

Supplementary results for: Five Facts about MPCs: Evidence from a Randomized Experiment*

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This document presents additional analyses to complement the results presented in our main paper, in line with our pre-analysis plan. We first document heterogeneity in the MPC along several dimensions. We then describe the second round of the experiment.

1 Additional MPC Heterogeneity Analysis

We now report three additional analyses of MPC heterogeneity.

In Figure 1, we study MPC heterogeneity depending on proxies for credit constraints. Considering three such credit constraints, we do not find evidence of heterogeneity along this dimension.

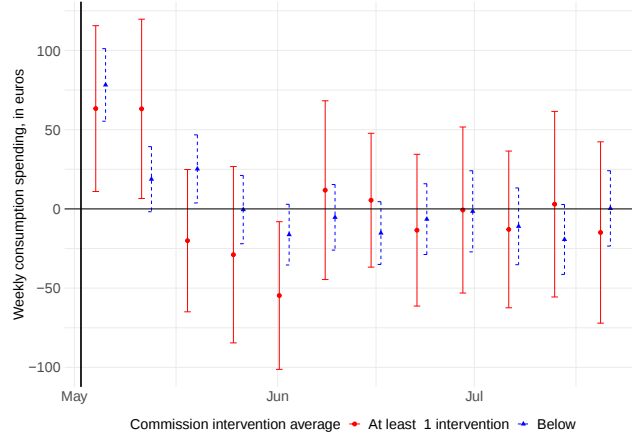
Second, in Figure 2, we analyze MPC heterogeneity depending on a household-level estimate of income volatility; we do not find significant differences.

Finally, in Figure 3, we analyze whether MPCs vary with household characteristics that predict the purchase of durables during the period of the experiment. Estimating the prediction model on the control group, we do not find evidence that households who are more likely than usual to purchase durables have a lower MPC out of transfers.

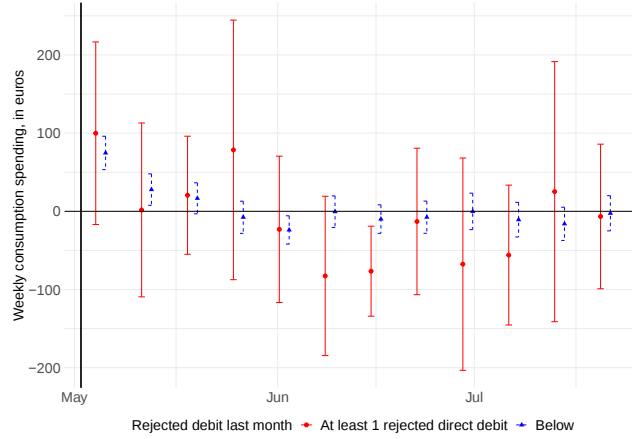
*AEA preregistration: <https://doi.org/10.1257/rct.9296-1.0>.

Figure 1 MPC Heterogeneity by Proxies for Credit Constraints

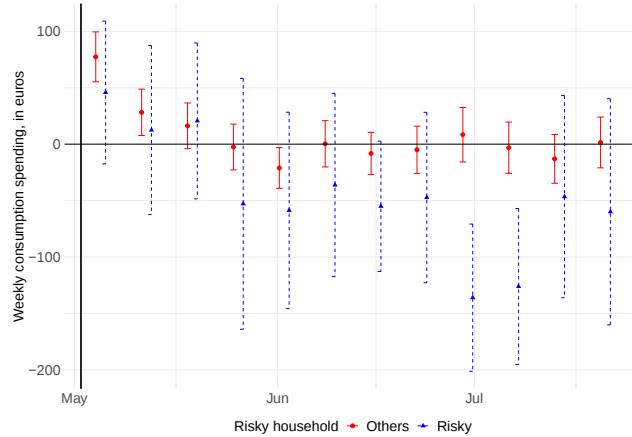
A. Proxy #1: Negative current account balance for more than sixty days



