

Housing, financial conditions and mental health during a pandemic

Health Studies User Conference - July 12th, 2022

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Context

COVID-19 pandemic had major impacts on mental health across the world (Le and Nguyen (2021); O'Connor et al. (2021); Kola et al. (2021); Farkhad and Albarracín (2021))

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Lockdowns and social-distancing imply much more time than before at home

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Lockdowns and social-distancing imply much more time than before at home

The importance for mental health of one's living space was significant in pre-pandemic times (Krieger and Higgins (2002), Schulz and Northridge (2004), Bambra et al. (2010), Marmot et al. (2010), Braubach (2011))

Context

COVID-19 pandemic had major impacts on mental health across the world

Lockdowns and social-distancing imply much more time than before at home

The importance for mental health of one's living space was significant in pre-pandemic times

Likely to have grown during the pandemic

Context

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Housing is prominent in this respect too, since rent or mortgage loan payments represent a sizeable part of household expenses and cannot easily be adjusted

Contribution

Test whether the pre-pandemic gradient in mental health across tenures stays the same during the pandemic

Contribution

▶ To theory

Test whether the pre-pandemic gradient in mental health across tenures stays the same during the pandemic

Test also two possible channels: ability to keep up with housing payments and access to outdoor space

Data

8 waves of Understanding Society's COVID-19 Study
(April 2020 - March 2021), and 10 waves of
Understanding Society's main survey (2009-2020)
(University of Essex, Institute for Social and
Economic Research, 2021)

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Panel data: between about 128,000 and 338,000 observations, and about 32,500 unique individuals

Data

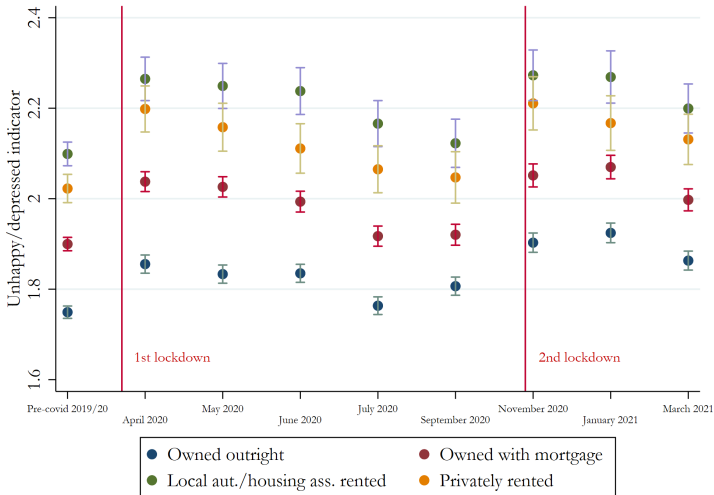
[▶ To descriptives](#)

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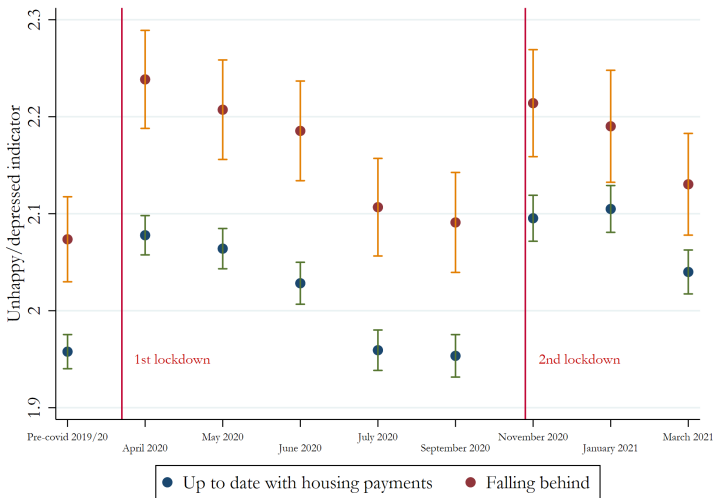
Panel data: between about 128,000 and 338,000 observations, and about 32,500 unique individuals

Insight on reported mental health, housing tenure, ability to keep up with housing payments and access to outdoor space

