Heterogeneity in the Marginal Propensity to Consume Before and During the COVID-19 Pandemic: Evidence from a Lottery and Administrative Data

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Outline

Literature I

- MPC: Magnitude and heterogeneity.
- Important for effectiveness of fiscal and monetary policy.
- Micro estimates using revealed-preference, reported-preference, or structural approaches.

Literature II

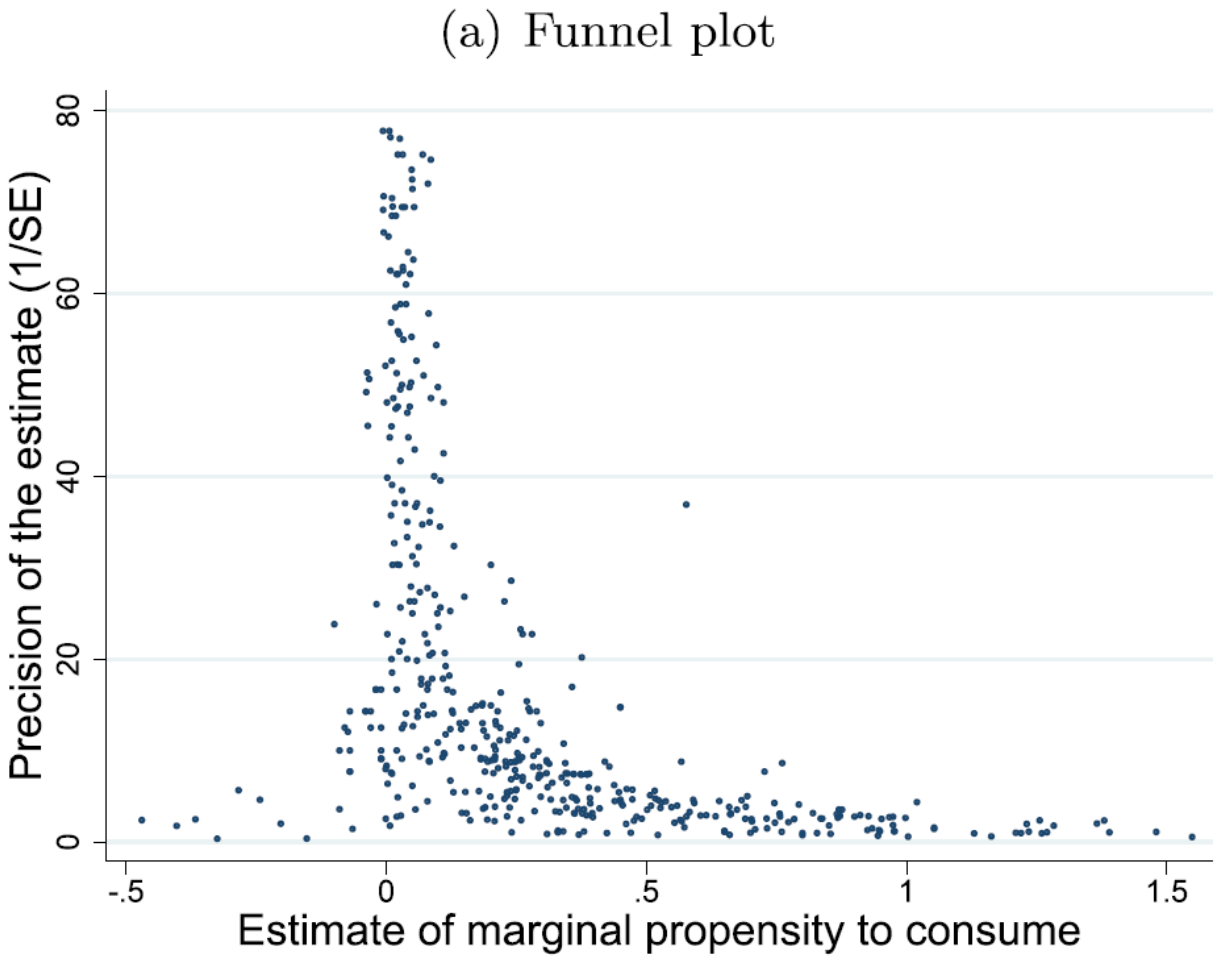

Figure 1: Havranek and Sokolova (2020)

Literature III

- Micro estimates vary.
- Some disagreement on sources of heterogeneity.
- Question as to consistency in estimates between revealed-preference and reported-preference approaches.

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4. Contrast MPC for same households in December 2019 and in April 2020 to garner the impact of the COVID-19 pandemic on household consumption and saving behavior.
5. Provide reported-preference estimates for an unexpected loss scenario also.

Results

1. MPC estimates larger than other studies have found (GAIN):
   - 0.536 (3-month, revealed preference, transactions data)
   - 0.586 (4-month, revealed preference, transactions data)
   - 0.487 (4-month, reported preference, survey)
2. Consistency between two approaches using same sample.
3. Higher MPC for LOSS: 0.668 (4-month), $\Delta = 0.181$
4. Consistent with Christelis et al. (2019), Fuster et al. (2021)
5. MPC for non-durables (ND) considerably higher than for durables (D)
6. Household Finance. Split between Gross Saving and Repaying Debt:
   - GAIN : 1 to 2
   - LOSS : roughly equal (to avoid default)

Results on Heterogeneity of MPC

GAIN:

- Higher income have higher MPS and lower MPRD.
- Higher LW have higher MPC (!) and MPS and lower MPRD. Fuster et.al (2021) for review. Very negative shocks to LW have higher MPC and MPS and lower MPRD.
- Illiquid Wealth: insignificant relationship.
- Arrears to the State: Lower MPC and MPS, and Higher MPRD

LOSS:

- Higher-Income: higher MPC (weak) and MPS, lower MPRD.
- Higher-LW individuals have higher MPC (!) and MPS, lower MPRD. Reverse results when examining by shocks to LW.
- Illiquid Wealth: no significant relationship
- High arrears to the State: lower MPS, higher MPRD.

