The response of spending to distinct income shocks : Evidence from bank account data

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Overview

Motivation

How do consumers react to income shocks ?

Goal: write down the most parsimonious model that grasps individual heterogeneity of responses to a variety of income shocks.

Empirical Contribution: based on the same dataset, estimate the effect of distinct income shocks:

- positive vs negative
- transitory vs permanent

on spending for various categories of goods

- durables vs non durables
- necessities vs luxury

depending on households' characteristics

- income
- financial wealth

For today, 2 kinds of shocks:

- wage increases
- transition to unemployment

Other shocks (in Appendix): back-to-school allowances payday

Literature review

In public economics, a large literature is dedicated to the study of excess sensitivity of consumption (ESC) to income shocks: Shea (1995), Angeletos et al. (2001), Gelman et al. (2014), etc.

Various estimations of Marginal Propensity to Consume (MPC) depending on countries, households, periods considered :

- quarterly MPC: ranging between .5 and .75 (Broda et Parker 2014) - USA, fiscal stimulus (2008 crisis)
- monthly MPC on food aid: about .5-.6 (Hastings et Shapiro 2018) - USA, 2004-2016
- quarterly MPC on tax rebate: heterogeneous effect decreasing with the level of liquidity, Gelman (2021) - USA, 2012-2016. Baugh et al. (2018), asymmetry of the MPC according to the sign of the shock (rebate vs refund)
- MPC up to 5 weeks on back to school allowance: .38 (Landais et al. 2021) - France, 2020
- Elasticity of consumption relative to income following wage increase: ranging from .3 to .38 (Baker 2018) - USA, 2007-2013
- MPC up to 24 months following a job loss: around .3 - Danemark, 2009-2016 (Andersen et al., 2021)

Overview

High frequency data

Banking data:

- an anonymized panel of 300,000 households (HH) that are clients of *Crédit Mutuel Alliance Fédérale*, a major French bank (8.3 millions clients) from February 2019 to now
- transactions: cards, bank transfers, direct debit, checks, cash withdrawal, monthly balances, etc.
- high frequency (daily) panel data at the HH level + regular updates (every monthly): spending, income, and savings can be tracked on (near) real time basis
- sociodemographics: size of HH, sex, proxy for location (*département*), occupation, etc.
- Card spending: can be categorized according to the 4-digit *Merchant Category Code* (MCC) classification
- Bank transfers: specific labels for wages, unemployment benefits, welfare benefits, and pensions

Outcomes

Spending:

- Sum of card spending, cash withdrawal and direct debiting (excluding outgoing bank transfers and checks).
- as far as card spending is concerned:
  1. we separate durables from nondurables
  2. we select a handful of spending categories:
     - *groceries / transportation / fuel / restaurants, bars, coffee house and nightclubs / clothing and footwear / furnishings, HH equipment, HH maintenance and Hi-Fi / recreation and culture / barbers and beauty shops / car dealers / health / tobacco / hotels*.

Income:

- Sum of incoming transfers labelled *wage*, *unemployment*, *welfare benefits* or *pension*
- N.B. those labels have been available since August 2020 only

Financial wealth:

- Sum of monthly balances over all bank accounts.
- Includes both liquid (deposit accounts and savings accounts) and illiquid wealth (life insurance and securities accounts).

Savings:

- Change in monthly balances over all deposit accounts + internal outflows (net of internal inflows) from other accounts (savings, life insurance, and securities).

Working sample

Initial sample of 300,000 clients drawn randomly and stratified by *département* as well as by 5-year age dummies.

We restrict our attention to

- HH with the same number of adults aged at least 18 over the period
- spending and earning at least €150 over three rolling months

Working sample: 170,000 HH calibrated to reproduce exactly known population totals for auxiliary variables (age, sex and *département*)

Potential concerns with bank account data

Representativeness:

- clients are richer, on average, than the French population descriptive stats
- yet the distribution of HH expenditures (by decile of income) matches closely the one issued from the representative consumption survey histogram

Completeness:

- Main concern: financial wealth is likely to be spread among different banks (especially for the very rich)
- yet our monthly variations of liquid wealth follow closely the ones issued by the *Banque de France* graph

Caveat: MCC correspond to recipient business categories

- hence only a proxy of the categories of purchases
- for instance, customers might buy both durables and nondurables in a supermarket

Overview

Wage increases

Idea: estimate how spending responds to a positive, permanent income shock

Setting:

- Observation window: 6 months before / after wage increase (the event)
- Restriction to periods with stable wages: average income in each sub period (pre-event and post-event) within a 5% range of median income

Identification strategy : event study DiD design

- treatment group (26,000 HH): average and median wages at least 5% higher post-event than pre-event
- comparison group (10,000 HH): average and median wages in post-event periods within a 5% range of their pre-event values

Estimation

Econometric specification:

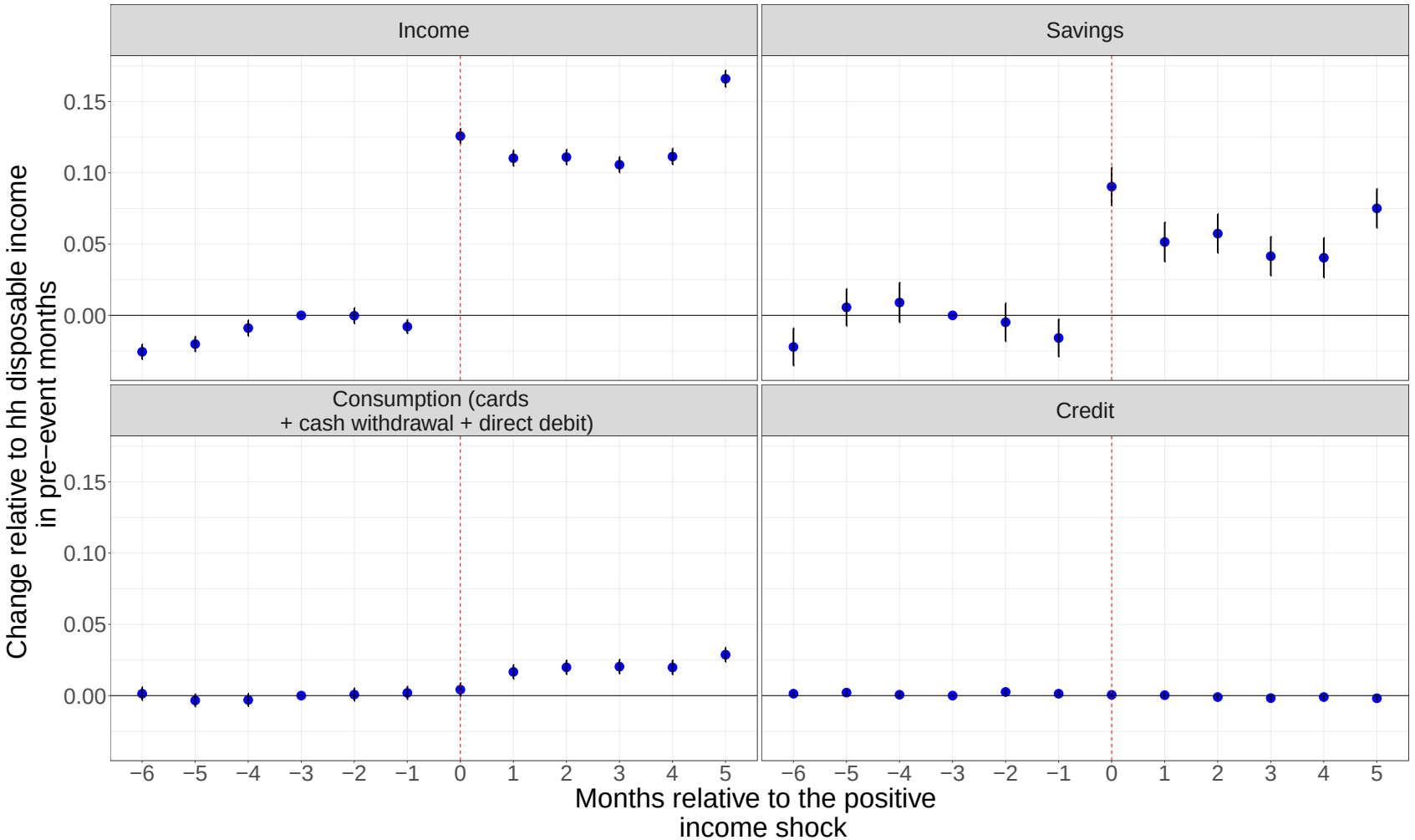
$$z_{it} = z_0 + \sum_{h=-6}^{5} \beta_h T_i \mathbb{1}_{\{e_{it}=h\}} + \sum_{h=-6}^{5} \delta_h \mathbb{1}_{\{e_{it}=h\}} + \alpha T_i + \gamma_t + \varepsilon_{it} \quad (1)$$