B. Proxy #2: Declined “direct debit” transactions due to overdraft

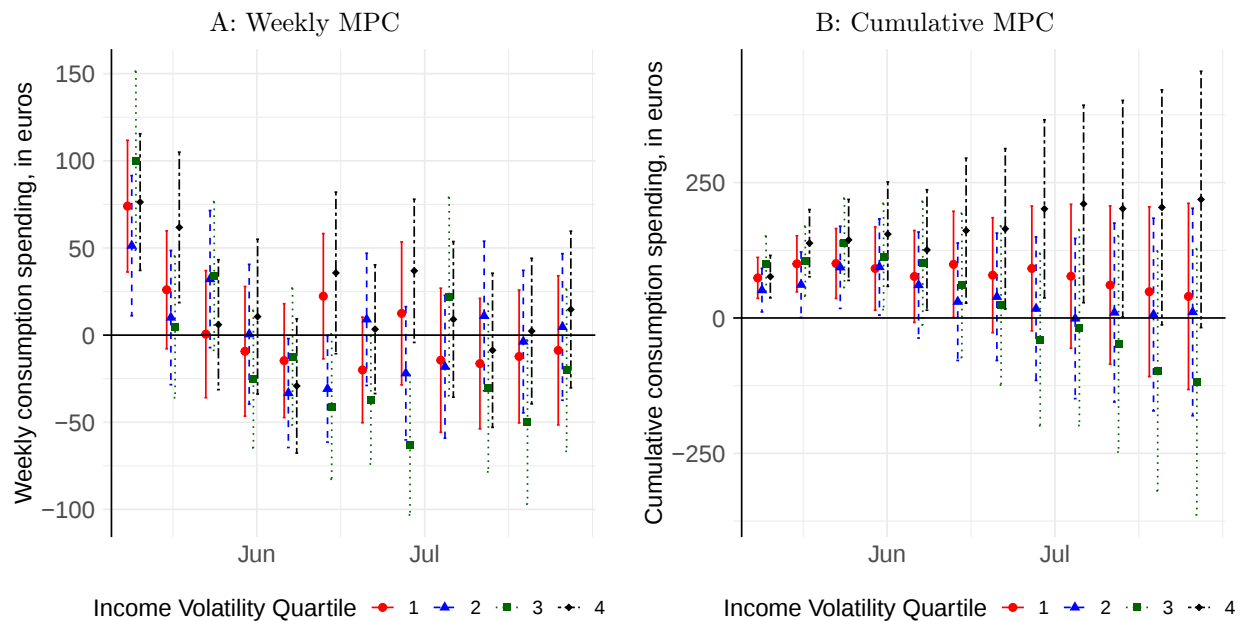


C. Proxy #3: Credit risk measure



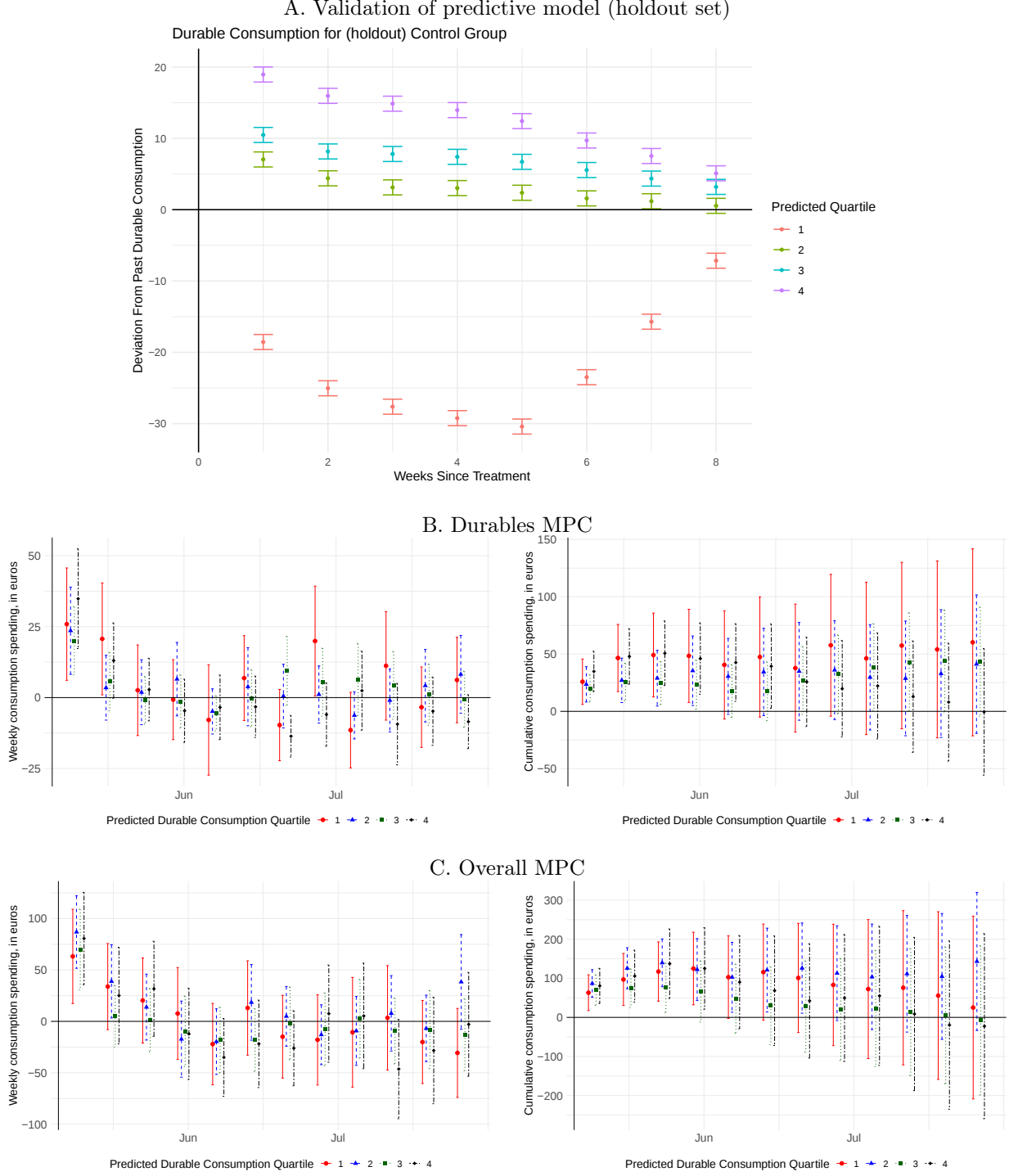
Notes: This figure report heterogeneity analysis in the weekly MPC depending on three proxies for credit constraints. In panel A, we consider the subsample of household who were flagged by the bank as having a negative current account balance for more than sixty days. In panel B, we label as “credit constrained” households whose direct debit transactions were frequently decline by the bank because they exceeded the account overdraft limit. Specifically, for the credit constrained group the bank decline at least one direct debit transaction every month for the month prior to treatment. Finally, in panel C we use a credit risk measure provided by the bank, which identifies 6.7% households with the worst credit ratings.

Figure 2 MPC Heterogeneity and Income Volatility