Data

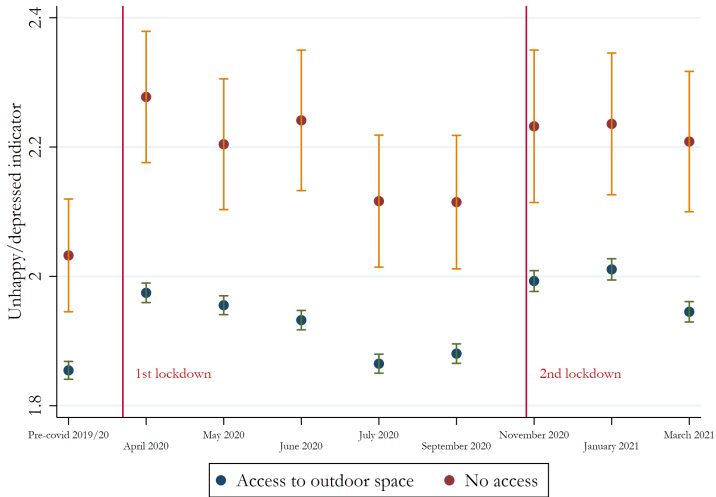
[▶ To the question](#)

Data

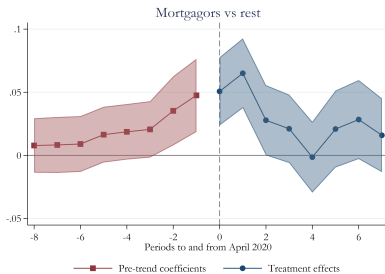
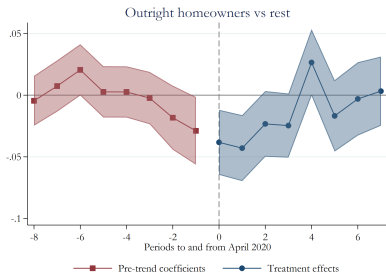


Data

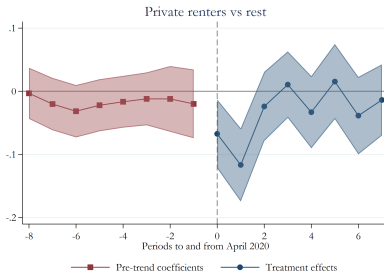
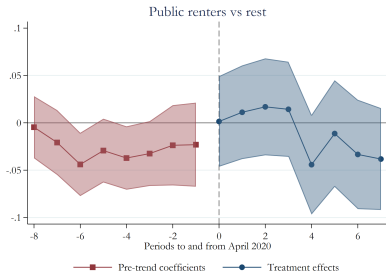
▶ To GHQ charts



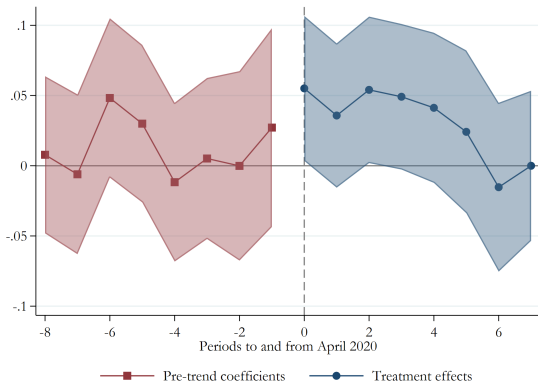
Results

[▶ To GHQ results](#)[▶ To estimation](#)

Results

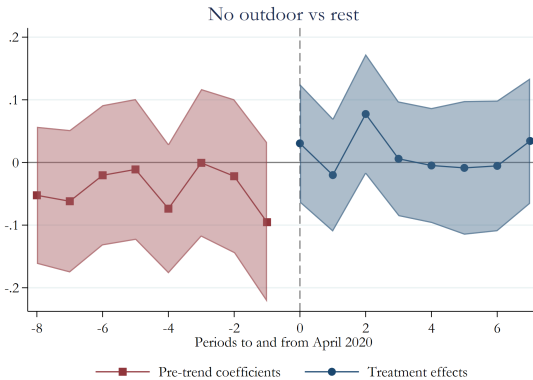


Results



Results

▶ More outdoor



Results

Some sizeable short-term variations: e.g. gap between private renters and the rest decreases in the first two months of pandemic

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Changes as compared to pre-pandemic times
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Some sizeable short-term variations: e.g. gap between private renters and the rest decreases in the first two months of pandemic

Changes as compared to pre-pandemic times quickly reabsorb

Trend largely synchronised across tenures: reported mental health worsens and improves with the infections waves and lockdowns in a same manner across tenures (similar overall trends in [Foa et al. \(2020\)](#); [Daly and Robinson \(2021\)](#))

Conclusions

Pre-pandemic gradient in mental health across tenures stays largely the same during the pandemic

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Channels of financial distress and access to outdoor space not affected much

Conclusions

Pre-existing gradients are persistent and resistant to multi-faceted shocks such as that represented by the COVID-19 pandemic

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Mental health inequality is entrenched and structural

Thank you!