where

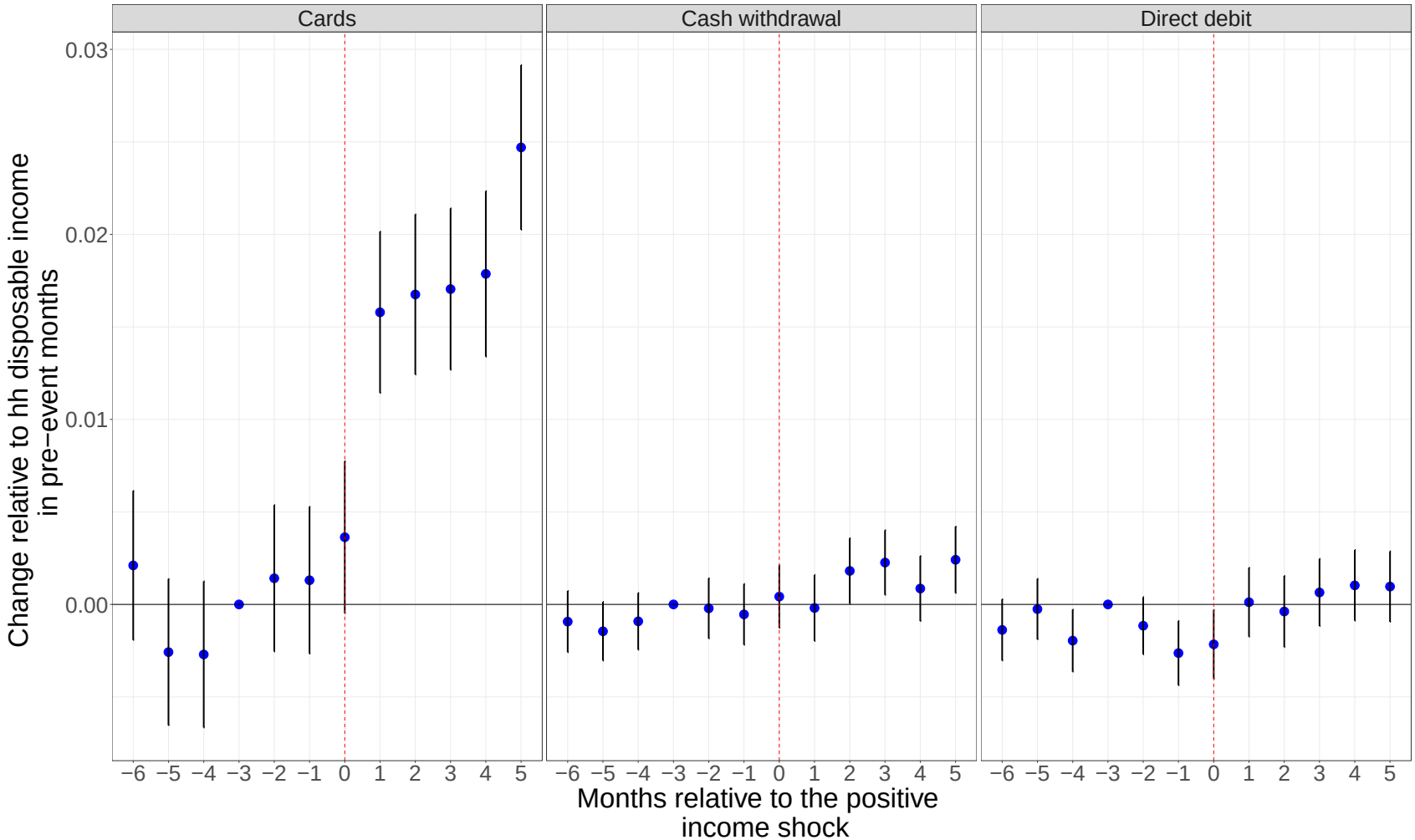
- z_{it} is the outcome variable of individual i in month t (income, savings, (durable) spending, etc.)
- T_i is a binary variable equal to 1 when i is treated
- γ_t corresponds to month FE
- $\mathbb{1}_{\{e_{it}=h\}}$ is event time defined as distance to wage increase (in months)
- reference: 3 months before event, $\beta_{-3} = \delta_{-3} = 0$

All outcome variables are expressed in % of the average HH income in periods -5 and -4 (similar methodology to the one used by Andersen *et al.*, 2021).

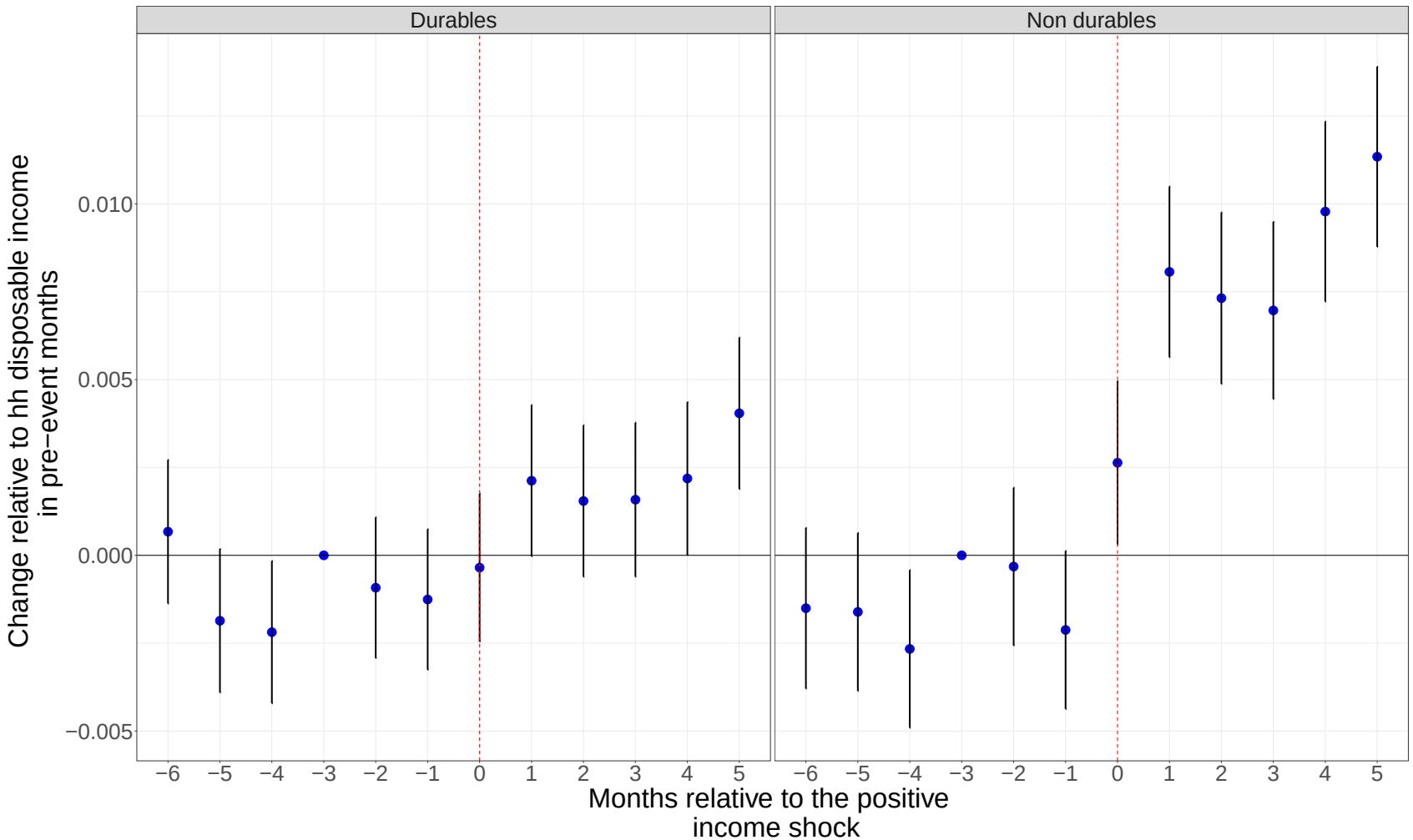
Results


Income
Savings
Consumption (cards
+ cash withdrawal + direct debit)
Credit
Change relative to hh disposable income
in pre−event months
0.15
0.10
0.05
0.00
−6 −5 −4 −3 −2 −1 0 1 2 3 4 5
Months relative to the positive
income shock