Notes: In this figure, we study MPC heterogeneity depending on income volatility. For each household, we measure the individual-level standard deviation of $\log(1 + \text{income})$ over a year prior to treatment. We then report MPC estimates for each quartile of the income volatility distribution.

Figure 3 MPC Heterogeneity and Predicted Spending on Durables



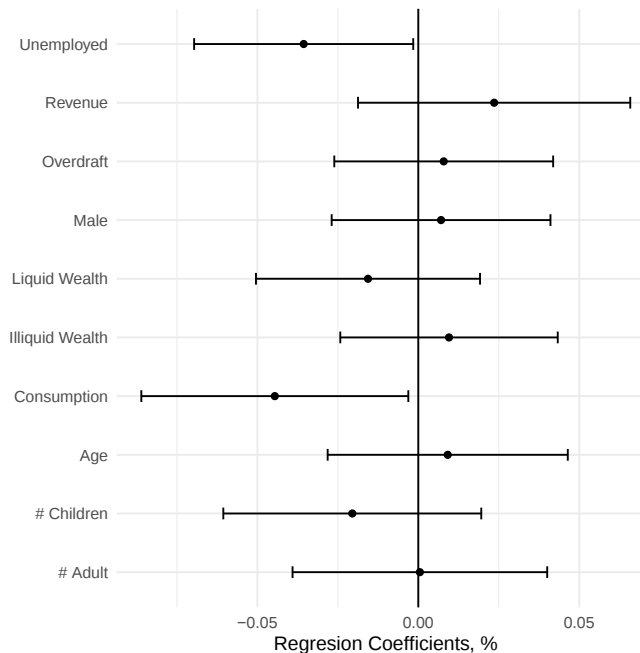
Notes: We estimate a linear model using OLS on data in March and April 2022 to predict the deviation in durable consumption in the subsequent four week (relative to the previous 8-week average), using the following variables: the last four weeks of durables consumption and the last four week of total consumption (all separately, 8 variables), income, and liquid wealth (over the past 6 months). We focus on deviations from average durable consumption so that our results do not capture differences in averages across households. In panel A, we assess the quality of the prediction in a holdout set. We then study model heterogeneity by quartiles, reporting the MPC for durables in panel B and the overall MPC in panel C.

