Understanding Society
Working Paper Series
No. 2022 – 02
March 2022

Stimulus Payments and Private Transfers

Thomas F. Crossley[1], Paul Fisher[2,#], Peter Levell[3], Hamish Low[4]

[1]European University Institute

[2]Institute for Social and Economic Research, University of Essex

[3]Institute for Fiscal Studies

[4]University of Oxford

[#]Corresponding author.

Understanding Society

UKRI Economic and Social Research Council

Non-technical summary

In severe economic downturns, one tool governments may use to stimulate the economy is direct, one-time income payments to individuals. The efficacy of such payments depends on the marginal propensity to consume or "MPC" of recipients; this measures the fraction of such payments that would be spent in the short run.

Studies of how households' respond to income windfalls typically focus on the extent to which households use funds to increase spending, increasing savings, or pay down debt. However, private transfers between households can be significant in times of economic distress and our previous research shows a non-trivial proportion of households report that they would use income windfalls to either increase the funds they give others or reduce the amount of financial assistance they receive from elsewhere.

We report new results from a survey experiment where individuals were asked how they would respond to a £ 500 payment, with a randomly selected subset of individuals explicitly told that all households would receive the same payments (a `public windfall' scenario). This additional information increased the Marginal propensity to consume by 11%. Reported transfer intentions in response to windfalls suggest that public payments crowd out private transfers, partly accounting for the higher MPCs in the public windfall case

The presence of an interaction between private transfers and individual responses to income windfalls has an important policy implication. That is that stimulus payments targeted at particular groups - such as low-income households - can potentially crowd out private transfer income from other households. This can affect aggregate spending responses to stimulus measures in so far as they lead to resources being transferred between households with different MPCs

Acknowledgements: The *Understanding Society* COVID-19 Study was funded by the Economic and Social Research Council (ES/K005146/1) and the Health Foundation (2076161). Fieldwork for the survey was carried out by Ipsos MORI and Kantar. *Understanding Society* is an initiative funded by the Economic and Social Research Council and various Government Departments, with scientific leadership by the Institute for Social and Economic Research at the University of Essex. The research data are distributed by the UK Data Service.

Stimulus Payments and Private Transfers

Thomas F. Crossley* Paul Fisher† Peter Levell‡ Hamish Low§

February 18, 2022

Abstract

Private transfers can affect the spending response to stimulus payments, as those receiving income windfalls may transfer resources to other households in greater financial need. We report a survey experiment where individuals were asked how they would respond to a £500 payment, with a randomly selected subset of individuals explicitly told that all households would receive the same payments (a 'public windfall' scenario). This additional information increased MPCs by 11%. Reported transfer intentions in response to windfalls suggest that public payments crowd out private transfers, partly accounting for the higher MPCs in the public windfall case.

Keywords: spending, transfers, MPCs, survey experiment

JEL codes: D12, D14, E21

*European University Institute and *Understanding Society* (email: thomas.crossley@EUI.eu).
†ISER, University of Essex and *Understanding Society* (email: pfishe@essex.ac.uk).
‡Institute for Fiscal Studies (email: peter_l@ifs.org.uk).
§University of Oxford, IFS and *Understanding Society* (email: hamish.low@economics.ox.ac.uk).

1 Introduction

Knowing the propensity for individuals to spend out of extra resources is crucial in determining when stimulus measures should be deployed and how they should be targeted to achieve maximum impact.

Studies of how households' respond to income windfalls typically focus on the extent to which households use funds to increase spending, increasing savings, or pay down debt (see for example the responses allowed in questions of how individuals responded or would respond to income windfalls in Shapiro and Slemrod (1995, 2003, 2009); Jappelli and Pistaferri (2020); Fuster, Kaplan, and Zafar (2021); Broda and Parker (2014) and others). However, private transfers between households can be significant in times of economic distress (McGarry, 2016; Crossley, Fisher, and Low, 2021), and a non-trivial proportion of households report that they would use income windfalls to either increase the funds they give others or reduce the amount of financial assistance they receive from elsewhere (Crossley et al. (2021)). This implies that the aggregate marginal propensity to consume (MPC) out of a stimulus payment need not equal the population-average MPC, even if all individuals receive the same payment. Further, the extent of transfers may depend on whether income windfalls are common or individual specific.