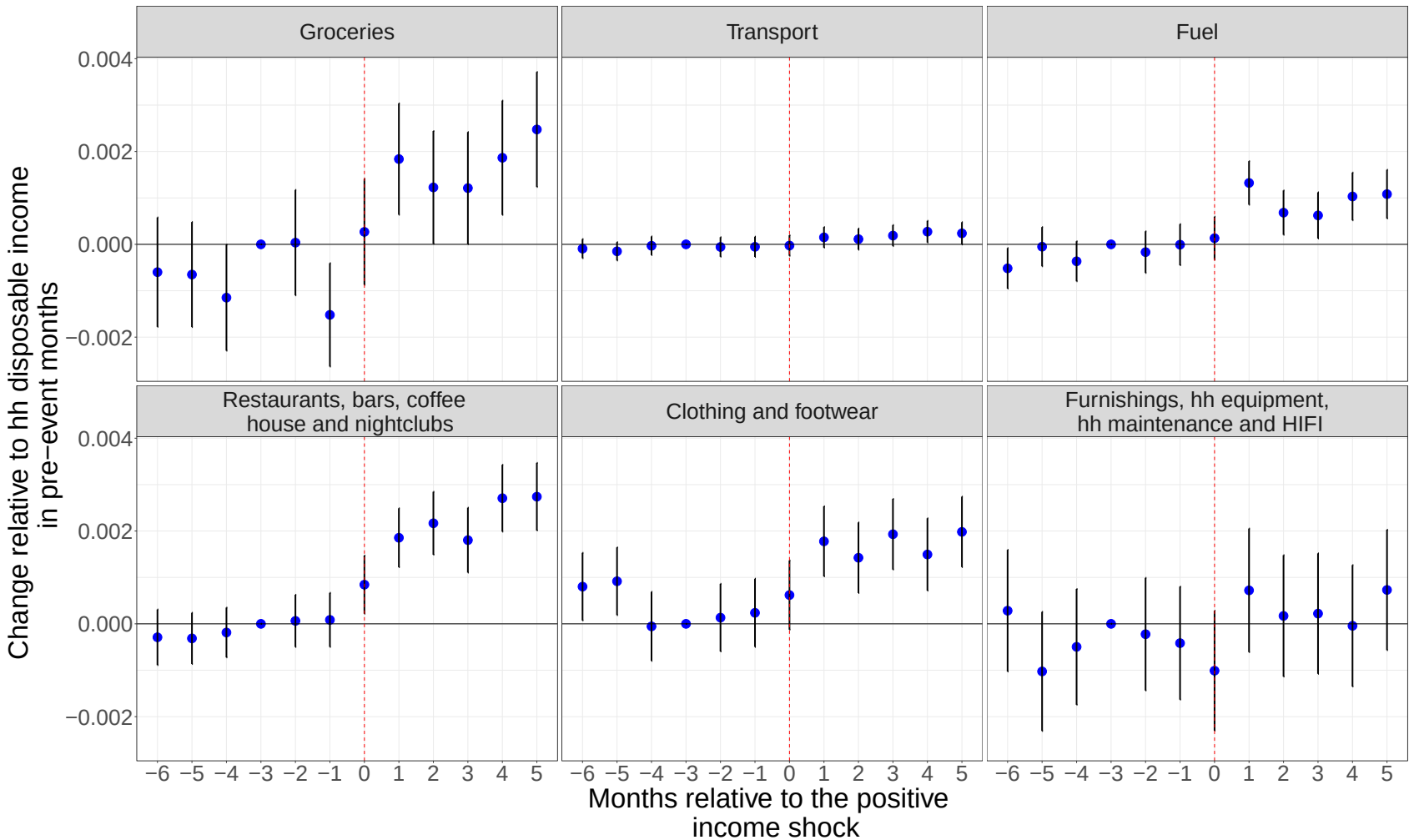
Spending: mostly cards



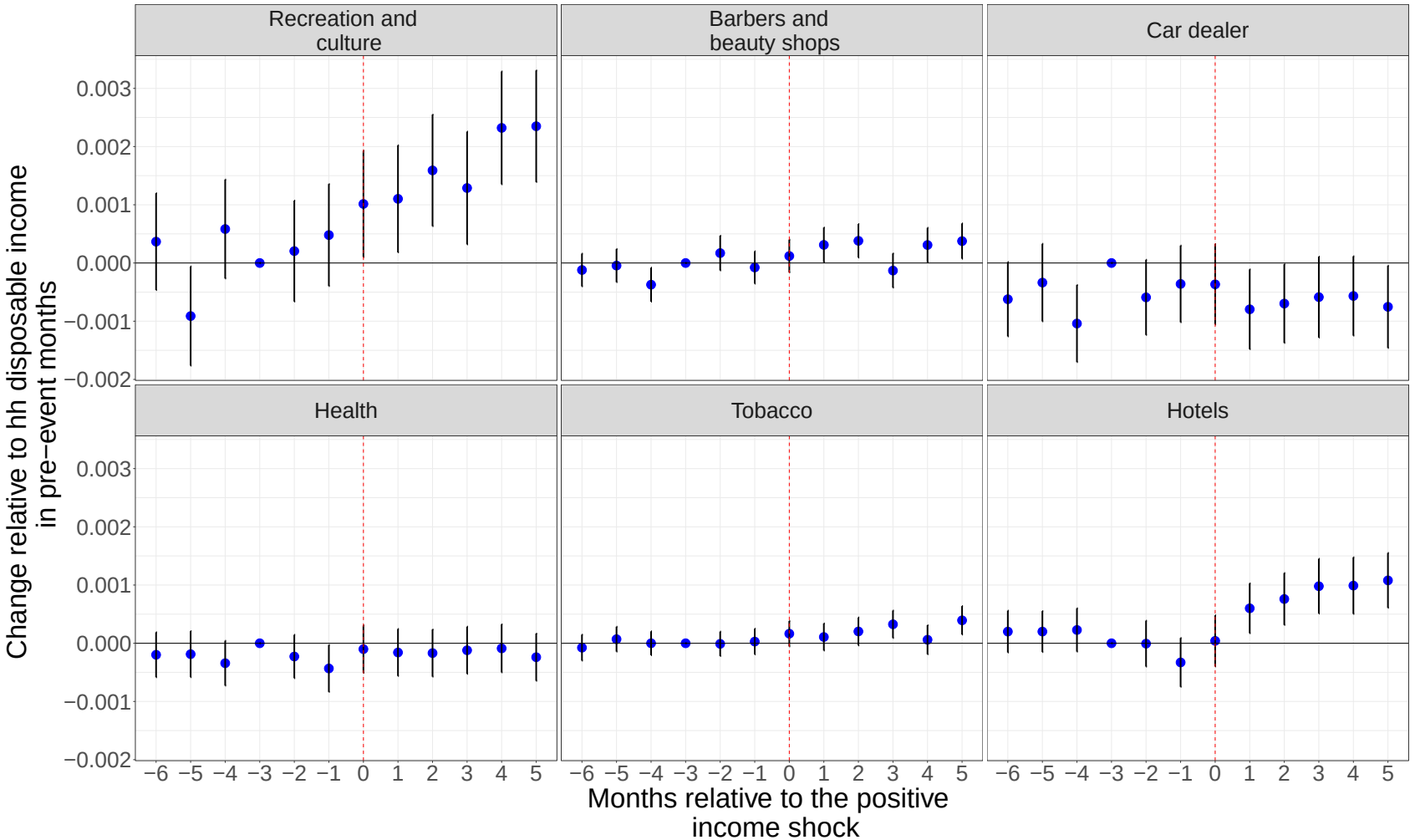
Heterogeneity of spending response: Nondurables



Heterogeneity of spending response: Categories of goods (1)



Heterogeneity of spending response: Categories of goods (2)



Individual heterogeneity of spending response

Econometric specification: FD version of equation (1):

$$\Delta C_{it} = \beta(X_i)\Delta Y_{it} + \Delta\gamma_t + \Delta\varepsilon_{it},$$

where C is spending, Y is income, X corresponds to individual characteristics (including **income, liquid and illiquid assets**), and Δ is a FD operator between 6-month averages computed post- and pre-event.

Main results:

- average MPC: .16
- MPC vary more wrt liquid assets than wrt income or illiquid assets
- spending response is significant at all liquidity levels
- yet 3 times higher for the bottom 25% (.26) than for the top 25% (.09)
- low-liquidity individuals: mostly necessities (groceries)
- high-liquidity individuals: mostly luxury (restaurants, bars, nightclubs, clothing, recreation and culture, hotels)

individual heterogeneity | product heterogeneity

Job loss

Context: Previous studies (Andersen *et al.*, 2021 and Ganong and Noel, 2019) have shown that part of income loss due to job loss is absorbed through a decrease in spending

Setting:

- Observation window: a 9-month period, from 4 months before first period with some unemployment benefits (UB) to 5 months after
- Restriction to 1,464 HH:
  - whose wage is higher than €1,000 and UB are lower than €100 from periods -4 to -2
  - who receive at least €100 UB in periods 0 and 1 (N.B. may perceive UB later on, or not)
  - whose average income from periods -4 to -2 is higher than their average income from periods 0 to 4 (N.B. we study the impact of an *income loss* here)

Identification strategy: event study design

- relying on differences in outcomes before and after job loss
- exploiting differences in the timing of the shock
- no comparison group

Estimation

Econometric specification:

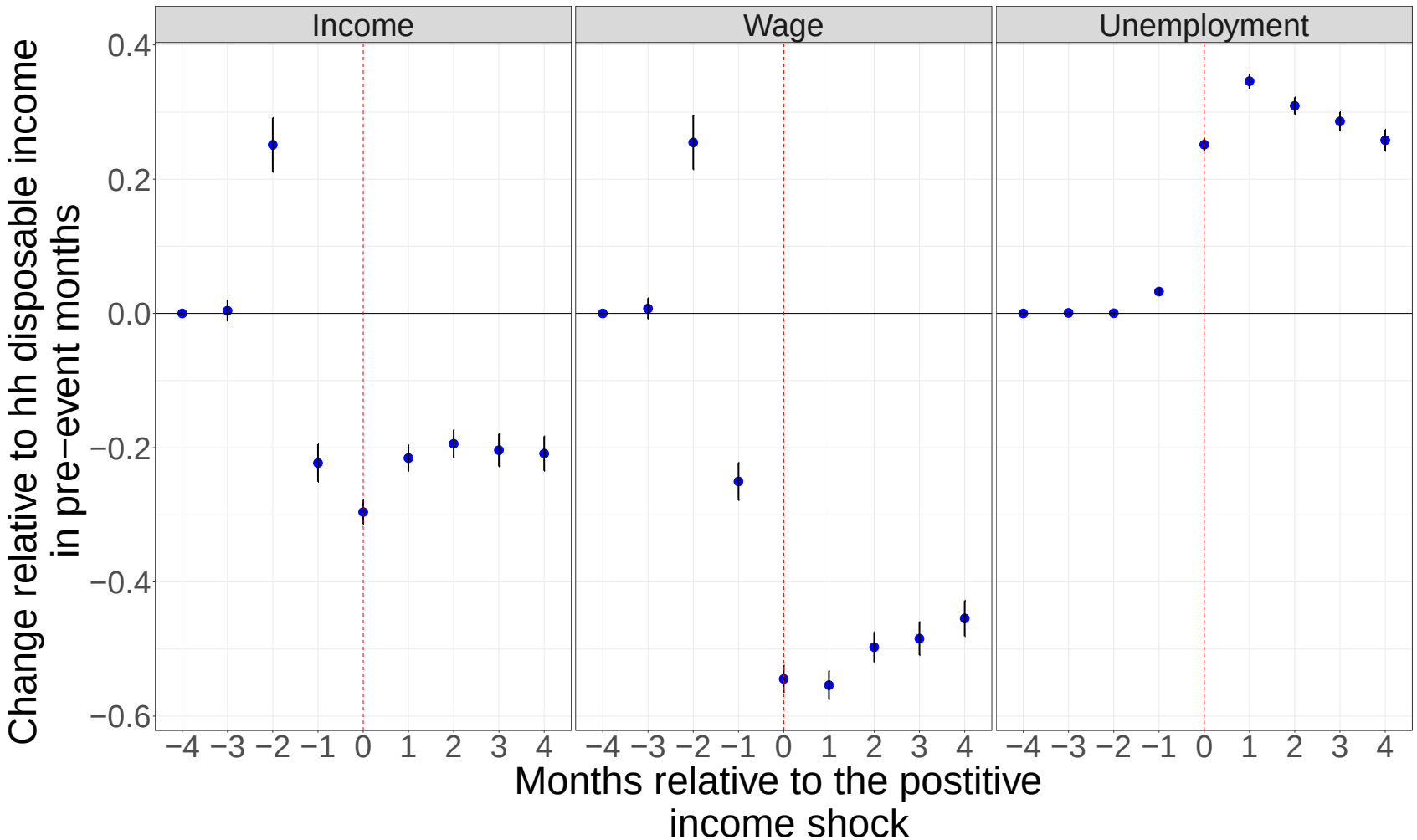
$$z_{it} = \sum_{h=-4}^{+4} \beta_h \mathbb{1}_{\{e_{it}=h\}} + \gamma_t + \varepsilon_{it} \tag{2}$$

where

- z_{it} is the outcome variable of individual i in month t (income, savings, (nondurable) spending, etc.)
- γ_t corresponds to month FE
- $\mathbb{1}_{\{e_{it}=h\}}$ is event time defined as distance in months to first month when UB are received
- reference: 4 months before event, $\beta_{-4} = 0$

