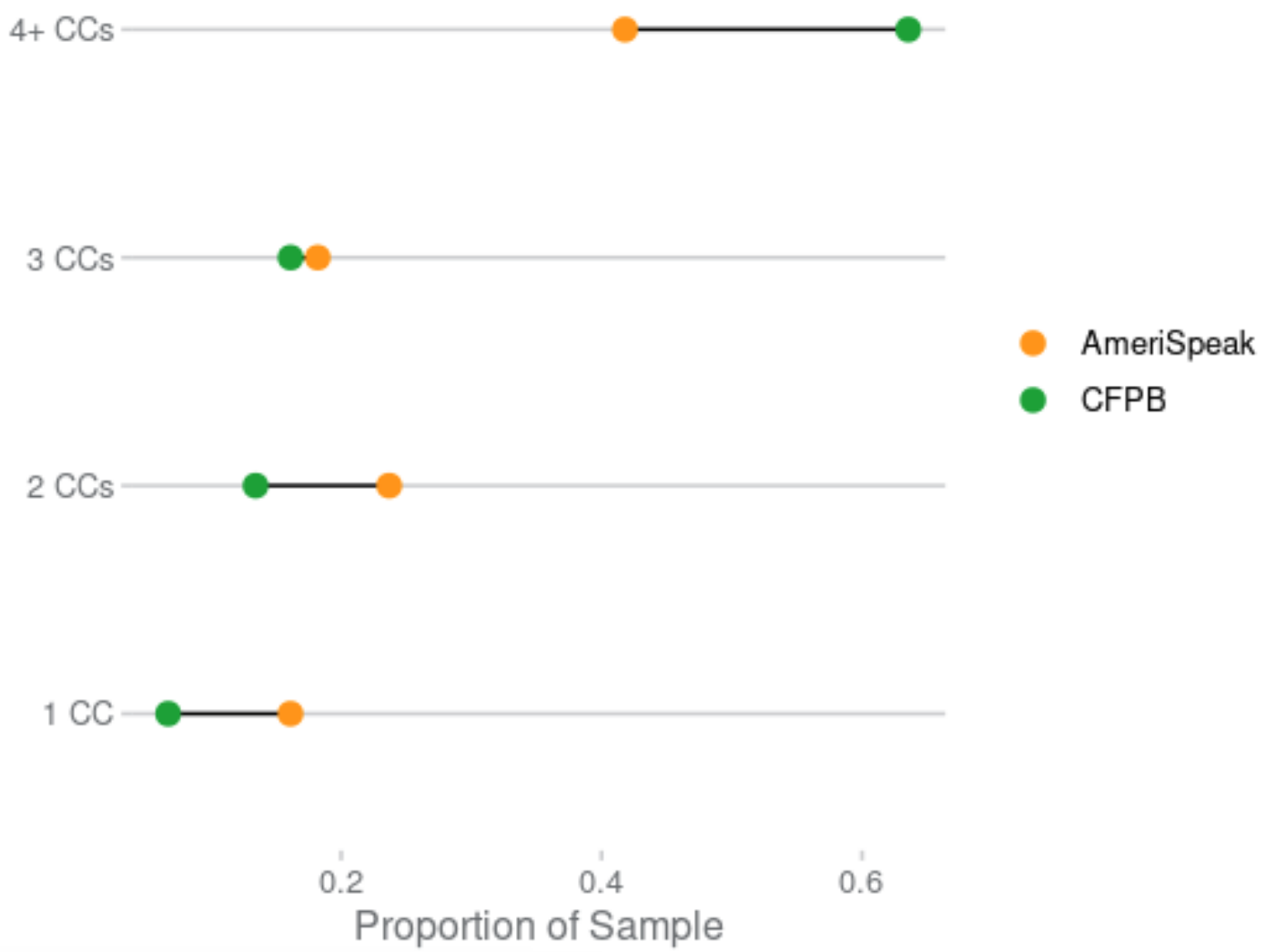
Age


75+
65-74
55-64
45-54
35-44
25-34
18-24
AmeriSpeak
CFPB
0.05
0.10
0.15
0.20
Proportion of Sample