We provide two new results. First, the extent that households would alter the transfers they make or receive in response to receiving a hypothetical income windfall varies across the COVID-19 pandemic (2020-21). Second, we report on a survey experiment in which a random subset of respondents was additionally provided explicit information on who else would receive the windfall: we show how transfer behaviour and MPCs are affected by this information.

2 Data

We draw on a large-scale, high-quality panel survey of individuals conducted during the COVID pandemic in the United Kingdom, specifically the *Understanding Society* COVID-19 Study (Institute for Social and Economic Research (2020); henceforth COVID-19 Study). This survey was fielded monthly from April 2020 until July 2020; thereafter waves of data were collected in September and November 2020, and then in January, March and September 2021.

The survey included questions about transfers given and received by respondents' households. The first, second, fourth, sixth, eighth and ninth waves included questions on whether individuals were making financial transfers to other households, receiving transfers from other households, or both. The sixth survey wave (fielded in September 2020) also asked individuals how much they

had given or received in transfers since the start of the pandemic (March 1st 2020).

The waves of this study fielded in July and November 2020 and March and September 2021 also included questions that directly elicited individuals' marginal propensities to consume: individuals were asked how they would respond to a hypothetical unanticipated and one-time payment of £500 ($640). There is a strong tradition of direct elicitation of the MPC using hypothetical scenarios (see Drescher, Fessler, and Lindner (2020); Bunn et al. (2018); Sahm, Shapiro, and Slemrod (2012); Jappelli and Pistaferri (2014); Fuster, Kaplan, and Zafar (2021); Christelis et al. (2019); Jappelli and Pistaferri (2020)). In the COVID-19 Study, respondents were first asked if they would spend more, spend the same, or spend less than they would have had they not received the transfer. Those who reported they would spend more were then asked how much. Those who reported they would not spend the entire windfall were then asked if they would use the funds to increase savings, pay down debts, give more financial help to friends or family, or receive less in help from friends or family. This option to report giving or receiving fewer private transfers in response to a windfall is novel and unique to the COVID study. In other respects, the wording and structure of the question is most similar to that posed in (Fuster, Kaplan, and Zafar (2021)).

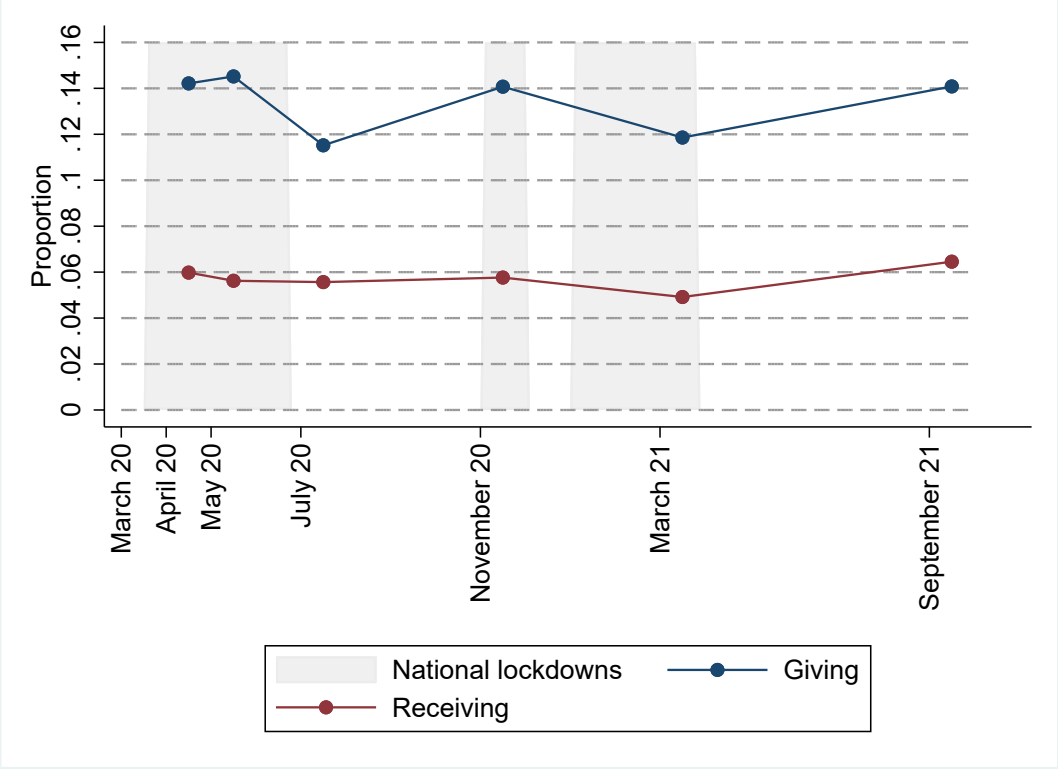
For this paper, we designed a survey experiment that ran from November 2020 onwards within the COVID-19 Study. We randomly assigned households two alternative questions. The first group were allocated the original question from July 2020: *"Now consider a hypothetical situation where you unexpectedly receive a one-time payment of £500 today. We would like to know whether this extra income would cause you to change your spending, borrowing and saving behaviour in any way over the next 3 months."* This provided continuity both with the earlier wave of the COVID-19 survey, and with the prior literature. The second group were given additional information, making the windfall explicitly public. In particular, the first sentence of the question was changed to *"Now consider a hypothetical situation where the government unexpectedly gives everyone a one-time payment of £500 today."* Once assigned one particular question wording, individuals were asked the same question in subsequent survey waves.