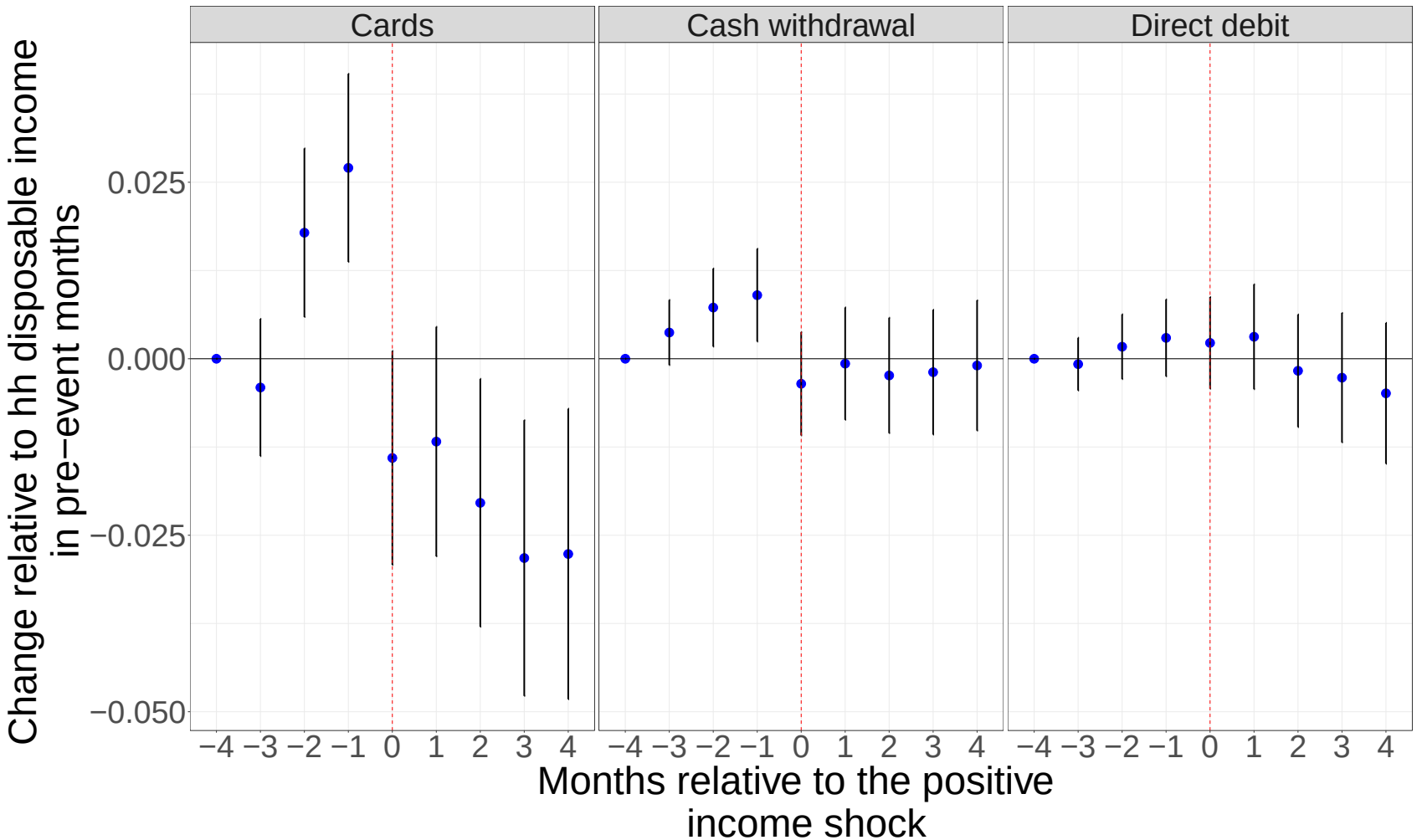
N.B. All outcome variables are expressed in % of average HH income in periods -4 and -3.

Overall results (1)

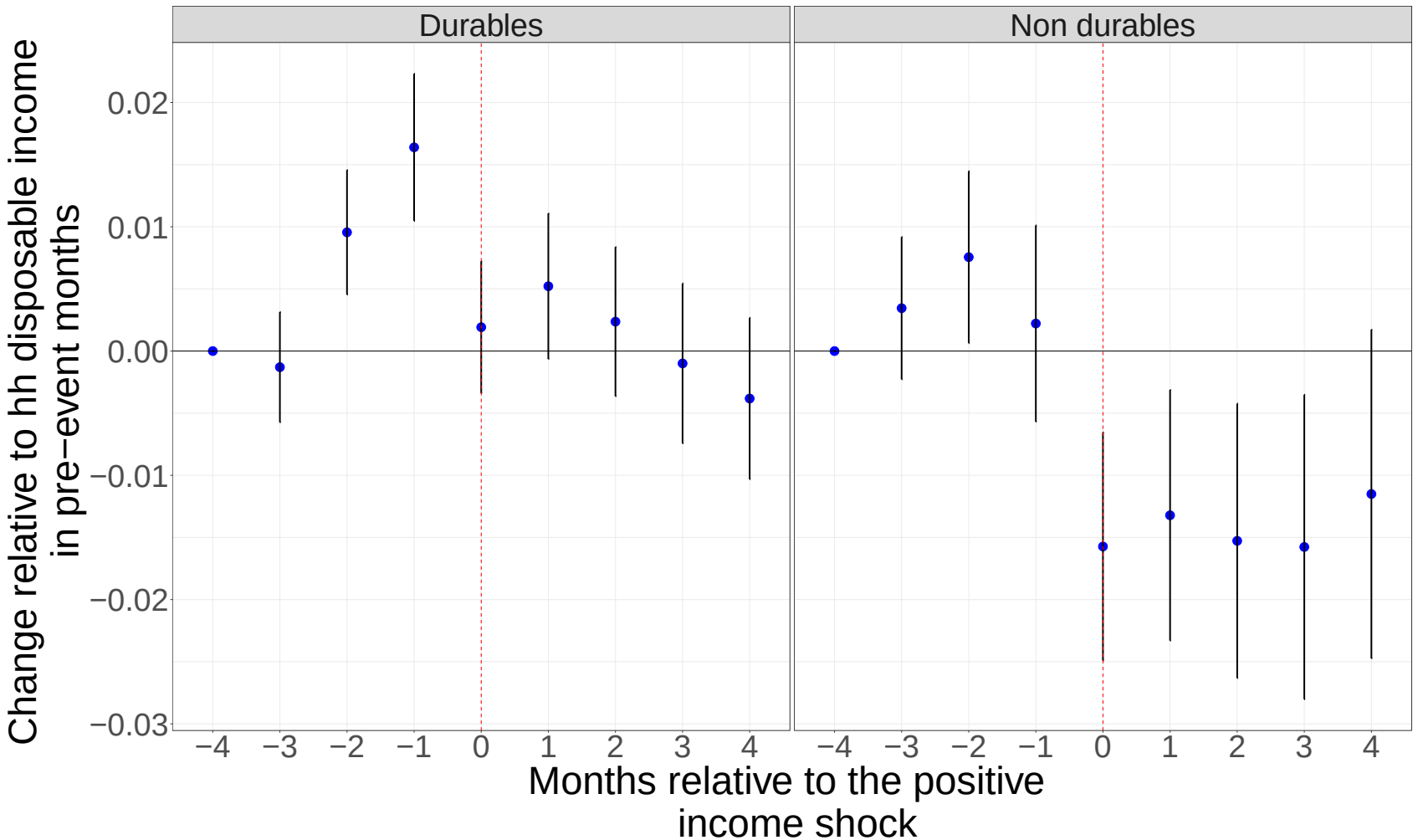


Overall results (2)

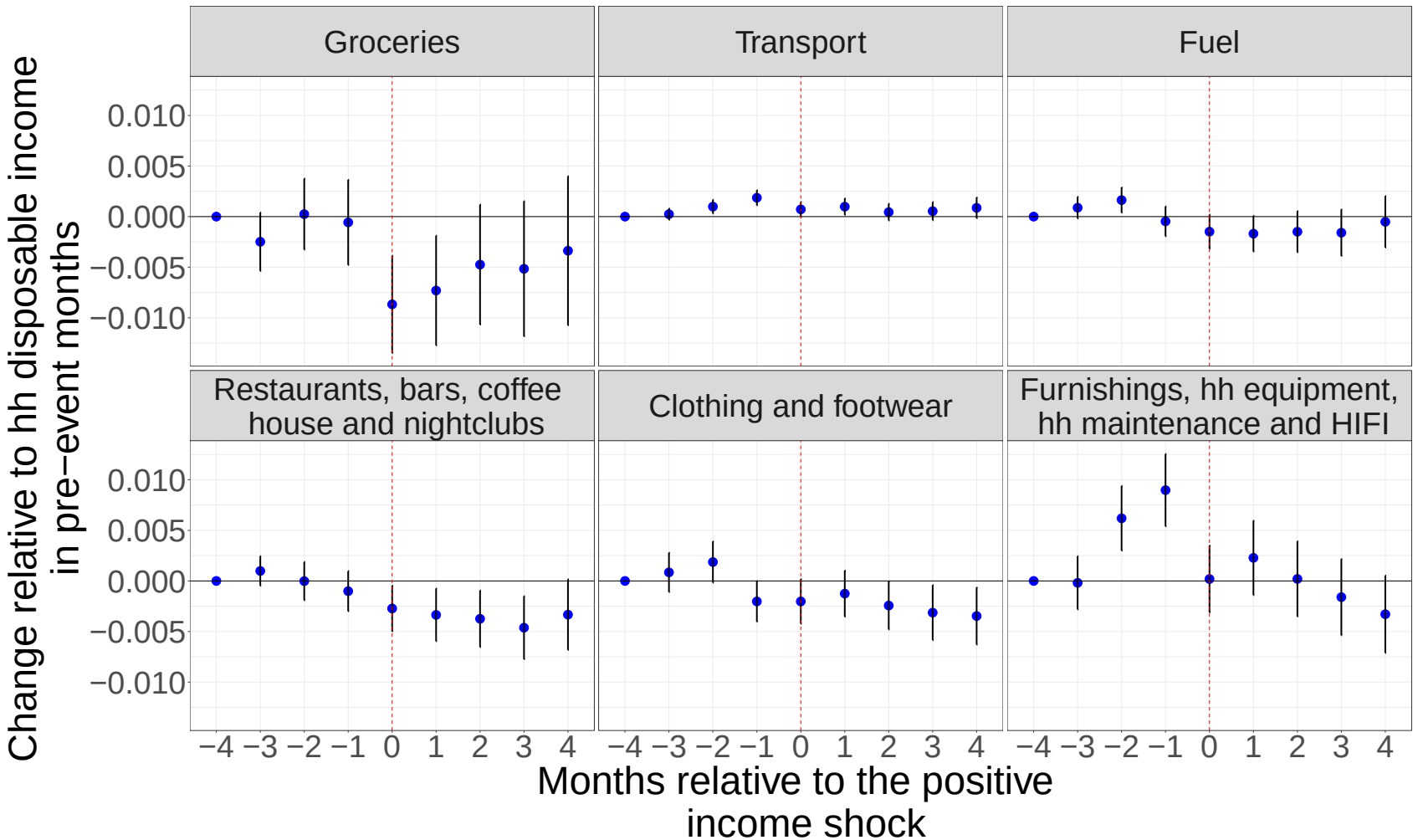
Spending


Cards
Cash withdrawal
Direct debit
Change relative to hh disposable income in pre−event months
0.025
0.000
−0.025
−0.050
−4 −3 −2 −1 0 1 2 3 4
Months relative to the positive income shock