Results on impact of COVID-19 Pandemic

For responding subsample (286), GAIN scenario, comparing April 2020 to December 2019 :

- $\Delta MPC = 0.197$ (roughly equally between ND, D),
- Older or male individuals increase MPC more (through non-durables)
- Expectations matter. Optimistic about future income increase MPC more (through durables)
- Recipients of compensation payments change MPC less (through durables).

The tax lottery of 30 November 2019

- Since 2017, the Independent Authority for Public Revenue (I.A.P.R) of the Hellenic Republic conducts a monthly lottery where 1,000 winners receive 1,000 € each.
- The award is tax-free and cannot be confiscated by I.A.P.R.
- All consumers older than 17 years with a Tax Identification Number who had executed at least one electronic transaction in the previous month are included.

The tax lottery of 30 November 2019

- Electronic transactions are purchases with credit or debit cards, and bank transfers, towards purchases of goods or services.
- The number of lottery tickets given to each person is a step function of the amount of total transactions in Euros the month before (October 2019). The number of lottery tickets per Euro spent decreases in the value of spending. There is a maximum eligible spending of 50,000 €.
- The prize of 1,000 € was credited in the winners' bank account on 20 December 2019.

Matching Strategy

- For each winner, we generated a set of non-winners from the lottery population with exact matching on Gender, Region of Residence, Age, Marital Status, and Household Size.

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- The above algorithm created a Contact Sample that consisted of 5,977 individuals including 942 winners (non-dependent, tax filers).

The Survey: Stage 1, Telephone

Stage 1, Telephone:

- From 2 December 2019 to 13 December 2019 (with a limited number of phone calls also made on 19 and 20 December 2019)
- GAIN. Winners were asked how they would dispose of a 1,000 € tax-free prize. For winners this was real-life. For non-winners it was a hypothetical scenario ▸ Q1
- LOSS. Both winners and non-winners were asked how they would react in case of an unexpected immediate reduction of 1,000 € in their net income ▸ Q2
- 1014 participants, 481 winners, 533 non-winners

The Survey: Stage 1, Online

Stage 1, Online:

- A link to an online survey was sent via SMS and email immediately after the telephone contact
- Survey respondents were asked what type of goods and services they would spend the prize on (durable/non-durable/personal care/vacation, etc.)
- And when during the 4 months horizon. They were also asked about their education level, occupation, weekly working hours, expectations, personality traits and other
- 586 participants, 336 winners, 250 non-winners

The Survey: Stage 2

Stage 2:

- Survey built with the help of ELSTAT to reproduce the Consumer Expenditure Survey of Eurostat
- Commenced on the 17th of January 2020 and ended on the 13th of February 2020
- Asked participants to keep track of their expenses under detailed categories and record them in a specially designed diary for two weeks
- Contained 9 questions on recalling different types of expenditure made in the past two months
- Incentivized participation through a lottery of fourty 125 € prizes
- Main Qs: 264 participants, 155 winners, 109 non-winners
- Also the 9 questions: 161 participants, 96 winners, 65 non-winners

The Survey: Stage 3

Stage 3:

- Online Survey from 24 April 2020 to 7 May 2020
- Presented with a hypothetical question regarding how they would plan on spending within the next 4 months an unexpected, immediate tax-free 1,000 € transfer. Wording of Stage 1 Telephone
- Participants were asked if they had their labor contract suspended since the beginning of COVID-19
- And whether they received (or expected to) the compensation of 800 €
- Respondents reported what percent of their expected 4-month household net income (January 2020-April 2020) they lost during these 4 months
- Also debt level, borrowing difficulty, and expectations about future income, real estate value

Administrative Data I

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- Arrears: Arrears to the State at the end of 2019 provided by I.A.P.R
- Income, Taxes: From I.A.P.R. back to 2006

Administrative Data II

- Liquid Wealth: Tax returns contain information regarding the annual interest earned from deposits (domestic and foreign). We estimate average annual deposits using an interest rate from the Central Bank

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- Illiquid Wealth: The value of real estate holdings, cars, and boats
- Hand-to-Mouth: We combine Kaplan-Violante-Weidner (KVW, 2014) and Zeldes (1989) to derive Wealthy HtM and Poor HtM

Comparison of Population and Sample

Table 1: Population and Sample Statistics

Variables	Population				Sample			
	N	Mean	Median	Std.Dev.	N	Mean	Median	Std.Dev.
Lottery Tickets	5,695,732	298.07	257.00	343.21	1,014	5,519.19	4,207.50	7,829.95
E-Transactions ()	5,695,732	626.31	312.42	3,129.24	1,014	17,472.04	7,365.43	78,681.50
Age	5,695,732	49.59	48	17.27	1,014	50.73	50	13.51
Household Size	5,480,822	2.12	2	1.19	1,009	2.49	2	1.27
Household Income 2019 (Declared)	5,480,822	17,651.13	13,262.20	38,341.43	1,009	25,786.24	19,171.59	26,748.42

Revealed Preferences

Table 2: Revealed Preferences on Spending

	Marginal Effects		Implied Long-Run Cumulative Effects	
	(1) Coeff.	(2) S.E.	(3) Coeff.	(4) S.E
β_{win}	129.725***	38.920		
β_{-2}	267.822**	111.599		
β_{-1}	51.063	40.313		
β_0	156.751***	56.091		
β_1	263.366***	80.16		
β_2	135.937	83.361	556.053**	166.894
β_3	24.787	63.863	580.840**	214.438
β_4	60.849	51.823		
β_5	73.11	90.349	714.799*	312.752
β_6	-22.417	50.824		
β_7	40.275	57.736		
Cons.	115.074	190.092		
	Joint Significance			
$(\beta_2^j)_0^2$	0.00165			
$(\beta_5^j)_0^5$	0.00559			
$(\beta_7^j)_0^7$	0.0119			
N	39759			
R^2	0.056			