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Theoretical framework

▶ [To definition](#)

Two channels from housing tenure to mental health:
material and intangible

Theoretical framework

Two channels from housing tenure to mental health:
material and intangible

Material: security of tenure and, at the extremes, fear of eviction or foreclosure, as well as dwelling characteristics (Currie and Tekin (2015), McLaughlin et al. (2012), Park and Seo (2020), Curl et al. (2015), Pevalin et al. (2017))

Theoretical framework

Two channels from housing tenure to mental health:
material and intangible

Material: security of tenure and, at the extremes, fear of eviction or foreclosure, as well as dwelling characteristics

Intangible: ontological security and social status
(Shaw (2004), Saunders (1986), Dupuis and Thorns (1998), de Botton (2004), Marshall and Smith (2016))

Hypotheses

Hypothesis 1

The gap in reported mental health between outright homeowners and the remaining tenure categories has increased as a result of the pandemic through increased financial pressure on mortgagors and renters.

Hypothesis 2

The gap in reported mental health between those with and without access to outdoor spaces has increased as a result of the pandemic.

▶ [Back to contribution](#)

Empirical strategy

Difference-in-differences

Empirical strategy

▶ To equations

Difference-in-differences

Imputation estimator coming from recent advances
with staggered adoption ([Borusyak et al., 2021](#))

Empirical strategy

▶ To equations

Difference-in-differences

Imputation estimator coming from recent advances
with staggered adoption

Useful also when units are treated together:
intuitive estimation, testing of assumptions
separate from estimation

▶ Back to results

Definition of mental health and depression

[...] a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community (WHO, 2005).

[...] a common mental disorder, involving persistent sadness or loss of interest or pleasure accompanied by several of the following symptoms: disturbed sleep or appetite, feelings of guilt or low self-worth, feelings of tiredness, poor concentration, difficulties making decisions, agitation or physical restlessness, talking or moving more slowly than normal, hopelessness, and suicidal thoughts or acts (WHO, 2016).

Survey question for mental health

Have you recently been feeling unhappy or depressed?

- Much more than usual
- Rather more than usual
- No more than usual
- Not at all

▶ [Back to the graph](#)

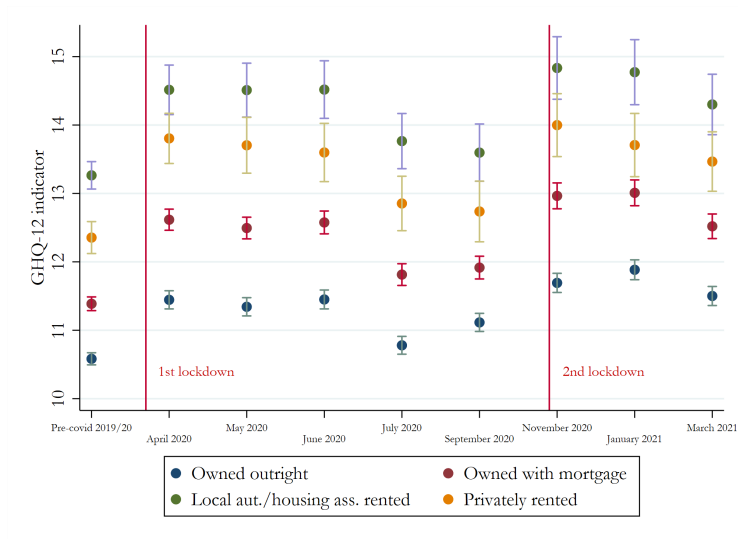
Descriptive statistics

	Outright homeowners		Mortgagors		Public renters		Private renters	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Pre-pandemic unhappy/depressed score	1.71	0.76	1.83	0.79	2.06	0.91	1.97	0.85
Pandemic unhappy/depressed score	1.85	0.80	2.00	0.82	2.23	0.90	2.14	0.86
Age	60.50	14.67	41.98	12.71	47.41	17.33	40.55	16.17
Share female (%)	55.51	49.70	56.45	49.58	63.06	48.26	59.64	49.06
Share with a degree (%)	42.19	49.39	53.79	49.86	20.44	40.33	40.81	49.15
Observations	149110		120707		41485		26369	