The COVID-19 Study is a component of *Understanding Society*: the UK Household Longitudinal Study (UKHLS). *Understanding Society* (University of Essex Institute for Social and Economic Research, NatCen Social Research, and Kantar Public, 2019) is the UK's main longitudinal Household Survey. Data collected in the COVID-19 Study can be linked to data on the same participants, and their households, collected in past waves of the UKHLS. We use this link to obtain individuals' pre-pandemic income levels (taken from the 2017-18 wave of the UKHLS).

2.1 Background: transfer behaviour during the COVID-19 pandemic

Private transfers were common over 2020-21, when the COVID survey was fielded. Figure 1 shows the proportion of individuals reporting giving and receiving financial transfers at different points over the period 2020-21. During 2020, the proportion of individuals making transfers rose and fell with national restrictions on household mixing. The proportion of individuals recorded giving transfers was highest in May, during the first national lockdown (which in England lasted from 16th March to 23rd June 2020). In this month, 14.5% of individuals reported making transfers. This proportion then fell following a loosening of restrictions in the summer of 2020, before rising during the second national lockdown starting in November. In 2021, the proportion fell in March relative to the previous November, before rising in the September 2021 wave of the survey when social distancing restrictions had been lifted. Reported transfer receipt varied much less: fluctuating between 4.9 and 6.5% of individuals over the period.

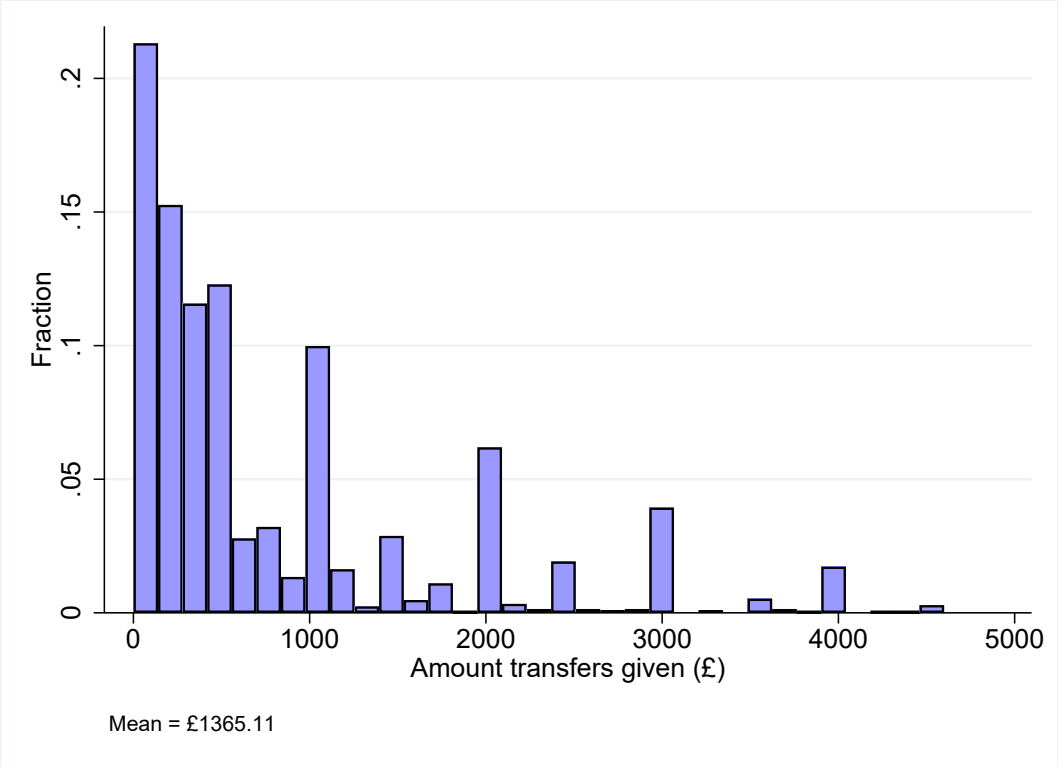
Figure 1: Proportion of individuals giving or receiving transfers