2 Second Round of the Experiment

We conducted a second round of the experiment where, in line with the pre-registered design, there was only one treatment group, which received a treatment corresponding to group 1 of the first round (i.e., with 300-euro prepaid cards expiring after six months, transferring any remaining fund to the participants' bank account), and only the baseline “framing” treatment (i.e. no additional paragraph in the letter encouraging the participants to spend quickly and on local goods and services). The sample size was chosen to disburse the remaining funds, with 187 treated households.

Unfortunately there was a communication problem which led to an incorrect randomization procedure for the second round. The implementation partner had, in advance of the first round, randomly drawn a list of 1,500 individuals that satisfy the eligibility criteria before first round, of which the first 922 had been used for the first round. They then applied the eligibility filter (using the data up to April 2023) to the subsequently listed individuals, and applied the treatment in round 2 to those individuals. This filter, however, was not applied to the control group, and as a result the households treated in round 2 are no longer a random sample of the population that the control group represents. Randomization tests for this second round treatment group, shown in Figure 4, confirm that treated and untreated households have significantly different means along a set of observed characteristics before the treatment.

Figure 4 Randomization Tests



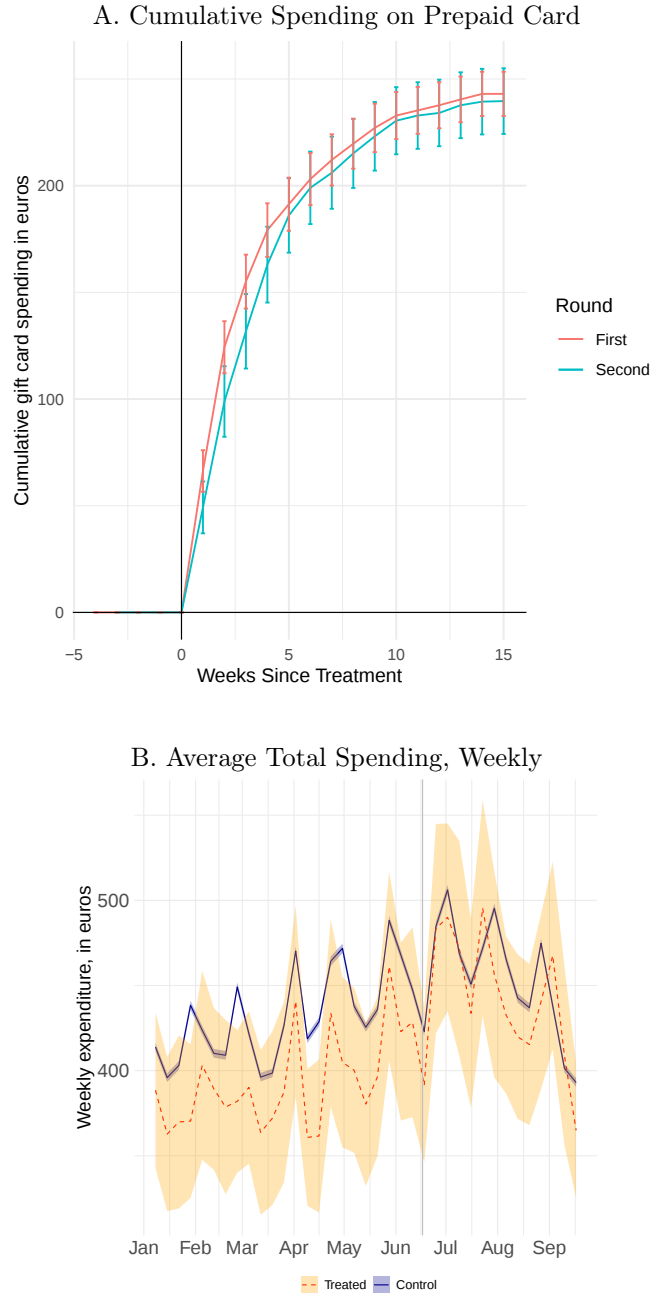
Notes: This figure reports the randomization tests for participation in the second wave of the experiment, regressing a dummy for participation status on several household characteristics. We control for the number of eligible members in the households.