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Reported-preference Results: GAIN

Table 3: Statistics in GAIN

	MPC	MPCND	MPCD	MPS	MPRD
Mean	0.481	0.347	0.134	0.170	0.349
Standard Error	0.0131	0.0122	0.00834	0.0102	0.0130
Mean (W)	0.487	0.358	0.129	0.179	0.334
Standard Error (W)	0.0189	0.0176	0.0120	0.0149	0.0184
Mean (NW)	0.476	0.336	0.140	0.163	0.362
Standard Error (NW)	0.0183	0.0168	0.0117	0.0140	0.0184

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	MPC	MPCND	MPCD	MPS	MPRD
Mean	0.668	0.414	0.254	0.149	0.183
Standard Error	0.0126	0.0122	0.0102	0.00942	0.0106
Mean (W)	0.690	0.435	0.254	0.152	0.158
Standard Error (W)	0.0177	0.0176	0.0150	0.0138	0.0143
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Reported-preferences - Distributions

Figure 2: Distributions of MPC, MPS, and MPRD

Revealed Heterogeneity - Income and Arrears

Table 5: Revealed preferences - Income, Income Shocks and Arrears

VARIABLES	Income Coef	se	Income Shock Coef	se	Arrears Coef	se
Group 1:						
0 (Marginal)	-203.373***	67.774	153.411*	88.578	95.795	58.993
b1 (Cum 0+1)	-302.912**	119.139	393.771*	206.092	346.032**	137.009
b3 (Cum 0to3)	-818.226***	220.8	857.599	675.436	407.673**	193.953
Group 2:						
0 (Marginal)	265.193	172.113	-18.313	72.668	-93.535	74.411
b1 (Cum 0+1)	405.233*	239.31	307.558	243.304	-32.129	211.576
b3 (Cum 0to3)	546.276	402.585	206.535	349.549	-242.749	411.943
Group 3:						
0 (Marginal)	89.52	75.613	156.752	155.11	421.164	262.182
b1 (Cum 0+1)	296.021**	144.423	158.435	187.562	604.524*	326.436
b3 (Cum 0to3)	444.286*	245.664	135.874	293.941	680.929	489.308
Group 4:						
0 (Marginal)	376.070***	97.082	341.560***	113.077	369.485**	145.708
b1 (Cum 0+1)	1,036.900***	284.743	818.244***	240.626	968.543**	407.095
b3 (Cum 0to3)	1,684.358***	639.732	1,114.118***	372.281	1,926.353*	1,133.90
Constant	122.809	189.333	114.282	191.381	121.489	188.906
Observations	39,758		39,758		39,759	
R-squared	0.058		0.057		0.057	

Revealed Heterogeneity - Liquid Wealth, Illiquid Wealth and their Shocks

Table 6: Revealed preferences - Liquid Wealth, Illiquid Wealth and their Shocks

VARIABLES	Illiq Wealth Coef	se	Illiq Wealth Shock Coef	se	Liq Wealth Coef	se	Liq Wealth Shock Coef	se
Group 1:								
0 (Marginal)	34.187	73.193	154.142*	79.689	88.694	89.545	289.441***	85.572
b1 (Cum 0+1)	168.592	174.284	476.399***	169.307	241.217	207.617	631.399***	200.207
b3 (Cum 0to3)	139.126	333.128	588.233*	306.068	194.159	402.9	1,357.893**	644.274
Group 2:								
0 (Marginal)	-20.878	96.385	156.233	157.306	19.313	85.078	-63.234	72.851
b1 (Cum 0+1)	175.084	274.847	428.905	274.172	103.581	146.201	100.097	202.745
b3 (Cum 0to3)	-86.797	330.392	252.043	336.767	-2.56	255.781	58.297	383.401
Group 3:								
0 (Marginal)	157.336	95.859	-24.689	125.779	42.435	78.531	37.514	91.84
b1 (Cum 0+1)	391.256*	208.768	14.642	274.112	141.222	138.631	67.909	144.235
b3 (Cum 0to3)	392.083	338.132	-149.018	436.6	28.718	213.345	-223.784	233.588
Group 4:								
0 (Marginal)	369.157***	136.124	274.161***	90.856	430.837***	149.562	302.966**	152.891
b1 (Cum 0+1)	804.230***	214.876	609.180***	199.362	1,081.704***	307.656	780.498***	290.017
b3 (Cum 0to3)	1,550.061***	587.695	1,286.406**	595.5	1,875.856***	665.255	962.307**	391.266
Constant	109.087	190.042	109.973	189.866	121.864	189.833	116.203	188.082
Observations	39,758		39,758		39,758		39,758	
R-squared	0.057		0.057		0.058		0.057	

Reported Heterogeneity - GAIN Scenario

Table 7: Reported preferences for GAIN scenario with Income or Income Shock

DEPENDENT VARIABLE	(1) MPC	(2) MPC	(3)MPS	(4) MPS	(5) MPRD	(6) MPRD
CI 2019 Q2	-0.018		0.036		-0.017	
CI 2019 Q3	-0.01		0.081***		-0.072*	
CI 2019 Q4	-0.031		0.157***		-0.126***	
shockCI 2019 Q2		-0.027		0.026		0.001
shockCI 2019 Q3		0.036		-0.002		-0.035
shockCI 2019 Q4		-0.024		0.049*		-0.025
Constant	0.505***	0.499***	0.185***	0.199***	0.310***	0.302***
Observations	1,010	1,010	1,010	1,010	1,010	1,010
R-squared	0.021	0.024	0.057	0.038	0.031	0.022