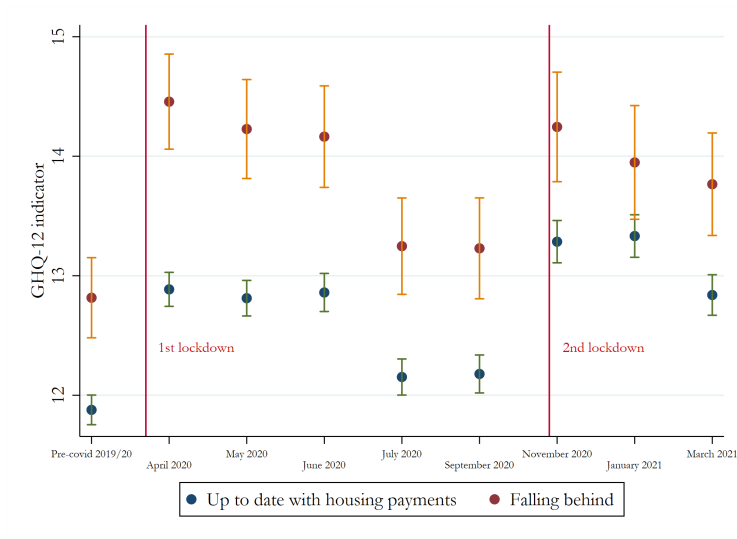
	Up to date with housing payments		Not up to date	
	Mean	S.D.	Mean	S.D.
Pre-pandemic unhappy/depressed score	1.89	0.82	1.99	0.86
Pandemic unhappy/depressed score	2.04	0.84	2.17	0.87
Age	43.17	13.54	41.86	12.79
Share female (%)	60.60	48.86	59.50	49.09
Share with a degree (%)	52.73	49.93	45.32	49.78
Observations	109326		19069	

	Access to outdoor space		No access	
	Mean	S.D.	Mean	S.D.
Pre-pandemic unhappy/depressed score	1.80	0.79	2.01	0.87
Pandemic unhappy/depressed score	1.94	0.82	2.21	0.91
Age	52.08	15.58	41.73	15.89
Share female (%)	58.88	49.21	53.60	49.88
Share with a degree (%)	50.55	50.00	50.44	50.00
Observations	195157		4754	

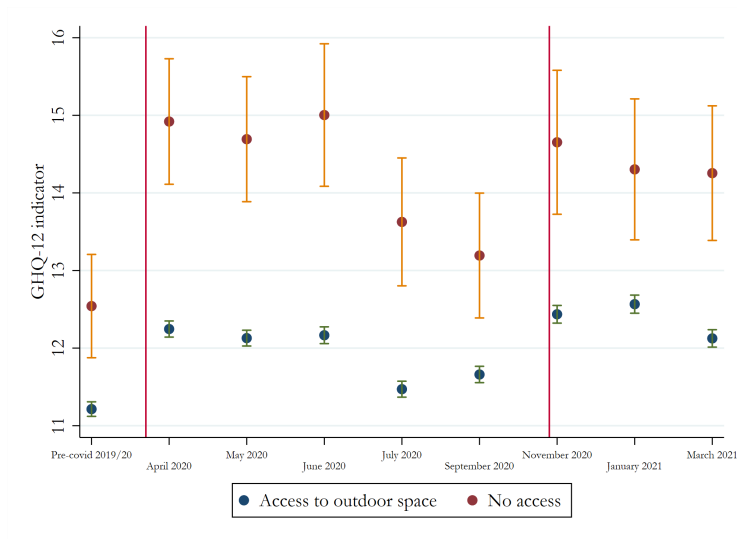
12-items General Health Questionnaire



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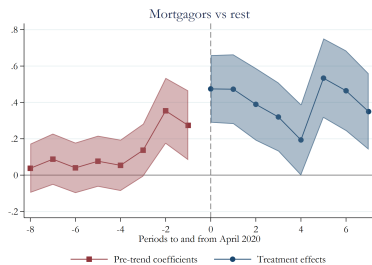
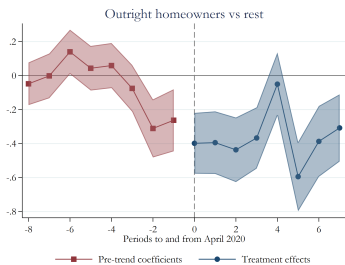
The imputation estimator

$$UD_{it}(0) = \gamma_g + \lambda_t + \beta_a Age_{it} + \beta_g Gender_{it} + \beta_h HousingTenure_{it} + \beta_q Qualification_{it} + \epsilon_{it} \quad (1)$$