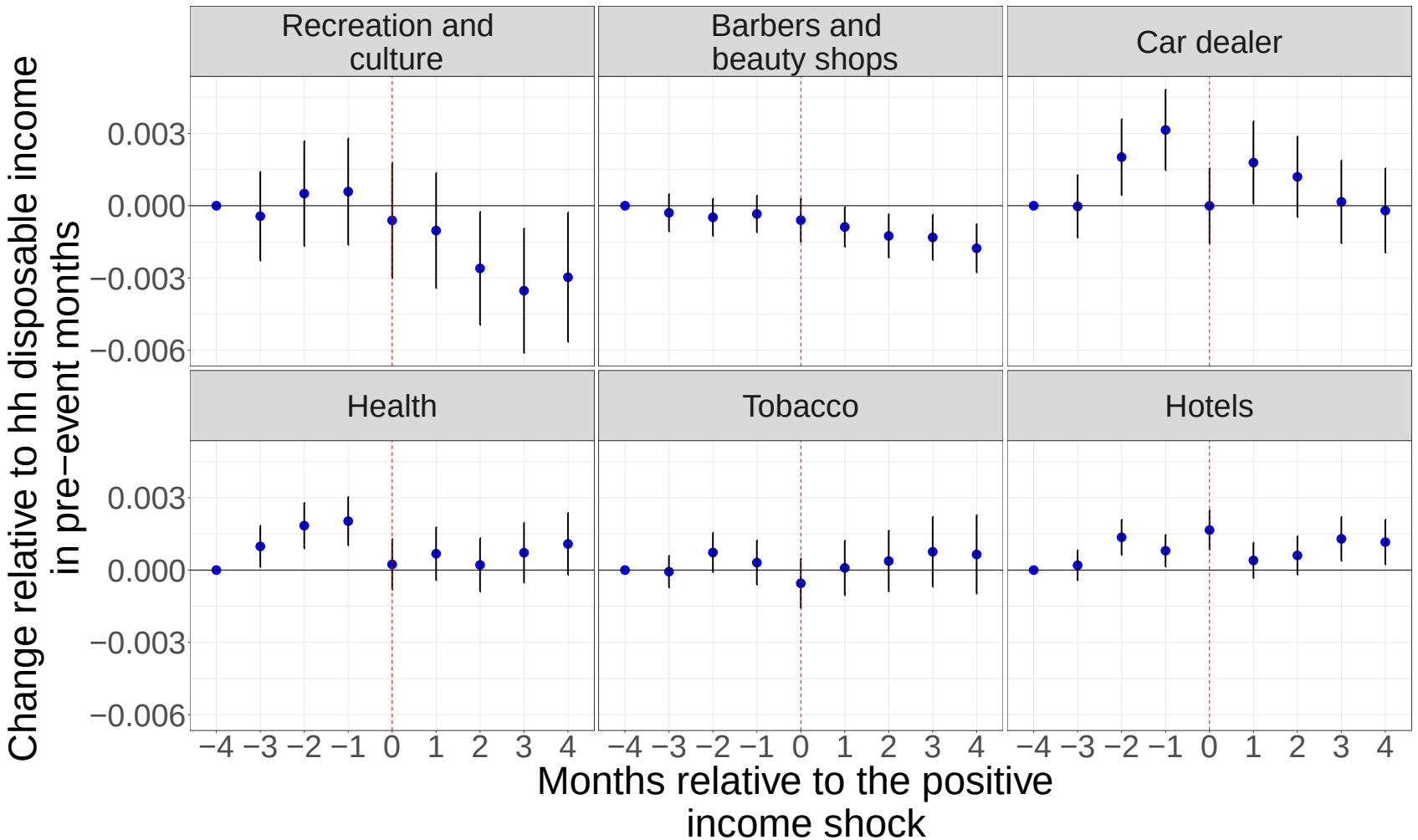
Heterogeneity of spending response: Durables vs nondurables



Heterogeneity of spending response: Categories of goods (1)



Heterogeneity of spending response: Categories of goods (2)



Individual heterogeneity of spending response

Econometric specification: FD version of equation (2)

$$\Delta C_{it} = \beta(X_i)\Delta Y_{it} + \gamma_t + \Delta\varepsilon_{it}$$

where the Δ operator now corresponds to the difference between average outcomes in months

- 0 to 4, on the one hand, and -4 and -3, on the other hand (- shocks)
- -2 and -1, on the one hand, and -4 and -3, on the other hand (+ shocks)

Main results:

- **Negative shocks (job loss):**
  - average MPC: .10
  - effect driven mostly by groceries
- **Positive shocks (severance payments):**
  - average MPC: .06
  - effect on durables/luxury goods
- significant spending response for low-liquidity HH only
- high-liquidity HH smooth consumption
- MPC vary more wrt liquid assets than wrt income or illiquid assets

individual heterogeneity | product heterogeneity

Overview

Preliminary conclusion

A parsimonious model of consumption behavior should feature:

- higher response for low-liquidity HH -liquidity constraints?
- high-liquidity HH smooth negative shocks -asymmetry between - / + shocks?
- temporary shocks (e.g., severance payments) imply stronger response on durables -durables vs nondurables?
- low-liquidity HH respond mostly on inferior/normal goods (e.g., groceries) while high-liquidity HH respond mostly on normal/luxury goods (e.g., restaurants) -necessities vs luxury goods?

Prospect: calibrate a model with different types of goods and liquidity levels to match previous moments

Thanks

We are extremely grateful to *Crédit Mutuel Alliance Fédérale* for sharing the data with us, and in particular to key employees for their precious help.

All individual data used in this analysis have been anonymized and no single customer can be traced in the data.

All data processing has been conducted following the bank's strict data privacy guidelines.

Appendix

Summary statistics (working sample)

	(1)	(2)	(3)
	Crédit Mutuel		
	Unweighted sample	Weighted sample	National surveys
# of observations	169,163	169,163	
# of months	35	35	
	Sample means		
Spending	2,371	2,461	2,284
Credit cards	1,650	1,698	
Bills	713	756	
Checks	8	7	
Utilities (bills and cards)	140	148	113
Groceries (cards)	232	248	368
Restaurants (cards)	98	97	136
Fuel (cards)	78	79	92
Income	3,497	3,492	2,924
Financial Assets	50,657	55,615	50,882
Liquid financial Assets	32,858	35,241	24,270
Deposit account	9,514	10,525	4,046
Savings account	23,345	24,716	20,224
Illiquid financial Assets	17,799	20,374	26,612
Life insurance	13,597	15,748	18,947
Securities account	4,202	4,626	7,664
Monthly savings	95	83	
Loan net repayments	-390	-389	
Non-mortgage debt	-3,024	-3,086	-5,377
Mortgage debt	-34,793	-35,203	-38,605
Private transfers (or other inflows)	1,457	1,542	
Ratio liquid assets/deposit account	3.45	3.35	5.99
Age	49	52	52
Female	0.52	0.51	0.51
Craftsmen, merchants and business owners	0.06	0.06	0.04
Managerial and professional occupations	0.13	0.12	0.10
Technicians and associate professionals	0.14	0.13	0.13
Employees	0.24	0.22	0.14
Workers	0.13	0.12	0.11
Periphery areas	0.42	0.41	0.18
Rural areas	0.20	0.20	0.21
Urban areas	0.32	0.33	0.61

Pecuniary amounts: in €.

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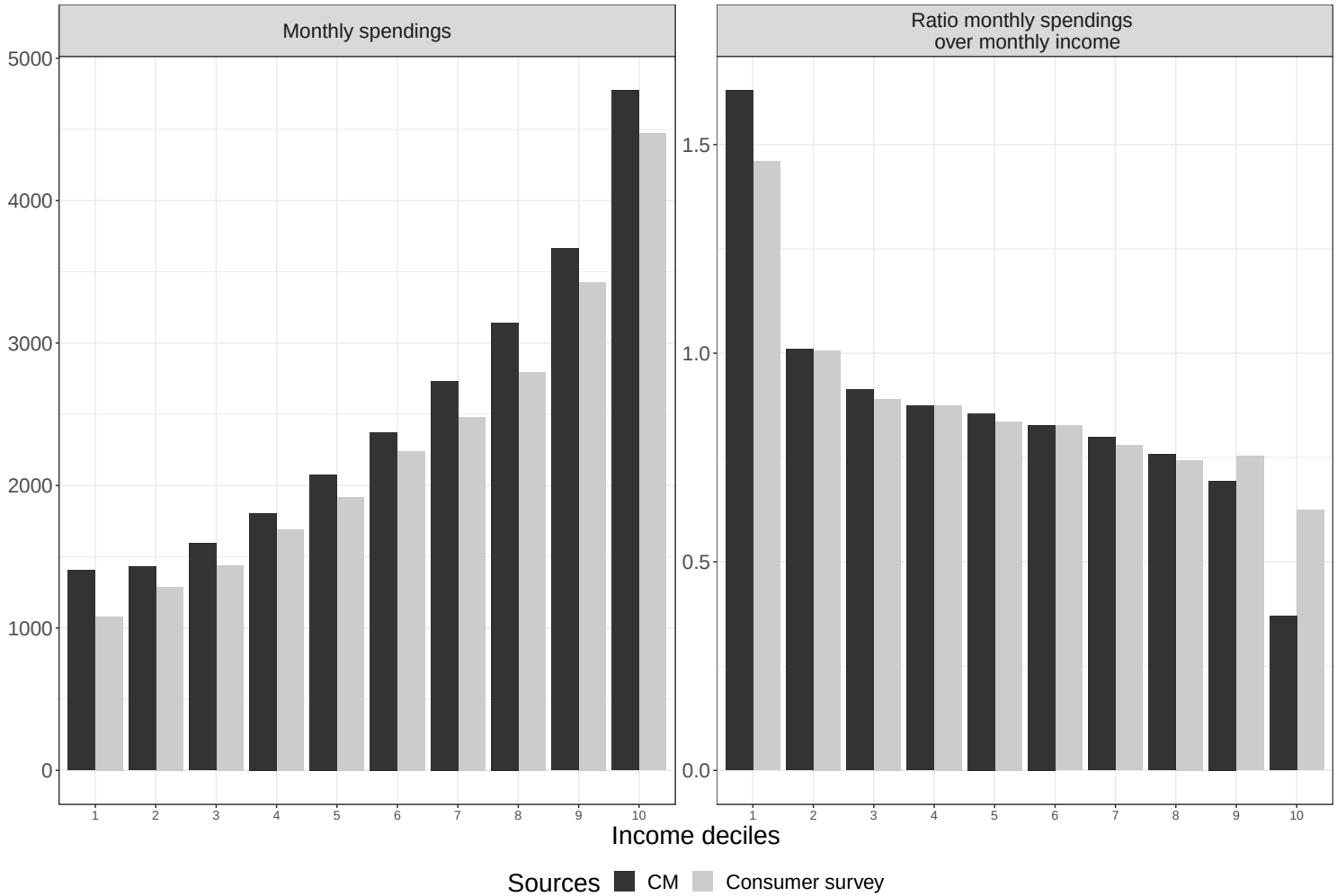
Distribution of spending: comparison with the national consumer survey