Reported Heterogeneity - GAIN Scenario

Table 8: Reported preferences for GAIN scenario with Liquid Wealth or Liquid Wealth Shock

DEPENDENT VARIABLE	(1) MPC	(2) MPC	(3)MPS	(4) MPS	(5) MPRD	(6) MPRD
LW 2019 Q2	0.033		0		-0.034	
LW 2019 Q3	0.058		0.034		-0.092**	
LW 2019 Q4	0.116***		0.147***		-0.263***	
shockLW 2019 Q2		-0.055		-0.072**		0.127***
shockLW 2019 Q3		-0.064*		-0.03		0.094**
shockLW 2019 Q4		0.02		0.036		-0.056
Constant	0.461***	0.525***	0.192***	0.231***	0.347***	0.244***
Observations	1,010	1,010	1,010	1,010	1,010	1,010
R-squared	0.029	0.027	0.066	0.049	0.074	0.05

Reported Heterogeneity - GAIN Scenario

Table 9: Reported preferences for GAIN scenario with Illiquid Wealth or Illiquid Wealth Shock

DEPENDENT VARIABLE	(1) MPC	(2) MPC	(3)MPS	(4) MPS	(5) MPRD	(6) MPRD
ILLW 2019 Q2	-0.055		-0.059*		0.114***	
ILLW 2019 Q3	-0.058		0.024		0.034	
ILLW 2019 Q4	-0.062		0.012		0.051	
shockILLW 2019 Q2		0.005		-0.023		0.018
shockILLW 2019 Q3		-0.021		0.004		0.017
shockILLW 2019 Q4		-0.017		0		0.017
Constant	0.514***	0.507***	0.220***	0.221***	0.266***	0.272***
Observations	1,010	1,010	1,010	1,010	1,010	1,010
R-squared	0.023	0.021	0.043	0.035	0.03	0.021

Reported Heterogeneity - GAIN Scenario

Table 10: Reported preferences for GAIN scenario with Arrears

DEPENDENT VARIABLE	(1) MPC	(2)MPS	(3) MPRD
OF 2019 T1	0.029	-0.084***	0.055
OF 2019 T2	-0.071*	-0.105***	0.176***
OF 2019 T3	-0.105***	-0.050*	0.155***
Constant	0.490***	0.232***	0.279***
Observations	1010	1010	1010
R-squared	0.032	0.051	0.05

Reported Heterogeneity - LOSS Scenario

Table 11: Reported results for LOSS scenario with Income or Income Shock

DEPENDENT VARIABLE	(1) MPC	(2) MPC	(3)MPS	(4) MPS	(5) MPRD	(6) MPRD
CI 2019 Q2	0.016		0.014		-0.03	
CI 2019 Q3	0.090**		0.018		-0.108***	
CI 2019 Q4	0.034		0.084***		-0.118***	
shockCI 2019 Q2		0.04		-0.036		-0.004
shockCI 2019 Q3		0.01		0.001		-0.011
shockCI 2019 Q4		0.05		0.011		-0.060*
Constant	0.683***	0.685***	0.143***	0.162***	0.174***	0.153***
Observations	1007	1007	1007	1007	1007	1007
R-squared	0.024	0.02	0.018	0.013	0.037	0.026

Reported Heterogeneity - LOSS Scenario

Table 12: Reported preferences for LOSS scenario with Liquid Wealth or Liquid Wealth Shock

DEPENDENT VARIABLE	(1) MPC	(2) MPC	(3)MPS	(4) MPS	(5) MPRD	(6) MPRD
LW 2019 Q2	0.083**		-0.042		-0.04	
LW 2019 Q3	0.095***		0.006		-0.101***	
LW 2019 Q4	0.068*		0.074***		-0.142***	
shockLW 2019 Q2		-0.025		-0.066**		0.091***
shockLW 2019 Q3		0.019		-0.089***		0.070**
shockLW 2019 Q4		0.059*		-0.039		-0.02
Constant	0.657***	0.695***	0.155***	0.203***	0.188***	0.102*
Observations	1007	1007	1007	1007	1007	1007
R-squared	0.025	0.023	0.027	0.021	0.044	0.039

Reported Heterogeneity - LOSS Scenario

Table 13: Reported preferences for LOSS scenario with Illiquid Wealth or Illiquid Wealth Shock

DEPENDENT VARIABLE	(1) MPC	(2) MPC	(3)MPS	(4) MPS	(5) MPRD	(6) MPRD
ILLW 2019 Q2	0.033		-0.039		0.006	
ILLW 2019 Q3	0.004		-0.006		0.002	
ILLW 2019 Q4	0.001		0.036		-0.037	
shockILLW 2019 Q2		-0.022		0.013		0.009
shockILLW 2019 Q3		-0.044		-0.006		0.049
shockILLW 2019 Q4		-0.042		0.004		0.037
Constant	0.705***	0.744***	0.157***	0.148***	0.138***	0.108**
Observations	1,007	1,007	1,007	1,007	1,007	1,007
R-squared	0.019	0.019	0.017	0.01	0.023	0.024

Reported Heterogeneity - LOSS Scenario

Table 14: Reported preferences for LOSS scenario with Arrears

DEPENDENT VARIABLE[1]	(1) MPC	(2)MPS	(3) MPRD
OF 2019 T1	0.009	-0.042	0.033
OF 2019 T2	0.054	-0.081***	0.027
OF 2019 T3	0	-0.073***	0.073**
Constant	0.705***	0.157***	0.138***
Observations	1,007	1,007	1,007
R-squared	0.02	0.022	0.027