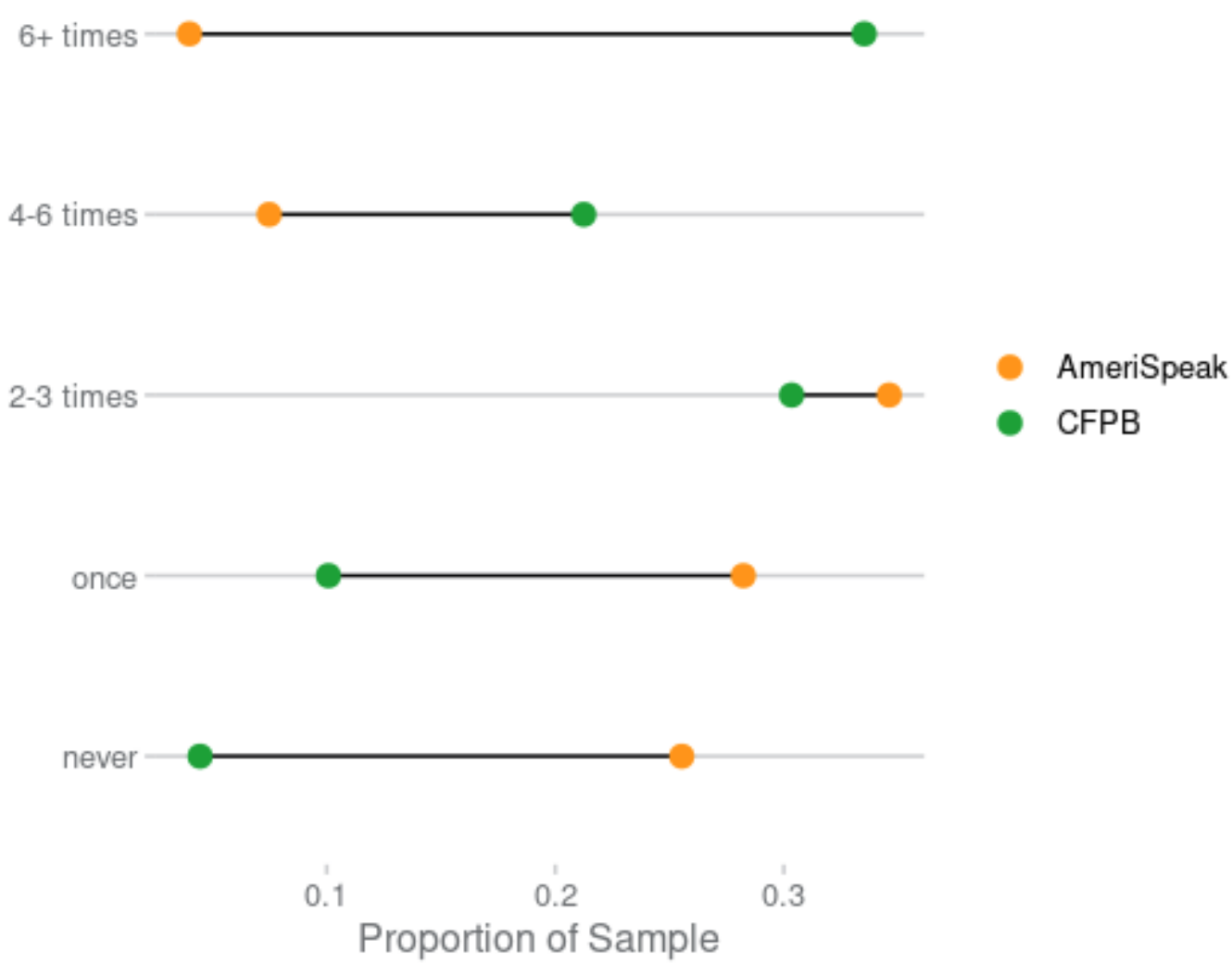
Veterans


not a veteran
veteran
AmeriSpeak
CFPB
0.25
0.50
0.75
Proportion of Sample

Number of credit cards



How many times did you contact your CC company in the last 12 months?



Discussion

- There are some large differences in who complains and who doesn't!
- Do you have a program or initiative with selection bias? Do you use those data to make decisions about the population?
- Using case-control methods could help you efficiently, accurately, and cost-effectively understand what your data are telling you about the population

What's next?

Current Planned deliverables

- White paper and analysis of results
- Feasibility analysis study for larger phase 2 of study

Other potential deliverables

- Blog or other non-technical summary
- Technical talk for other government research departments to discuss how the approach could be used for other programs/settings
- Use results to understand and develop outreach strategies for missing "market" segments
- Use results to inform consumer education strategy

Phase 2 of study

- Depending on results of initial study, develop a larger study that covers more of the 13 products on the complaint form.

Thanks!

- CFPB Consumer Insights team
- CFPB Consumer Response division
- R Gov organizers
- ICF and NORC partners
- You!