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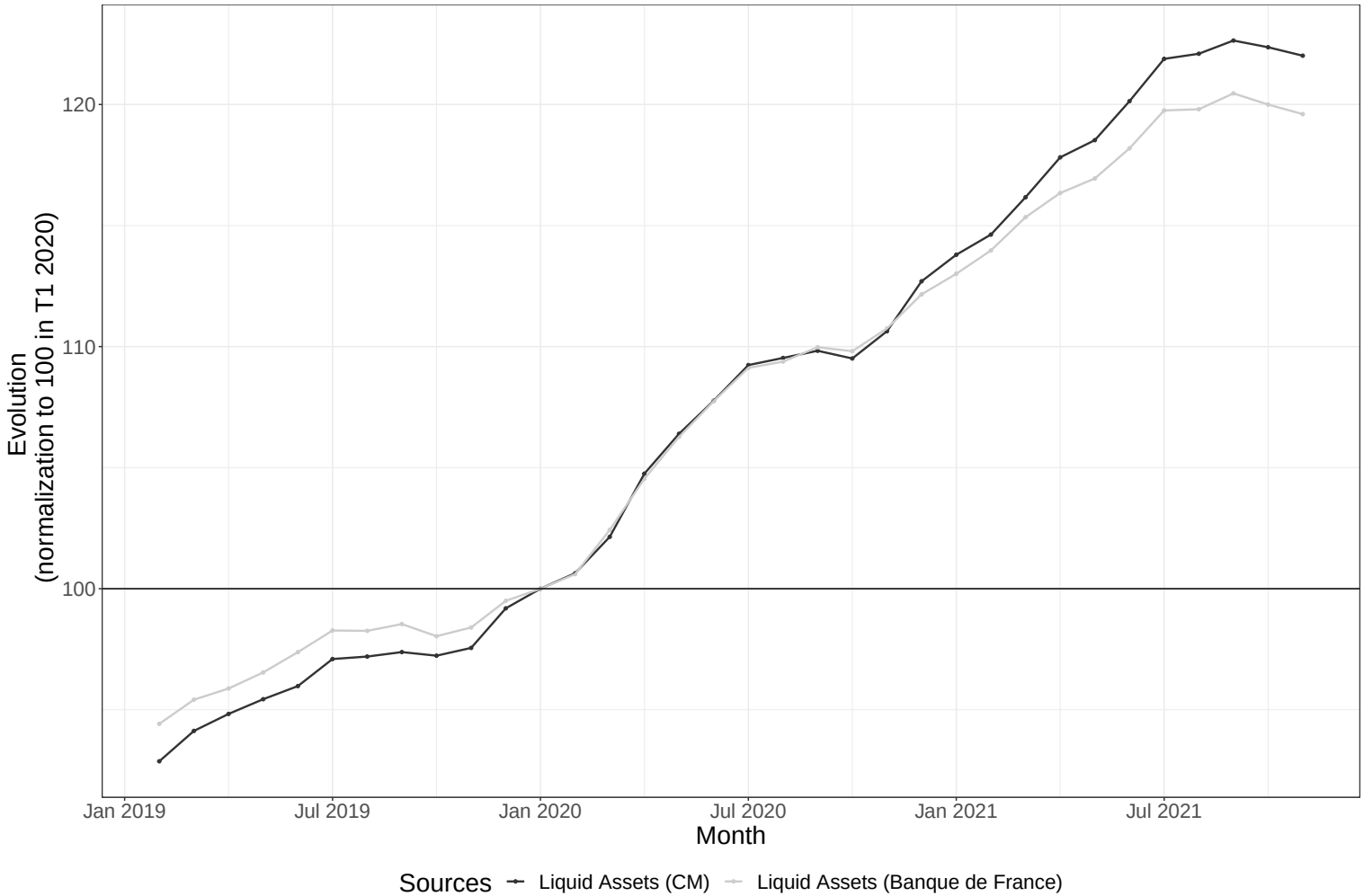
Liquid wealth: comparison with French Central Bank



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Income: comparison with National Accounts

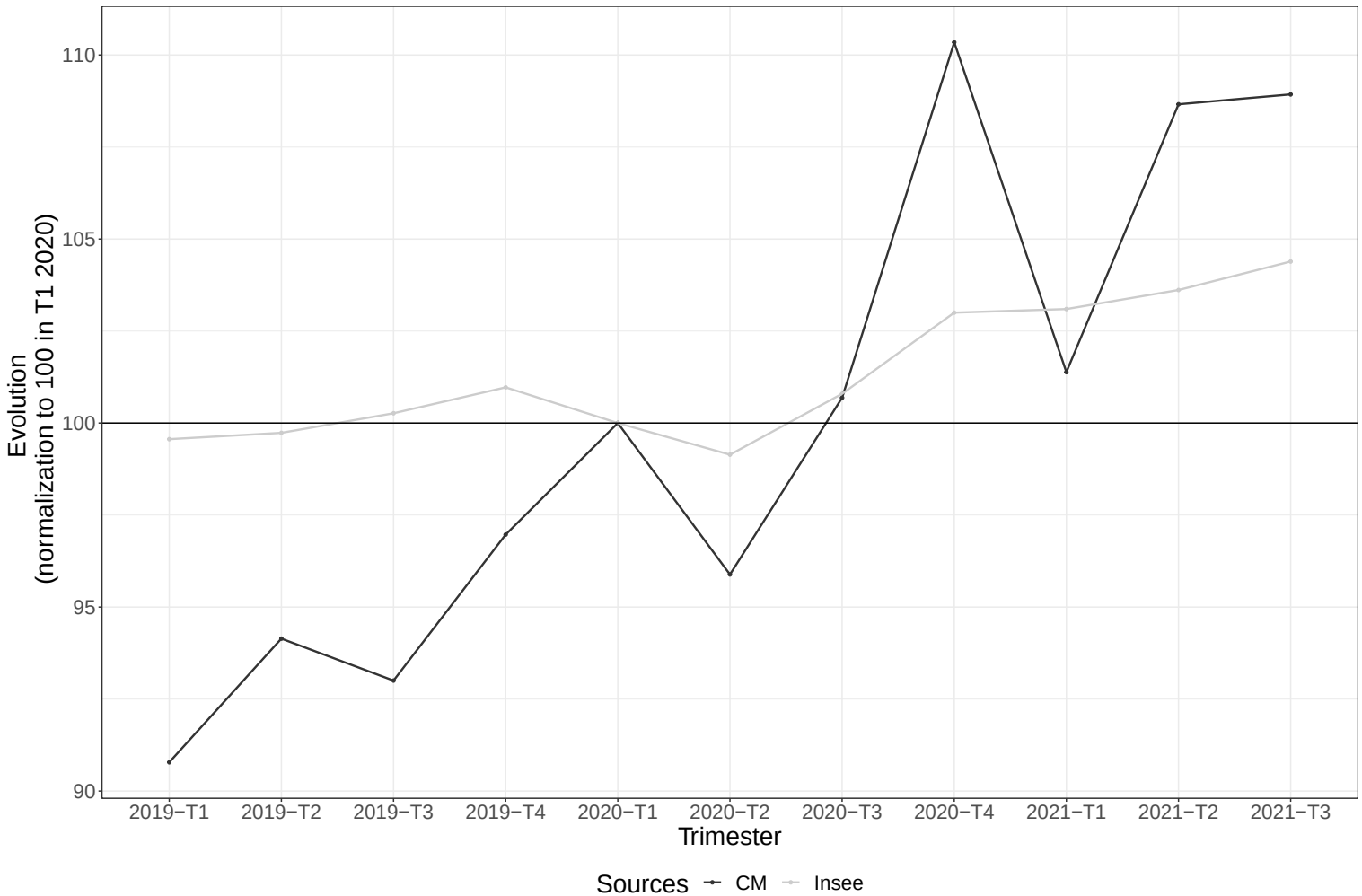

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Table 1: Back-to-school allowances: Individual heterogeneity of the MPC

	(1)	(2)	(3)	(4)	(5)	(6)
	0.30*** (0.07)					
Financial assets						
Bottom 25%		0.50*** (0.09)				0.43** (0.18)
Between 1st quartile and median		0.20* (0.12)				0.10 (0.22)
Between median and 3rd quartile		-0.10 (0.18)				-0.17 (0.27)
Top 25%		0.12 (0.26)				0.03 (0.33)
Income						
Bottom 25%			0.33*** (0.11)	Ref.		Ref.
Between 1st quartile and median			0.28** (0.11)	0.02 (0.16)		0.03 (0.17)
Between median and 3rd quartile			0.39*** (0.13)	0.17 (0.18)		0.19 (0.19)
Top 25%			0.18 (0.26)	0.10 (0.30)		0.10 (0.30)
Liquid financial assets						
Bottom 25%				0.48*** (0.13)		
Between 1st quartile and median				0.11 (0.16)		
Between median and 3rd quartile				-0.24 (0.22)		
Top 25%				0.18 (0.28)		
Illiquid financial assets						
No				Ref.		
Yes				0.07 (0.20)		
Consumption credit undertaken						
No				Ref.		
Yes				0.03 (0.14)		
Age						
Below 30						Ref.
30 and above						0.01 (0.16)
Household structure						
Family					0.27*** (0.09)	Ref.
Single parent family					0.39*** (0.08)	0.04 (0.13)
Socio-demographic controls	✓	✓	✓	✓	✓	✓
Financial vars pre-treatment	✓	✓	✓	✓	✓	✓
R^2	0.20	0.20	0.20	0.21	0.17	0.21
# of obs.	3,070	3,070	3,070	3,070	3,070	3,070