Reported-preference results : The COVID-19 pandemic

Table 15: Descriptive Statistics of Variables of Interest

	Mean	Std. Dev.	min	max
$MPCND_{dif}$	.113	.425	-1	2
$MPCD_{dif}$	.084	.266	-1	1.5
MPC_{dif}	.197	.481	-1	2
MPS_{dif}	-.197	.481	-2	1

▸ All Variables

Reported-preference results : The COVID-19 pandemic

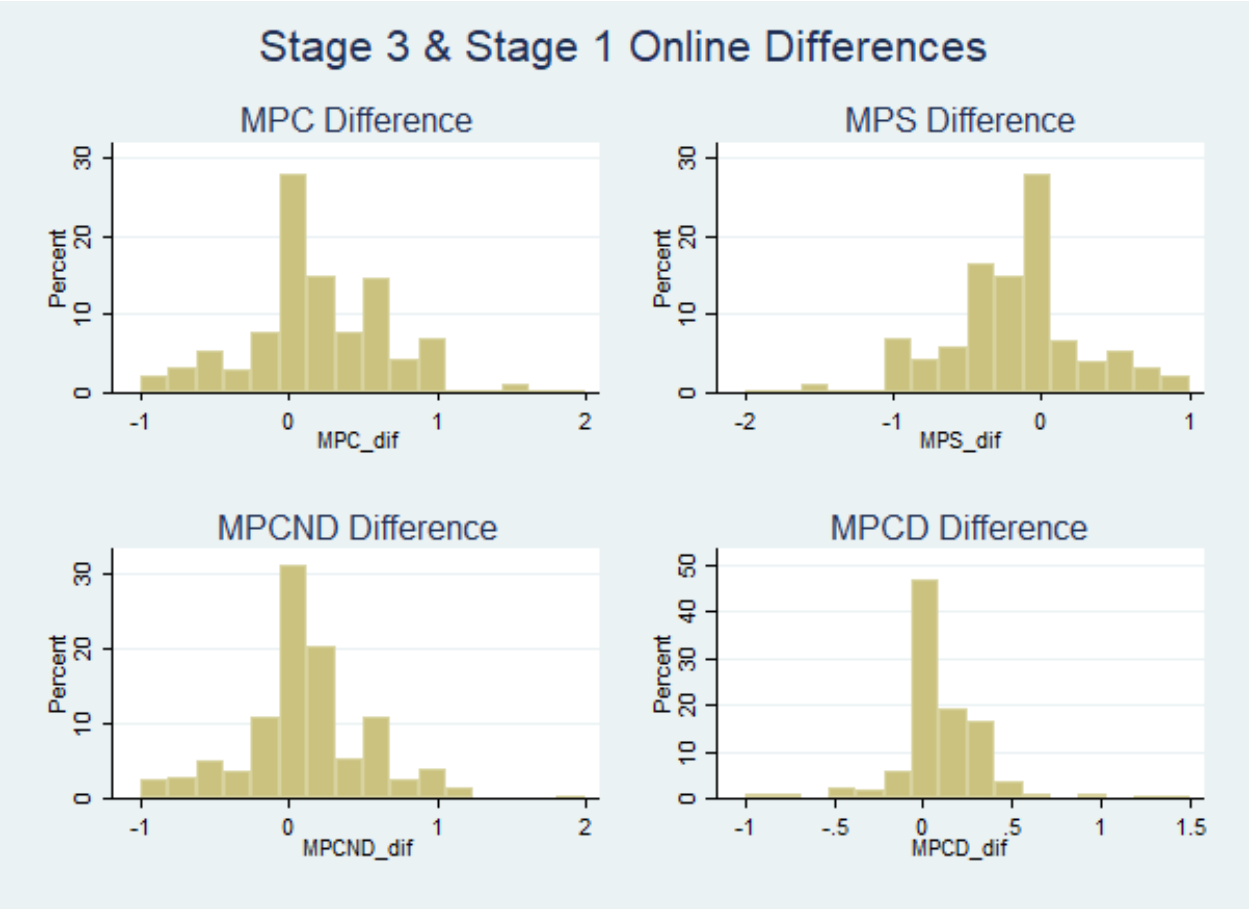

Figure 3: Stage3-online and Stage1-online differences

Reported-preference results : The COVID-19 pandemic

Table 16: Changes during the pandemic

VARIABLES	MPC_{dif}	$MPCND_{dif}$	$MPCD_{dif}$
age_{35}	-0.224	-0.275**	0.050
age_{35-50}	-0.039	-0.029	-0.010
age_{50-65}	0.019	-0.015	0.034
male	0.106*	0.082	0.024
DP_{50}	0.008	0.003	0.005
DP_{50-80}	-0.074	-0.032	-0.042
DP_{80-95}	0.036	0.072	-0.036
DP_{95}	-0.055	0.079	-0.133
$ILLW_{Q2}$	0.070	0.075	-0.005
$ILLW_{Q3}$	-0.021	0.034	-0.055
$ILLW_{Q4}$	-0.050	-0.087	0.037
IncExp. Positive	0.179**	0.058	0.121**
IncExp. Negative	0.057	0.017	0.040
REVExp. Positive	-0.057	-0.029	-0.028
REVExp. Negative	0.095	0.091	0.005
Received SPT	-0.115	0.050	-0.165***
Expects SPT	-0.195	-0.075	-0.120
NCI_{QNT2}	0.065	0.047	0.017
NCI_{QNT3}	-0.112	-0.132	0.019
NCI_{QNT4}	0.043	0.004	0.039
NCI_{QNT5}	-0.019	-0.063	0.045
Constant	-0.081	-0.140	0.059
Observations	286	286	286
R^2	0.138	0.157	0.139
ymean	0.197	0.113	0.0837
yse	0.0285	0.0251	0.0157