Notes: Statistics are weighted for survey design and nonresponse. Lockdowns are periods when strict restrictions were in place in England (first lockdown 16th March to 23rd June 2020, second lockdown 5th November 2020 to 2nd December 2020, and third lockdown 6th January 2021 to 29th March 2021). Rules differed slightly in other nations of the UK.

Figure 2 shows the distribution of inter-household financial transfers individuals report making between 1st March 2020 and the date they were surveyed in the sixth wave of the survey, which was fielded in September 2020 (conditional on giving a positive amount). The value of transfers was substantial. The mean amount given over this period was £277 (£1365 conditional on giving a positive amount). This is greater than the mean amount individuals reported receiving (£110) suggesting possible underreporting of transfer receipt.

Figure 2: Value of financial transfers given since March 1st 2020, as recorded in September 2020, conditional on transfers being made



Notes: N=2,280. Mean value is weighted for survey design and non-response.

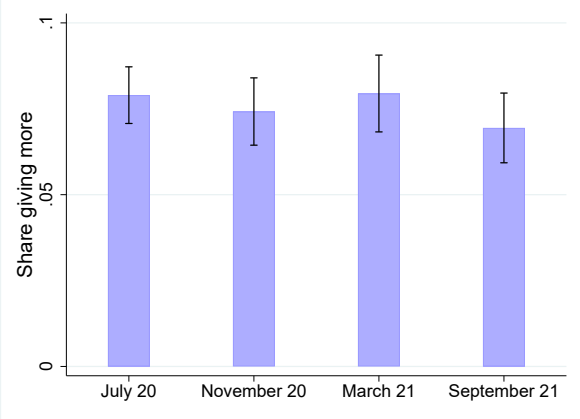
3 Responses to hypothetical payments

A significant share of responders reported they would change their transfer behaviour if they received an income windfall. Figure 3 shows the proportion of individuals who reported they would give more or receive less in response to receipt of a £500 windfall by wave and pre-pandemic income group (taken from the 2017-18 wave of UKHLS). For comparability across survey waves, we report responses by those asked the original July 2020 question wording only, and

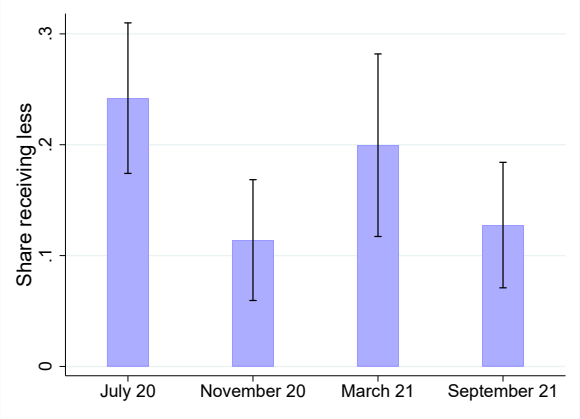
exclude responses from those asked about a public windfall. The proportion giving more in response to the windfall remained stable across waves, at roughly 7-8%. Among those receiving transfers, the proportion who reported they would receive less was highest in July 2020, when it reached a value of 24%. Those in the poorest pre-pandemic income quintile were much more likely than other groups to report they would receive less. The proportion of individuals that would give more, however, does not vary much across income groups.