While the take-up and timing of spending on the treatment card are similar for the first and second round (panel A of Figure 5), we find that round 2 treated households have differential pre-trends than the control group in our outcome variable, average weekly consumption expenditure (panel B of Figure 5). While an uptick in consumption around the time of treatment is visible for the treatment group, the two groups are clearly not similar ex-ante.

Figure 6 reports MPC estimates using the same procedure as in the first round. Panels A and B visually confirm the existence of pre-trends. We therefore interpret the post-treatment differences between treatment and control

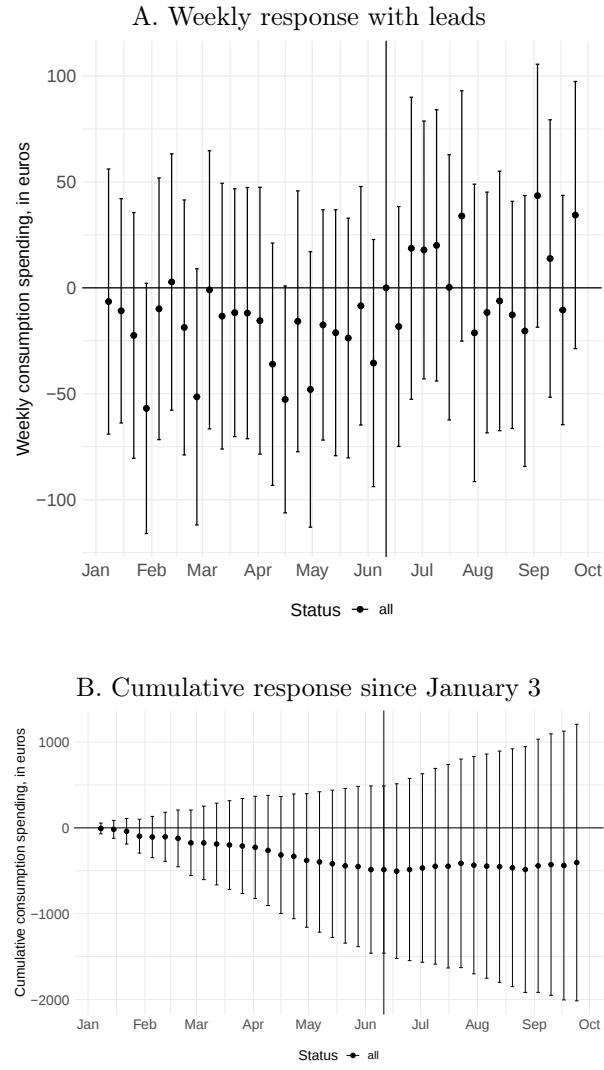
group as not leading to consistent estimates of the MPC. Given the failed randomization procedure, we decided not to pursue further the analysis of marginal propensities to consume in this second round of the experiment.

Figure 5 Spending Behavior in the Raw Data



Notes: This figure reports the treatment effects in the raw data, plotting cumulative spending on the prepaid card in panel A for treated households, and average weekly spending for control and treated households in panel B. The 95% confidence intervals for mean weekly spending are reported as shaded regions in panel B. Panel A also plots the cumulative spending on the prepaid card for Group 1 households in the first wave of the experiment. The weekly expenditures in Panel B are scaled to reflect differences in the number of eligible individuals in treatment and control households.

Figure 6 MPC Estimates



Notes: This figure reports the (biased) MPC estimates. Figures A and B are based on a regression where only the coefficient corresponding to the week prior to treatment is set to zero. The vertical line June corresponds to the time of treatment in the second round.