*The following were also included:

- $WP_{DEC2019}$
- $WP_{FEB2020}$
- $HSIZE_{Incr}$
- $HSIZE_{Decr}$
- $Debt_{Low}$
- $Debt_{Medium}$
- $Debt_{High}$
- $Debt_{NA}$
- MR Owned

Reported-preference results : The COVID-19 pandemic

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Reported-preference results : The COVID-19 pandemic

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Reported-preference results : The COVID-19 pandemic

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Reported-preference results : The COVID-19 pandemic

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- $HSIZE_{Decr}$
- $Debt_{Low}$
- $Debt_{Medium}$
- $Debt_{High}$
- $Debt_{NA}$
- MR Owned

Conclusions

- Depressed economy, 10-yr long crisis, 20% lower GDP
- MPC is considerably higher than previous estimates in GAIN scenario
- MPC even higher under a LOSS scenario
- Under negative shocks, maintaining debt repayment exacerbates consumption drop.
- Important to disaggregate Net Worth into Assets and Debt
- Important to disaggregate Cash on Hand into its components.
- Households with high Arrears to the State have less sensitive consumption in positive shocks, more sensitive in negative shocks.
- Consistent with credit constraints.
- The pandemic raised MPC, esp. for older, male, or with optimistic expectations, but not for those suffering employment disruption.