Figure 3: Proportion reporting giving more or receiving less in response to a hypothetical windfall of £500 by long-run income group

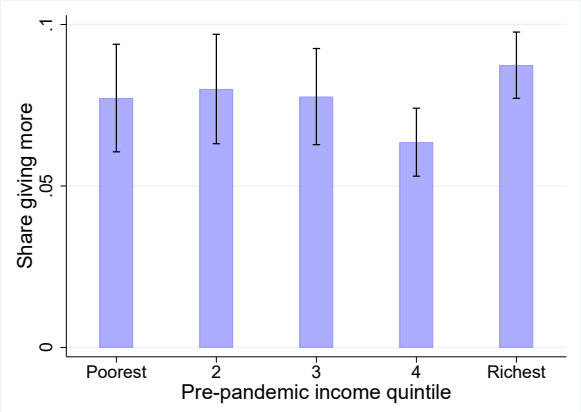
(a) Proportion giving more by wave



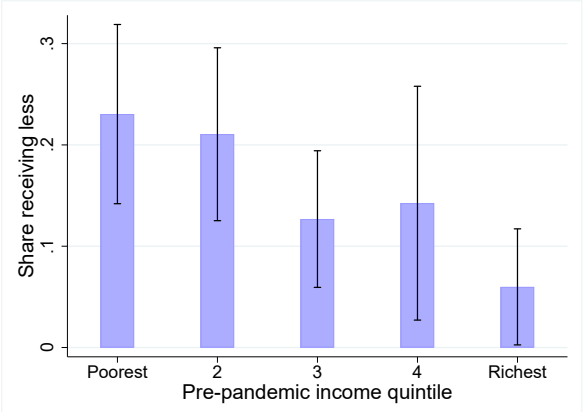
(b) Proportion receiving less by wave (if receiving)



(c) Proportion giving more by income group



(d) Proportion receiving less by income group (if receiving)



Note: Figures only include response for the private windfall treatment. Averages are weighted for survey non-response. Income quintiles are of household incomes that were collected in 2017-18 (wave 9) and are equivalised using the OECD modified scale. Error bars denote 95% confidence intervals.

Table 1 reports the average implied MPCs out of the £500 for those who were told all households would receive a windfall, those who were given the original question wording (which is ambiguous about which households receive the windfall) and the difference across the two treatments. We pool responses across waves when calculating averages. Given the randomized treatment, we report permutation-based (Fisher) p-values for the null of no treatment effect, clustering at the individual level (Heß, 2017; Imbens and Rubin, 2015).

Those who were told explicitly that the windfall would be public reported 1.3 percentage points higher MPCs on average, implying that MPCs were around 11% higher in the public windfall case. They were also 3.1 percentage points more likely to report spending more (that is, a positive MPC). The difference in MPCs across the two treatments was greater for those already making transfers, whose MPCs were 2.7 percentage points (22%) higher in the public windfall case. This points to lower transfers to other households in the public windfall case as a potential explanation for the higher MPCs. There was no significant difference in average reported MPCs amongst households receiving transfers in the two treatments.

Table 1: Marginal Propensities to Consume

MPC	Explicitly public windfall (treatment)	Standard scenario (control)	Difference	p-value
All	12.39	11.12	1.27	0.01
If giving	14.53	11.85	2.68	0.02
If receiving	16.20	16.07	0.13	0.94
MPC>0				
All	20.46	17.35	3.11	<0.001
If giving	22.77	17.89	4.88	<0.001
If receiving	26.50	24.90	1.60	0.53

Note: Implied marginal propensities to consume in response to a hypothetical windfall of £500 in a scenario where it is explicit that all individuals receive the windfall ('public') and a scenario where this is not specified ('standard'). MPCs are trimmed to be at least zero and at most one. P-values are calculated using randomisation inference, with 1,000 replications and clustering at the level of individuals. Number of clusters (MPC) = 13,721 (All), 3,216 (if giving) and 1,086 (if receiving). Number of clusters (MPC>0) = 13,996 (All), 3,341 (if giving) and 1,147 (if receiving).

Table 2 shows how the proportion of households who reported giving more or receiving less out in response to the windfall varies across the treatments.

Consistent with the hypothesis that individuals would make fewer transfers knowing that other households had received the same windfall, the proportion of those giving more is lower in the public windfall scenario than in the case where it was not specified which households would receive the windfall. The proportion who reported giving more fell by 0.8 percentage points (9%) when it was made explicit that other households would also receive payments. Among those already giving, the proportion making transfers fell by 2.6 percentage points (11%) in the public windfall treatment.