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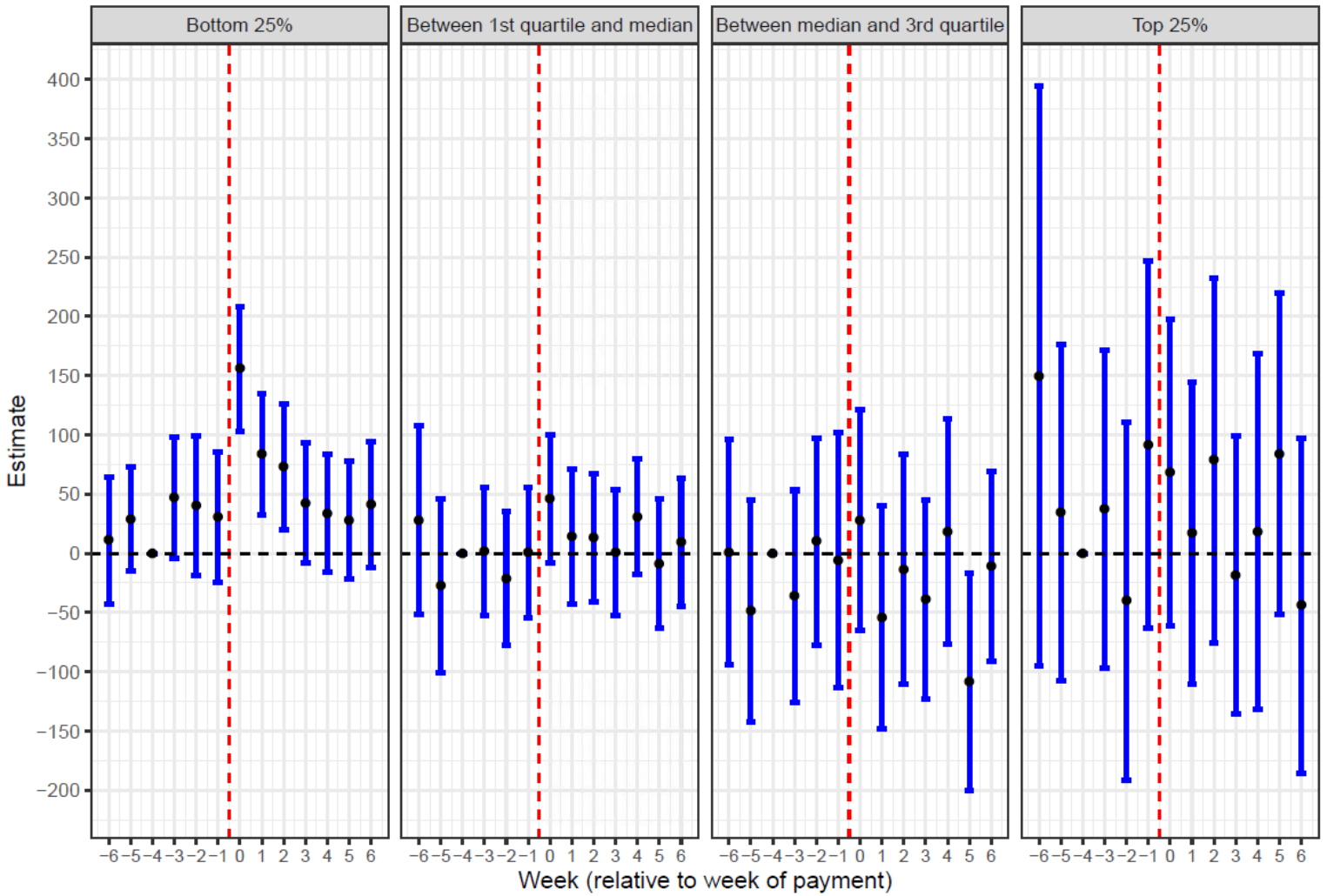
Back to school allowances: Individual heterogeneity of the MPC



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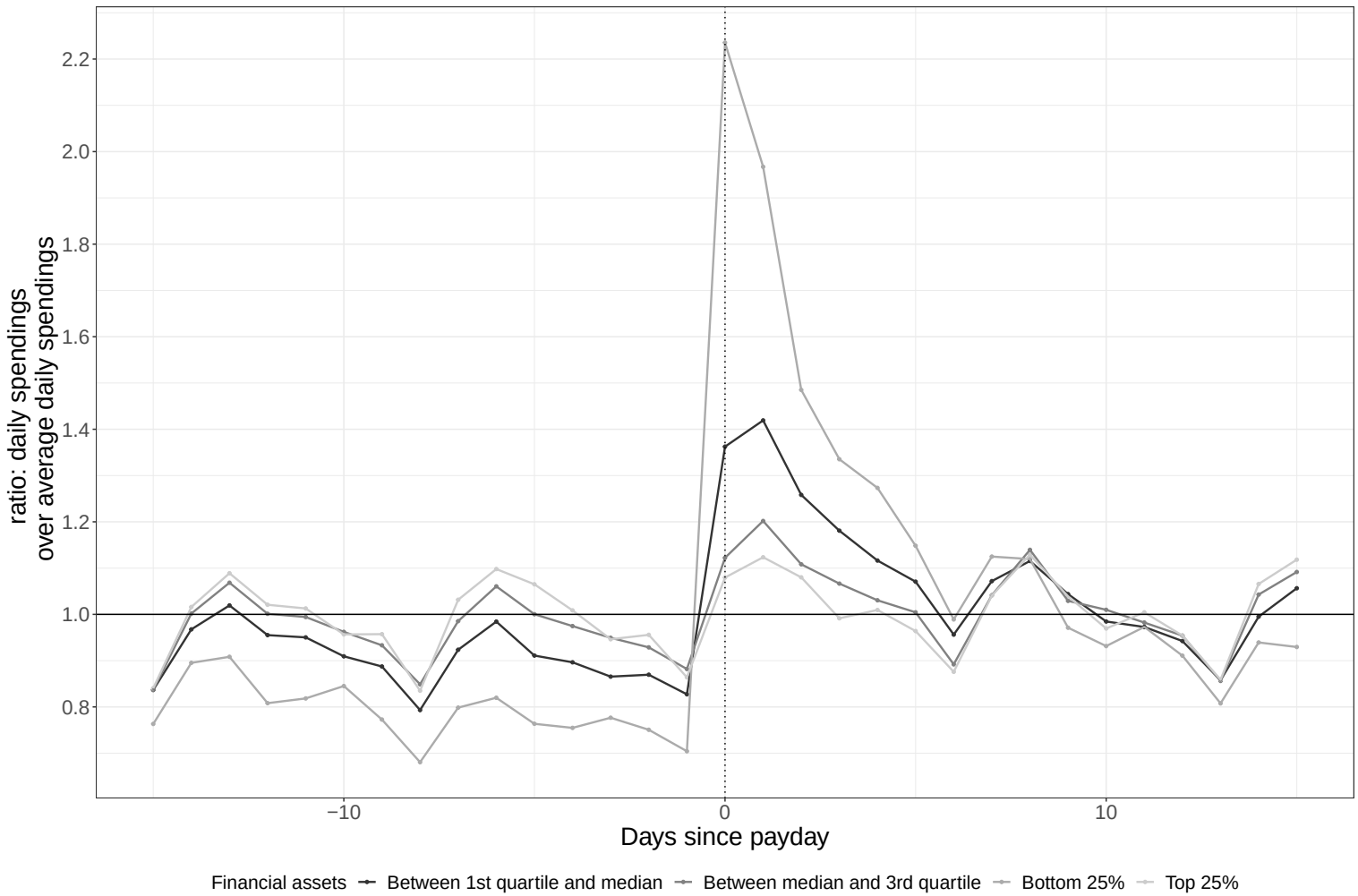
Payday effect (individual heterogeneity of spending response)

	All sample	Quartiles of income			
		1st	2nd	3rd	4th
Our estimates	0.43*** (0.01)	0.79*** (0.04)	0.46*** (0.02)	0.26*** (0.01)	0.14*** (0.01)
Olafsson-Pagel		0.88*** (0.01)	0.59*** (0.01)	0.44*** (0.01)	0.34*** (0.01)
Time FE	✓	✓	✓	✓	✓



Payday effect (heterogeneity of spending response: categories of goods)

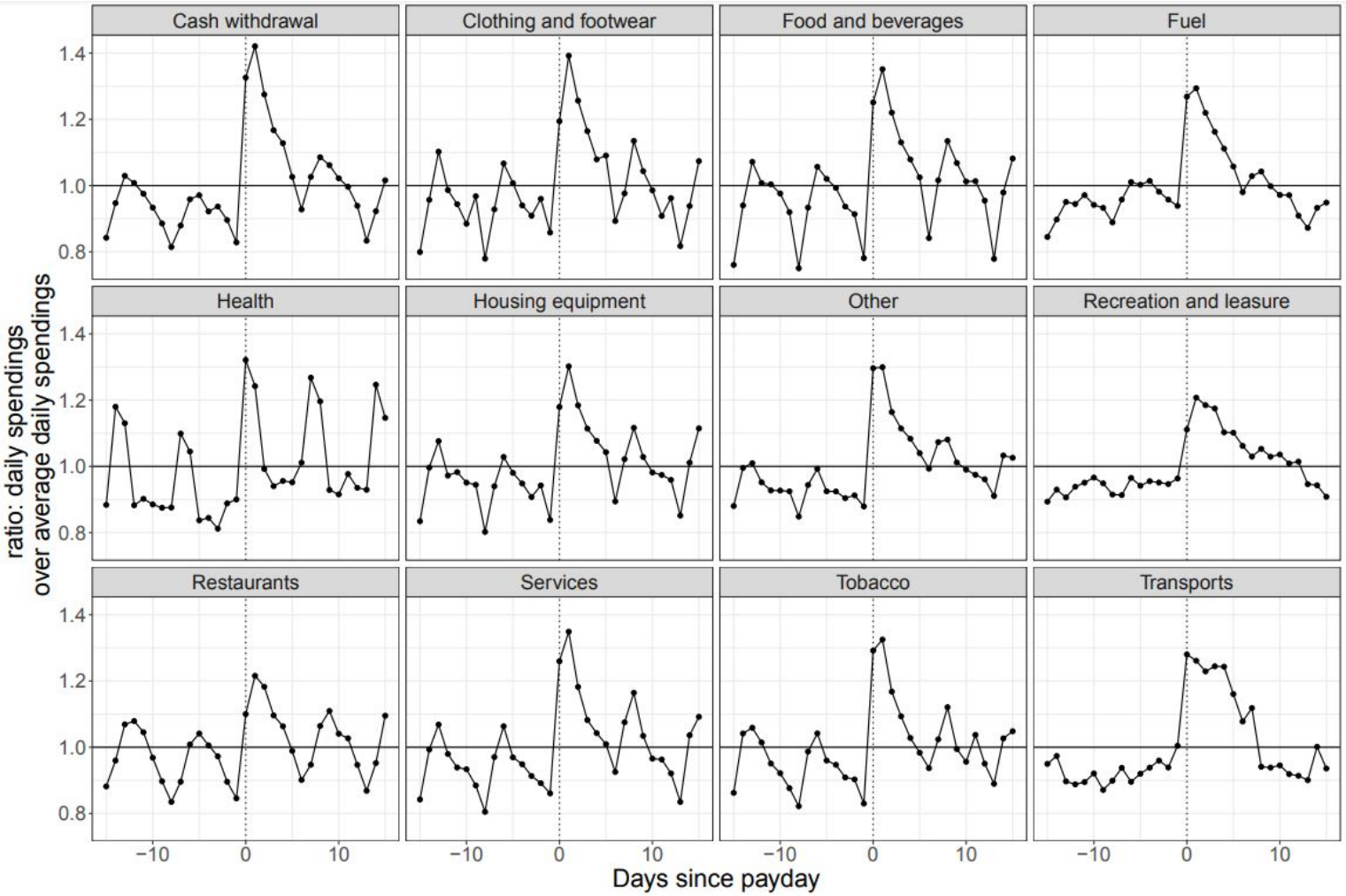


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Table 2: Wage increases: Individual heterogeneity of the MPC