Reported-preference results : The COVID-19 pandemic

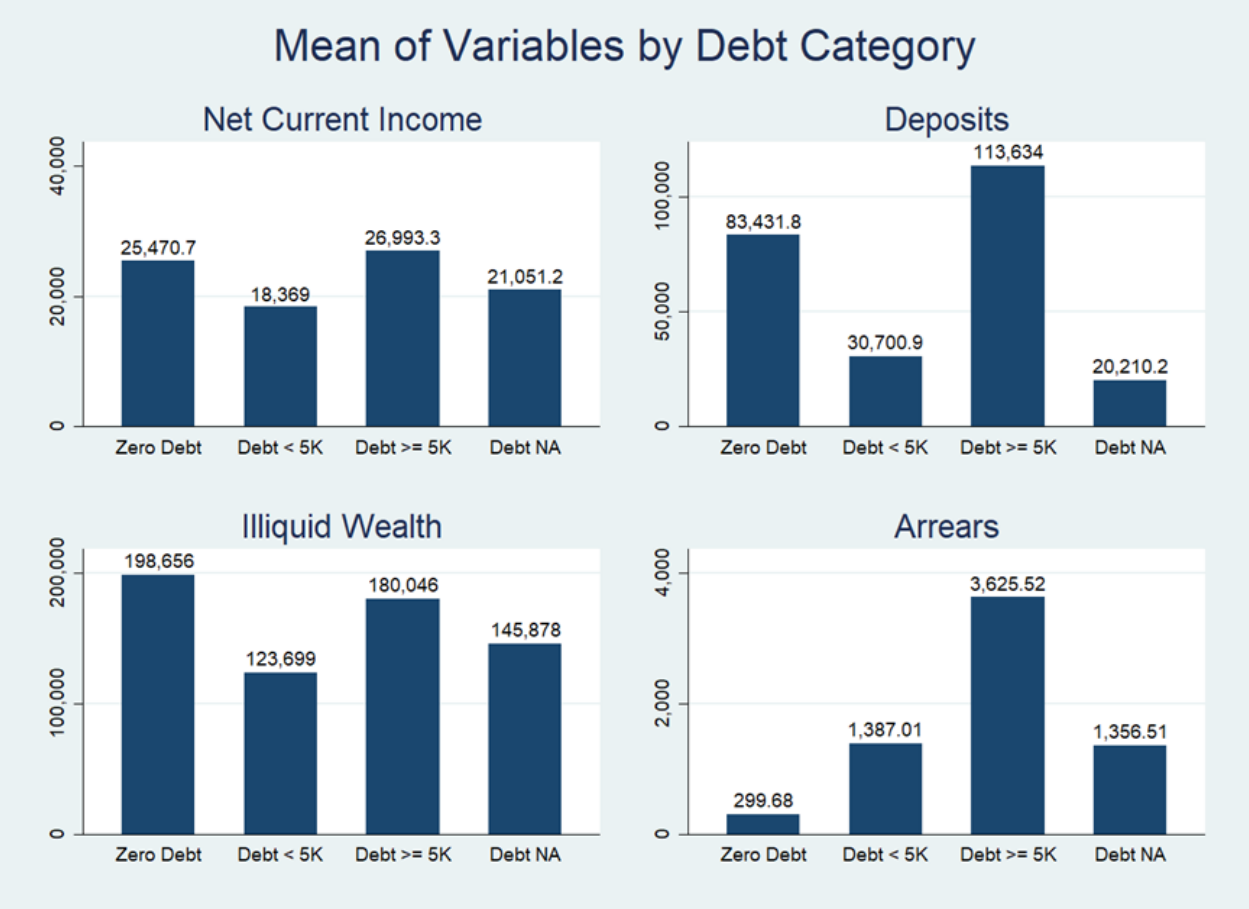

Figure 4: Household Characteristics by Debt Holdings

Notes: N=286

GDP comparison

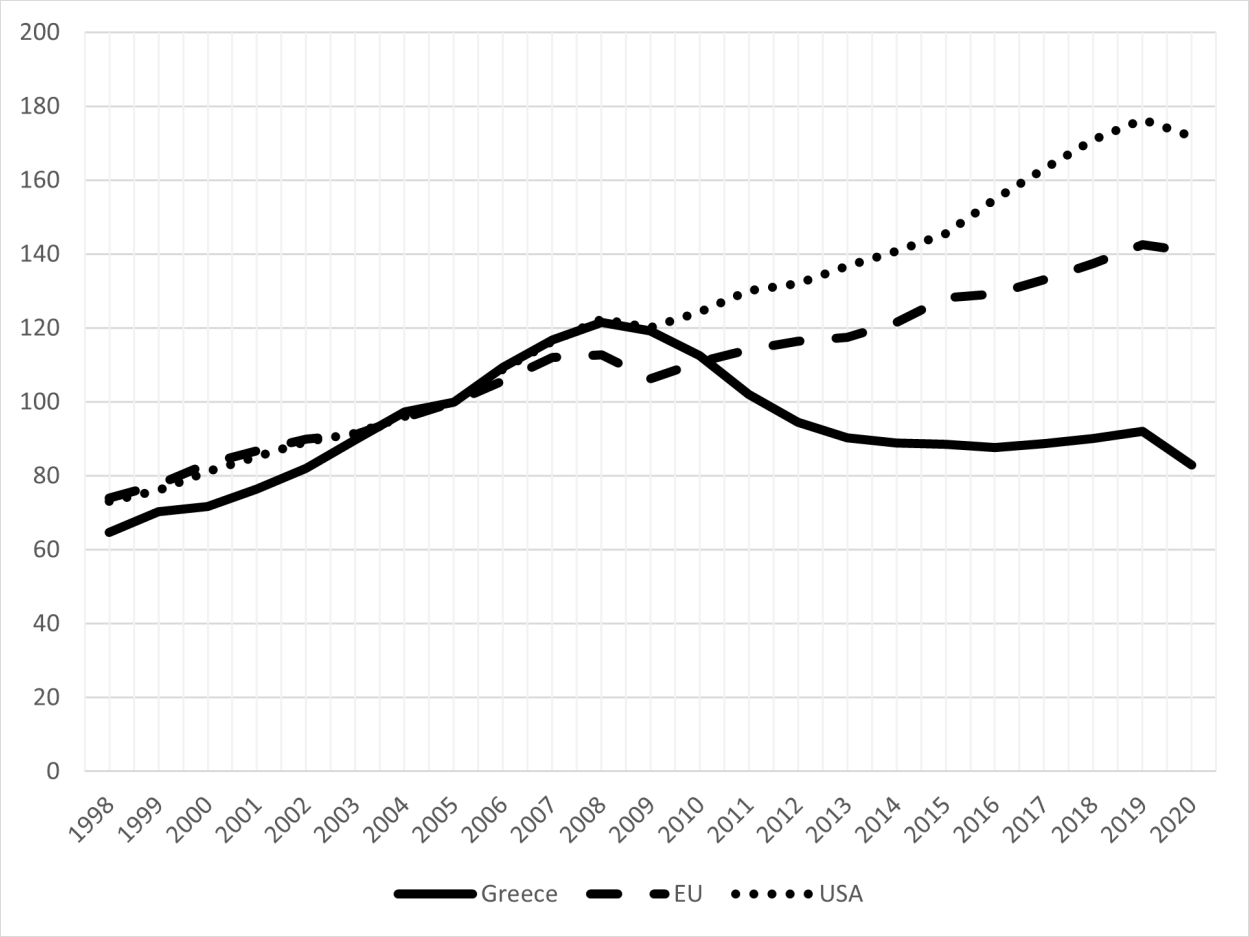

Figure 5: GDP comparison

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Comparison of Population and Sample

Table 17: Summary Statistics of Participants

			Panel A		
Variable	**Count**	**Proportion**	**Mean**	**Std.Dev.**	**Sum**
Lottery Tickets	5,695,732	100.00%	298.07	343.21	1,697,720,572
E-Transactions (€)	5,695,732	100.00%	626.31	3,129.24	3,567,312,705
Age	5,695,732	100.00%	49.59	17.27	282,446,223.7
Household Size	5,480,822	96.23%	2.12	1.19	11,620,208.61
Household Income 2019 (Declared)	5,480,822	96.23%	17,651.13	38,341.43	96,742,701,629
			Panel B		
	p1	**p25**	**p50**	**p75**	**p99**
Lottery Tickets	5	120	257	396	1200
E-Transactions ()	4,3	119.11	312.42	635.535	5,092.46
Age	20	36	48	62	89
Household Size	1	1	2	3	5
Household Income 2019 (Declared)	0	5,977.84	13,262.2	23,165,.5	83,774.7

Descriptive Statistics of Survey Stages

Table 18: Mean of variables by survey stage

	$S1_T$	$S1_O$	$S3_O$	S3O-S1O
N	1,014	586	361	286
S1T MPC	.481			
S1T MPCND	.347			
S1T MPCD	.134			
S1T MPS	.17			
S1T MPRD	.349			
S1T MPS*	.519			
S1O MPC		.217		.219
S1O MPCND		.166		.164
S1O MPCD		.051		.055
S1O MPS*		.784		.781
S3 MPC			.404	.417
S3 MPCND			.269	.278
S3 MPCD			.135	.139
S3 MPS			.333	.337
S3 MPRD			.262	.246
S3 MPS*			.596	.583
WHtM	.308	.312	.31	.301
PHtM	.06	.056	.039	.035
$WP_{DEC2019}$	.461	.556	.565	.545
$WP_{FEB2020}$	.012	.014	.008	.007
Age	50.729	48.937	49.042	48.843
Male	.593	.601	.596	.608

Descriptive Statistics of Survey Stages

Table 18 continued..