The proportion of those receiving less increased by 2.5 percentage points in the public windfall case, although this effect is not statistically significant.

Table 2: Giving more or receiving less in response to windfall

% giving more	Explicitly public windfall (treatment)	Standard scenario (control)	Difference	p-value
All	8.11	8.96	-0.85	0.02
If giving	22.24	24.88	-2.64	0.07
If receiving	6.88	9.34	-2.46	0.09
% receiving less				
All	1.68	1.52	0.15	0.29
If giving	1.82	1.38	0.44	0.21
If receiving	17.63	15.18	2.45	0.23

Note: Shares of respondents giving more or receiving less in response to a hypothetical windfall of £500 in a scenario where it is explicit that all individuals receive the windfall ('public') and a scenario where this is not specified ('standard'). P-values are calculated using randomisation inference, with 1,000 replications and clustering at the level of individuals. Number of clusters = 13,996 (All), 3,341 (if giving) and 1,147 (if receiving).

4 Conclusions

Our findings have two key implications for policy and future research.

First, private transfers interact with the response of individuals to income windfalls, such as stimulus payments. This can affect aggregate spending responses to stimulus measures in so far as they lead to resources being transferred between households with different MPCs. In particular, stimulus payments targetted at particular groups - such as low-income households - can potentially crowd out private transfer income from other households. The questions asked in the COVID-19 study only reveal whether individuals would 'give more' or 'receive less' without specifying amounts. Quantifying the extent of this crowd-out is an important question for future work.

Second, our survey experiment shows individuals respond differently to a public windfall compared to a private windfall. The literature has considered MPCs from hypothetical and actual

private windfalls such as lottery winnings (for example, Drescher, Fessler, and Lindner (2020), Fagereng, Holm, and Natvik (2021)), and MPCs from public transfers such as widespread stimulus payments (for example, Sahm, Shapiro, and Slemrod (2012), Johnson, Parker, and Souleles (2006)) without addressing whether those MPCs may differ. Our finding implies that one should be cautious in extrapolating MPCs in response to private windfalls (such as lottery winnings) to situations where transfers are more general (such as stimulus payments).

Acknowledgements

This research was funded by the Nuffield Foundation under the grant "Saving, Spending and financial resilience in the wake of the pandemic" (WEL/FR-000023226). The Nuffield Foundation is an independent charitable trust with a mission to advance social wellbeing. The Foundation has funded this project, but the views expressed are those of the authors and not necessarily the Foundation. Visit www.nuffieldfoundation.org. Levell also acknowledges Co-funding from the ESRC-funded Centre for the Microeconomic Analysis of Public Policy at IFS (grant number ES/T014334/1). The *Understanding Society* COVID-19 Study is funded by the Economic and Social Research Council (ES/K005146/1) and the Health Foundation (2076161). Fieldwork for the survey is carried out by Ipsos MORI and Kantar. *Understanding Society* is an initiative funded by the Economic and Social Research Council and various Government Departments, with scientific leadership by the Institute for Social and Economic Research, University of Essex. The data are distributed by the UK Data Service.

References

Broda, Christian and Jonathan A. Parker. 2014. "The Economic Stimulus Payments of 2008 and the aggregate demand for consumption." *Journal of Monetary Economics* 68:S20–S36. URL `https://www.sciencedirect.com/science/article/pii/S0304393214001366`. Supplement issue: October 19-20, 2012 Research Conference on "Financial Markets, Financial Policy, and Macroeconomic Activity" Sponsored by the Study Center Gerzensee and the Swiss National Bank.

Bunn, Philip, Jeanne Le Roux, Kate Reinold, and Paolo Surico. 2018. "The consumption response to positive and negative income shocks." *Journal of Monetary Economics* 96 (C):1–15. URL `https://ideas.repec.org/a/eee/moneco/v96y2018icp1-15.html`.

Christelis, Dimitris, Dimitris Georgarakos, Tullio Jappelli, Luigi Pistaferri, and Maarten van Rooij. 2019. "Asymmetric Consumption Effects of Transitory Income Shocks." *Economic Journal* 129 (622):2322–2341. URL https://ideas.repec.org/a/oup/econjl/v129y2019i622p2322-2341..html.