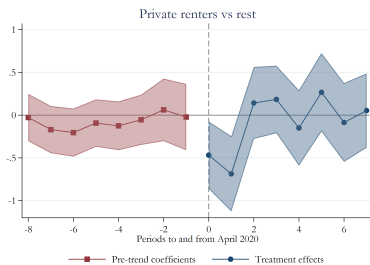
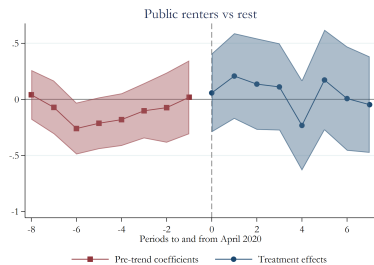
$$\hat{\tau}_{it} = UD_{it} - \widehat{UD}_{it}(0) \quad (2)$$

$$\widehat{ATT}_h = \sum_{i=1}^{N_h} \frac{1}{N_h} \hat{\tau}_{ih} \quad (3)$$

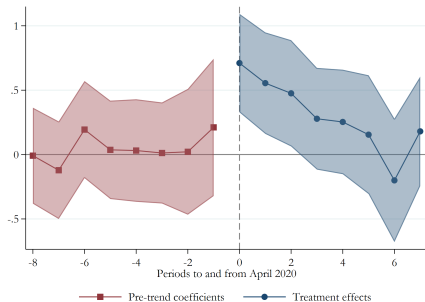
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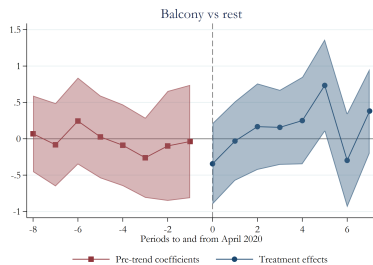
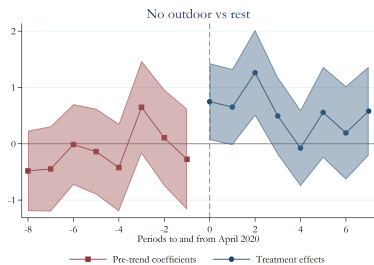
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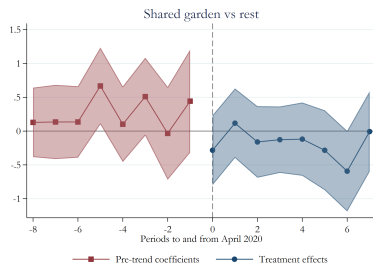
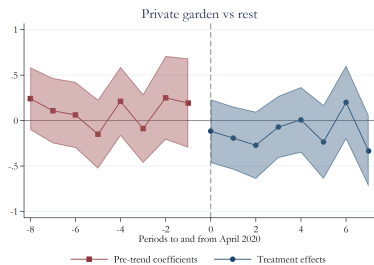
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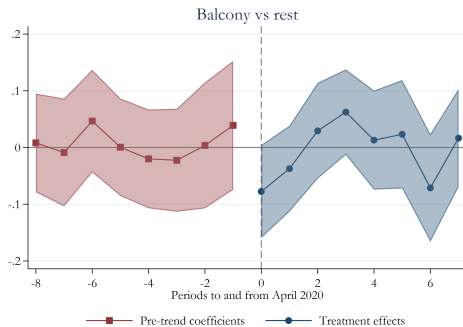
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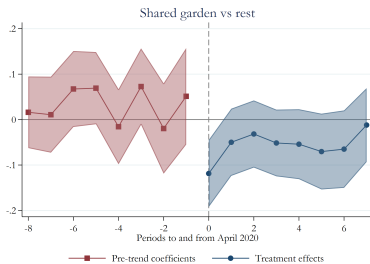
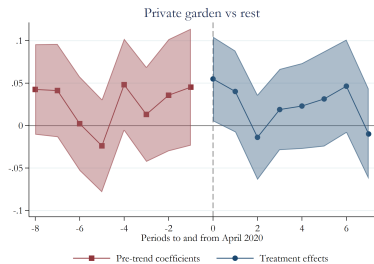
12-items General Health Questionnaire



More outdoor



More outdoor



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