	$S1_T$	$S1_O$	$S3_O$	S3O-S1O
HSIZE	2.487	2.57	2.637	2.657
$HSIZE_{Incr}$			.064	.066
$HSIZE_{Decr}$			.039	.028
NCI_{2019}	20,454.682	22,333.609	22,560.895	23,473.264
DP_{2019}	63,085.758	42,518.815	62,893.721	62,539.421
$ILLW_{2019}$	143,383.66	155,307.43	161,381.3	160,484.71
ILLW2-2019	170,839.97	188,751.64	197,755.05	193,005.23
IncExp Positive			.177	.182
IncExp Negative			.554	.538
REVExp Positive			.208	.217
REVExp Negative			.562	.538
Zero Debt			.28	.28
$Debt_{Low}$			.726	.724
$Debt_{Medium}$			.086	.101
$Debt_{High}$			.064	.066
$Debt_{NA}$			.108	.098
Received SPT			.175	.178
Expects SPT			.03	.024
MR Owned	.352	.367	.349	.364

Descriptive Statistics of Survey Stages

Table 19: Median of variables by survey stage

	$S1_T$	$S1_O$	$S3_O$	S3-S1
N	1,014	586	361	286
WP DEC 2019	0	1	1	1
WP FEB 2020	0	0	0	0
Age	50	48	48	48
Male	1	1	1	1
HSIZE	2	2	2	2.5
HSIZE Incr	0	0	0	0
HSIZE Decr	0	0	0	0
NCI 2019	15,395.71	16,993.045	18,176.27	18,884.291
DP 2019	388.235	473.529	513.725	565.686
ILLW 2019	79,650.891	88,938.715	93,308.648	98,176.113
ILLW2 2019	91,640.016	99,948.113	108,481.95	108,979.51
IncExp Positive	0	0	0	0
IncExp Negative	1	1	1	1
REVExp Positive	0	0	0	0
REVExp Negative	1	1	1	1
Debt Low	1	1	1	1
Debt Medium	0	0	0	0
Debt High	0	0	0	0
Debt NA	0	0	0	0
Received SPT	0	0	0	0
Expects SPT	0	0	0	0
MR Owned	0	0	0	0
WHtM	0	0	0	0
PHtM	0	0	0	0

Reported-preference results : The COVID-19 pandemic

Table 20: Descriptive Statistics

	Mean	Std. Dev.	min	max
S3 MPCND	.278	.268	0	1
S3 MPCD	.139	.192	0	1
S3 MPC	.417	.309	0	1
S3 MPS	.583	.309	0	1
S1 MPCND	.164	.356	-1	1
S1 MPCD	.055	.201	-1	1
S1 MPC	.219	.415	-1	1
S1 MPS	.781	.415	0	2
$MPCND_{dif}$	.113	.425	-1	2
$MPCD_{dif}$	.084	.266	-1	1.5
MPC_{dif}	.197	.481	-1	2
MPS_{dif}	-.197	.481	-2	1
$WP_{DEC2019}$	.545	.499	0	1
$WP_{FEB2020}$	.007	.083	0	1
age	48.843	11.224	27	81
male	.608	.489	0	1
HSIZE	2.657	1.29	1	7
$HSIZE_{Incr}$	.066	.249	0	1
$HSIZE_{Decr}$	.028	.165	0	1

Reported-preference results : The COVID-19 pandemic

Table 20 continued..

	Mean	Std. Dev.	min	max
NCI_{2019}	23,473.264	23,838.216	-3,530.96	237,926.19
DP_{2019}	62,539.421	391,319.69	0	5,393,564.5
$ILLW_{2019}$	160,484.71	225,643.23	0	1,768,106.9
$ILLW2_{2019}$	193,005.23	352,405.13	0	4,609,016.5
IncExp Positive	.182	.386	0	1
IncExp Negative	.538	.499	0	1
REVExp Positive	.217	.413	0	1
REVExp Negative	.538	.499	0	1
$Debt_{Low}$	.724	.448	0	1
$Debt_{Medium}$	.101	.302	0	1
$Debt_{High}$	.066	.249	0	1
$Debt_{NA}$	.098	.298	0	1
Received SPT	.178	.383	0	1
Expects SPT	.024	.155	0	1
MR Owned	.364	.482	0	1

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Telephone Questions - Q1

1. Based on the current economic condition of your household, we would like you to tell us how you plan on using the tax-free prize of 1,000, which you will receive in about twenty (20) days from today. Consider a horizon of 4 months. Distribute the 1,000 into the following 4 possible uses:

A. Will you save so that you can spend after 4 months have passed? [0, 1000]

B. Will you repay your debts? [0, 1000]

C. Will you purchase durable goods and services within the next 4 months (e.g. car, motorcycle, jewelry, furniture, electronic devices, house equipment, house repairs or improvements, etc.) that you would not have initially bought or would have bought after 4 months have passed? [0, 1000]

D. Will you purchase non-durable goods and services within the next 4 months (e.g. food, beverages, eat at restaurants, tobacco, clothes, shoes, traveling, vacation, etc.)? [0, 1000]

▸ Survey

Telephone Questions - Q2

2. Suppose that the government unexpectedly imposes an additional tax of 1,000 on your income today. We want you to tell us how you would react to this unexpected reduction in your net income. Think in the depth of 4 months. What actions would you take? Distribute the 1,000 into the following 4 possible uses referring to the next 4 months:

A. Will you save less? [0, 1000]

B. Will you borrow more or repay less of your debt? [0, 1000]

C. Will you postpone or cancel purchases of durable goods and services that you had planned within the next 4 months (e.g. car, motorcycle, jewelry, furniture, electronic devices, house equipment, house repairs or improvements, etc.)? [0, 1000]

D. Will you reduce your expenses for non-durable goods and services within the next 4 months (e.g. food, beverages, eat at restaurants, tobacco, clothes, shoes, traveling, vacation, etc.)? [0, 1000]

▸ Survey