Crossley, Thomas F., Paul Fisher, Peter Levell, and Hamish Low. 2021. "MPCs in an economic crisis: Spending, saving and private transfers." *Journal of Public Economics Plus* 2:100005. URL https://www.sciencedirect.com/science/article/pii/S2666551421000024.

Crossley, Thomas F., Paul Fisher, and Hamish Low. 2021. "The heterogeneous and regressive consequences of COVID-19: Evidence from high quality panel data." *Journal of Public Economics* 193:104334. URL https://www.sciencedirect.com/science/article/pii/S0047272720301985.

Drescher, Katharina, Pirmin Fessler, and Peter Lindner. 2020. "Helicopter money in Europe: New evidence on the marginal propensity to consume across European households." *Economics Letters* 195:109416. URL https://www.sciencedirect.com/science/article/pii/S0165176520302603.

Fagereng, Andreas, Martin B. Holm, and Gisle J. Natvik. 2021. "MPC Heterogeneity and Household Balance Sheets." *American Economic Journal: Macroeconomics* 13 (4):1–54. URL https://www.aeaweb.org/articles?id=10.1257/mac.20190211.

Fuster, Andreas, Greg Kaplan, and Basit Zafar. 2021. "What Would You Do with $500? Spending Responses to Gains, Losses, News, and Loans." *The Review of Economic Studies* URL https://doi.org/10.1093/restud/rdaa076. Rdaa076.

Heß, Simon. 2017. "Randomization inference with Stata: A guide and software." *The Stata Journal* 17 (3):630–651.

Imbens, Guido W and Donald B Rubin. 2015. *Causal inference in statistics, social, and biomedical sciences*. Cambridge University Press.

Institute for Social and Economic Research. 2020. *Understanding Society COVID-19 Study, 2020. [data collection]. 1st Edition*. UK Data Service. SN: 8644, 10.5255/UKDA-SN-8644-1.

Jappelli, Tullio and Luigi Pistaferri. 2014. "Fiscal Policy and MPC Heterogeneity." *American Economic Journal: Macroeconomics* 6 (4):107–36. URL https://www.aeaweb.org/articles?id=10.1257/mac.6.4.107.

———. 2020. "Reported MPC and Unobserved Heterogeneity." *American Economic Journal: Economic Policy* 12 (4):275–97. URL https://www.aeaweb.org/articles?id=10.1257/pol.20180420.

Johnson, David S., Jonathan A. Parker, and Nicholas S. Souleles. 2006. "Household Expenditure and the Income Tax Rebates of 2001." *American Economic Review* 96 (5):1589–1610. URL http://www.aeaweb.org/articles?id=10.1257/aer.96.5.1589.

McGarry, Kathleen. 2016. "Dynamic aspects of family transfers." *Journal of Public Economics* 137:1–13. URL https://www.sciencedirect.com/science/article/pii/S0047272716300147.

Sahm, Claudia R., Matthew D. Shapiro, and Joel Slemrod. 2012. "Check in the Mail or More in the Paycheck: Does the Effectiveness of Fiscal Stimulus Depend on How It Is Delivered?" *American Economic Journal: Economic Policy* 4 (3):216–50. URL https://www.aeaweb.org/articles?id=10.1257/pol.4.3.216.

Shapiro, Matthew D. and Joel Slemrod. 1995. "Consumer Response to the Timing of Income: Evidence from a Change in Tax Withholding." *American Economic Review* (1):274–83. URL https://EconPapers.repec.org/RePEc:aea:aecrev:v:85:y:1995:i:1:p:274-83.

———. 2003. "Consumer Response to Tax Rebates." *American Economic Review* 93 (1):381–396. URL https://www.aeaweb.org/articles?id=10.1257/000282803321455368.

———. 2009. "Did the 2008 Tax Rebates Stimulate Spending?" *American Economic Review* 99 (2):374–379. URL https://ideas.repec.org/a/aea/aecrev/v99y2009i2p374-79.html.

University of Essex Institute for Social and Economic Research, NatCen Social Research, and Kantar Public. 2019. "Understanding Society: Waves 1-9, 2009-2018 and Harmonised BHPS: Waves 1-18, 1991-2009. [data collection]. 12th Edition." URL http://doi.org/10.5255/UKDA-SN-6614-13.