	(1)	(2)	(3)	(4)	(5)
	0.157*** (0.006)				0.251*** (0.028)
Levels of shocks					
Below 0.1		0.102*** (0.018)			Ref.
Between 0.1 and 0.2		0.135*** (0.01)		0.042** (0.018)	
Above 0.2		0.162*** (0.006)		0.064*** (0.017)	
liquid financial assets					
Bottom 25%			0.27*** (0.012)		Ref.
Between 1st quartile and median			0.16*** (0.011)		-0.114*** (0.016)
Between median and 3rd quartile			0.096*** (0.011)		-0.14*** (0.015)
Top 25%			0.099*** (0.015)		-0.14*** (0.017)
Illiquid assets					
No illiquid assets					Ref.
Positive illiquid assets					-0.025*** (0.009)
Income					
Bottom 25%				0.22*** (0.014)	Ref.
Between 1st quartile and median				0.185*** (0.012)	-0.014 (0.019)
Between median and 3rd quartile				0.132*** (0.011)	-0.028 (0.019)
Top 25%				0.12*** (0.011)	-0.012 (0.02)
Age					
Below 30					Ref.
Between 30 and 60					-0.039** (0.018)
Above 60					0.031 (0.034)
Household structure					
Single man					Ref.
Single woman					0.015 (0.022)
Couple					-0.048** (0.02)
Family					-0.009 (0.02)
Single parent family					0.072* (0.038)
Socio-demographic controls	✓	✓	✓	✓	✓
Financial vars pre-treatment	✓	✓	✓	✓	✓
R^2	0.07	0.07	0.08	0.07	0.08
# of obs.	36,695	36,695	36,695	36,695	36,695

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Table 3: Wage increases: Heterogeneity of the MPC (durables vs nondurables)

	Non durable	Durable
Liquid assets		
Bottom 25%	0.111*** (0.005)	0.04*** (0.004)
Between 1st quartile and median	0.066*** (0.004)	0.02*** (0.004)
Between median and 3rd quartile	0.071*** (0.005)	0.022*** (0.004)
Top 25%	0.049*** (0.005)	0.022*** (0.004)
R^2	0.1	0.1
# of obs.	36,995	36,995

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Table 4: Wage increases: Heterogeneity of the MPC by category of goods (1)

	Groceries	Transport	Fuel	Restaurants, bars and nightclubs	Clothing and footwear	Furnishings
Liquid assets						
Bottom 25%	0.036*** (0.002)	0.001*** (0.00)	0.013*** (0.00)	0.022*** (0.001)	0.012*** (0.001)	0.015*** (0.002)
Between 1st quartile and median	0.008*** (0.002)	0.002*** (0.00)	0.01*** (0.00)	0.021*** (0.001)	0.008*** (0.001)	0.006** (0.002)
Between median and 3rd quartile	0.009*** (0.002)	0.003*** (0.00)	0.008*** (0.00)	0.017*** (0.001)	0.009*** (0.001)	0.004 (0.002)
Top 25%	0.006** (0.003)	0.002*** (0.00)	0.002*** (0.00)	0.013*** (0.00)	0.007*** (0.001)	0.003 (0.003)
R^2	0.01	0.04	0.07	0.16	0.03	0.00
# of obs.	36,995	36,995	36,995	36,995	36,995	36,995

Table 5: Wage increases: Heterogeneity of the MPC by category of goods (2)

	Computer network	Recreation and culture	Barbers and beauty shops	Car dealer	Health	Tobacco	Hotels
Liquid assets							
Bottom 25%	0.007*** (0.001)	0.011*** (0.002)	0.004*** (0.00)	0.004*** (0.001)	0.001 (0.001)	0.003*** (0.001)	0.001*** (0.001)
Between 1st quartile and median	0.001 (0.001)	0.011*** (0.002)	0.002*** (0.00)	0.003*** (0.001)	0.00 (0.001)	0.001*** (0.00)	0.002*** (0.001)
Between median and 3rd quartile	0.001 (0.001)	0.013*** (0.002)	0.002*** (0.00)	0.002*** (0.001)	0.002*** (0.001)	0.001** (0.00)	0.006*** (0.001)
Top 25%	0.001 (0.001)	0.008*** (0.002)	0.00 (0.001)	0.00 (0.001)	0.003*** (0.001)	0.00 (0.001)	0.009*** (0.001)
R^2	0.00	0.04	0.02	0.00	0.00	0.01	0.04
# of obs.	36,995	36,995	36,995	36,995	36,995	36,995	36,995

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Table 6: Job loss: Individual heterogeneity of the MPC

	(1)	(2)	(3)	(4)	(5)
	0.098*** (0.031)				0.244 (0.168)
Levels of shocks					
Above -0.1		0.052 (0.163)			Ref.
Between -0.1 and -0.2		0.008 (0.106)			-0.067 (0.188)
Below -0.2		0.091*** (0.032)			-0.02 (0.163)
Liquid financial assets					
Bottom 25%			0.214*** (0.036)		Ref.
Between 1st quartile and median			-0.001 (0.042)		-0.198*** (0.044)
Between median and 3rd quartile			-0.03 (0.05)		-0.199*** (0.066)
Top 25%			0.007 (0.059)		-0.154** (0.066)
Illiquid financial assets					
No illiquid financial assets					Ref.
Positive illiquid financial assets					-0.089* (0.048)
Income					
Bottom 25%				0.087** (0.041)	Ref.
Between 1st quartile and median				0.194*** (0.04)	0.129*** (0.048)
Between median and 3rd quartile				0.033 (0.047)	0.023 (0.061)
Top 25%				-0.006 (0.048)	0.025 (0.068)
Age					
Below 30					Ref.
Between 30 and 60					-0.012 (0.046)
Above 60					-0.188 (0.144)
Household structure					
Single man					Ref.
Single woman					-0.175*** (0.05)
Couple					-0.062 (0.065)
Family					-0.099 (0.067)
Single parent family					-0.101 (0.093)
Socio-demographic controls	✓	✓	✓	✓	✓
Financial vars pre-treatment	✓	✓	✓	✓	✓
R^2	0.05	0.05	0.07	0.06	0.09
# of obs.	1,464	1,464	1,464	1,464	1,464

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Table 7: Job loss: Heterogeneity of the MPC (durables vs nondurables)

	Non durable	Durable
Liquid financial assets		
Bottom 25%	0.098*** (0.017)	0.024* (0.012)
Between 1st quartile and median	0.024*** (0.02)	0.016 (0.014)
Between median and 3rd quartile	-0.001 (0.025)	-0.01 (0.018)
Top 25%	0.068** (0.03)	-0.008 (0.021)
R^2	0.1	0.02
# of obs.	1,464	1,464

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Table 8: Job loss: Heterogeneity of the MPC by category of goods (1)

	Groceries	Transport	Fuel	Restaurants, bars and nightclubs	Clothing and footwear	Furnishings
Liquid financial assets						
Bottom 25%	0.026*** (0.008)	0.002 (0.00)	0.014*** (0.00)	0.023*** (0.005)	0.011** (0.005)	0.009*** (0.007)
Between 1st quartile and median	0.002 (0.01)	-0.004** (0.002)	-0.002 (0.004)	0.012** (0.006)	0.004 (0.006)	0.012*** (0.008)
Between median and 3rd quartile	-0.009 (0.012)	0.001 (0.002)	-0.001 (0.005)	0.006 (0.007)	0.001 (0.007)	0.015 (0.01)
Top 25%	-0.011 (0.015)	0.003 (0.00)	-0.002 (0.006)	0.017* (0.01)	0.006 (0.008)	-0.001 (0.012)
R^2	0.06	0.04	0.06	0.18	0.06	0.02
# of obs.	1,464	1,464	1,464	1,464	1,464	1,464

Table 9: Job loss: Heterogeneity of the MPC by category of goods (2)

	Computer network	Recreation and culture	Barbers and beauty shops	Car dealer	Health	Tobacco	Hotels
Liquid financial assets							
Bottom 25%	0.004 (0.003)	0.009* (0.005)	0.004* (0.002)	0.011*** (0.004)	0.002 (0.002)	0.007*** (0.002)	0.001 (0.002)
Between 1st quartile and median	0.007* (0.004)	-0.003 (0.006)	0.004* (0.002)	0.002 (0.004)	0.002 (0.004)	-0.002 (0.002)	0.001 (0.002)
Between median and 3rd quartile	-0.003 (0.005)	0.00 (0.007)	0.00 (0.003)	-0.006 (0.005)	0.003 (0.003)	-0.001 (0.003)	-0.005* (0.003)
Top 25%	0.005 (0.006)	0.018** (0.009)	0.01*** (0.003)	-0.001 (0.006)	0.002 (0.004)	0.005 (0.004)	-0.003 (0.003)
R^2	0.03	0.05	0.03	0.02	0.01	0.02	0.04
# of obs.	1,464	1,464	1,464	1,464	1,464	1,464	1,464

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Table 10: Job loss: Heterogeneity of the MPC for severance payments

	(1)	(2)	(3)	(4)	(5)
	0.063*** (0.012)				0.26*** (0.044)
Levels of shocks					
Above -0.1		0.037** (0.015)			Ref.
Between -0.1 and -0.2		0.266** (0.108)		0.174 (0.111)	
Below -0.2		0.127*** (0.03)		0.042 (0.039)	
Liquid financial assets					
Bottom 25%			0.188*** (0.022)		Ref.
Between 1st quartile and median			0.061*** (0.019)		-0.146*** (0.031)
Between median and 3rd quartile			-0.00 (0.024)		-0.204*** (0.035)
Top 25%			-0.035 (0.029)		-0.251*** (0.042)
Illiquid financial assets					
No illiquid financial assets					Ref.
Positive illiquid financial assets					0.001 (0.027)
Income					
Bottom 25%				0.129*** (0.03)	Ref.
Between 1st quartile and median				0.082*** (0.022)	0.009 (0.038)
Between median and 3rd quartile				0.023 (0.025)	-0.014 (0.042)
Top 25%				0.047** (0.018)	0.083* (0.044)
Age					
Below 30					Ref.
Between 30 and 60					-0.064* (0.037)
Above 60					-0.095 (0.068)
Household structure					
Single man					Ref.
Single woman					-0.093* (0.42)
Couple					-0.071 (0.04)
Family					-0.068 (0.045)
Single parent family					-0.063 (0.082)
Socio-demographic controls	✓	✓	✓	✓	✓
Financial vars pre-treatment	✓	✓	✓	✓	✓
R^2	0.07	0.08	0.11	0.08	0.12
# of obs.	1,464	1,464	1,464	1,464	1,464

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