



## **CONFIDENTIAL - FOR PEER-REVIEW ONLY**

## Dynamic references in credit card payments, may 2024 (#174051)

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#### 1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

#### 2) What's the main question being asked or hypothesis being tested in this study?

What are the effects of providing reference points highlighting the consequences of payment decisions?

Do dynamic references change payment behavior?

Does it depend on whether they start at a low or high value?

#### 3) Describe the key dependent variable(s) specifying how they will be measured.

Key dependent variables are:

- a) The amount of money indicated in the payment decision as a proportion of the statement balance.
- b) The likelihood that people pay the statement balance, minimum, or other amounts.
- c) The distribution of payments
- d) The response times: how long it took participants to make the decision
- e) Participant confidence in their decision

#### 4) How many and which conditions will participants be assigned to?

All participants will make one payment decision in one of five randomly assigned conditions:

- 1. Control: the dual-payoff scenario used in the US and other countries (status quo), including a table with the costs of always paying the minimum and a reference of the savings if a person pays the debt off in three years.
- 2. Statement balance: This treatment changes the three-year payment reference of the status quo for a reference indicating the savings if a person pays the statement balance.
- 3. Reference table: This treatment includes a table with multiple reference points, which allows people to observe the changes in savings for each \$100 extra they pay.
- 4. Slider-low: This treatment starts the user interface with the same information as the Control but adds a slider that people can move to observe the same reference points as the Reference table treatment. The slider starts at the left (low value or three-year payment reference).
- 5. Slider-high: This is the same as treatment 4, but the slider starts at the right (high value or statement balance). It is a variation on the dynamic treatment, where the slider has an initial reference set to the statement balance, as in the treatment "Statement balance."

## 5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

We compare the payment decisions (and the time it takes a person to make a decision) in "Control" vs. each of the four treatments using linear regression models or linear probability models for dummy variables (we will also analyze the data using logit and multinomial models).

We will use statistical estimations such as the Kolmogorov–Smirnov tests to compare distributions.

### 6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

We will use observations for anyone who enters a payment decision.

# 7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

The desired sample size is 2500 respondents, approximately 500 per treatment. A third party, a market research company, controls the exact number.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?) We will examine treatment heterogeneity (e.g., by gender, SES, financial literacy, and others).