

Employment inequalities of working at home

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Background

- Lasting large-scale shift of the geography of employees' workplaces (Özgüzel et al., 2023)
- Self-employed had high level of homeworking before the pandemic (Reuschke, 2019)
- Right to request flexible working in UK since 2003
- Only 3% of employees 'mainly' worked at home in 2019 (APS); sometimes working at home was more common ('telecommuting')
- Employer concerns about productivity
- Most 'trusted' employees allowed to work at home (Felstead & Reuschke, 2023)
 - High-skilled, higher educated, older workers



Inequalities of working at home

- Increase of mainly working at home of employees 3% (2019) to 22% (2023) (APS) or 5.6 million employees
- Focus on employees
- Change versus persistence?
- Where?
 - Large regional workforce imbalances in UK
 - High industrial and occupational concentration of jobs (North-South divide)
 - Equaliser or amplifier?
- Who?
 - Has working at home become less concentrated in high-skilled, high-educated, older (most trusted) employees?



Data

- APS Jan-Dec 2019 & 2023 (safeguarded)
- Robustness check with LSF (April-June) 2019 & 2023 (safeguarded)
- “(In your main job) do you work mainly ... *(This question should be asked in relation to the respondent’s usual working pattern.)*”
 - In your own home & in the same grounds or buildings as your home (combined)
- Employees 16-64 years
- Government Office Regions (9 in England, Wales, Scotland, Northern Ireland)



Measurement and interpretation

LFS/APS: 'Mainly' working at home

Employees, 16-64 years, weighted

- Own home & same grounds or building: 21.8%
- Different places with home as base: 8%
- Separate from home: 70.3%

Comparison: **Understanding Society** (wave 13: 2022-2023)

Employees 16-64 years, weighted

Main work location: 21.95% at home

If working at employer premises (64.6%):

- Always works at home: 0.5%
- Often works at home: 7.8%
- Sometimes works at home : 21%



Geography of working at home

Government Office Region	% of UK employee homeworkers, 2023	% of UK employee workforce, 2023	% point difference (column 1&2), 2023	% point difference, 2019
North East	3.0	3.9	-0.9	-1.4
North West	10.6	10.9	-0.3	-1.2
Yorkshire and Humbers	7.5	8.0	-0.5	-0.6
East Midlands	5.8	7.2	-1.4	-0.7
West Midlands	7.6	8.8	-1.2	-0.8
East of England	10.1	9.3	0.7	0.4
London	16.4	14.0	2.3	-0.3
South East	17.6	14.1	3.5	5.7
South West	7.4	8.2	-0.8	3.9
Northern Ireland	1.7	2.7	-1.1	-0.9
Wales	8.3	8.3	0.0	-3.0
Scotland	4.1	4.5	-0.4	-1.2
<i>Dissimilarity Index (D)</i>			<i>0.083</i>	<i>0.103</i>



Explaining regional disparities of working at home

- Uneven regional distribution of:
 - Industry sectors?
 - High-skilled employees?
 - High educated employees (degree)?
 - Demography of workforce?



Multivariate analysis of regional disparities of mainly working at home (or not)

Binary logistic regression, odds ratio, bold ORs=p-value <0.05

Co-variates	Model 1	Model 2	Model 3	Model 4	Model 5
	Individual only	Industry	Occup.	Degree	All
REGION (Ref. London)					
North East	0.56	0.84	0.74	0.69	1.05
North West	0.74	1.07	0.90	0.87	1.26
Yorkshire and Humbers	0.67	1.02	0.87	0.81	1.23
East Midlands	0.64	0.99	0.81	0.78	1.21
West Midlands	0.66	0.97	0.84	0.80	1.18
East of England	0.83	1.11	0.99	1.01	1.29
South East	1.05	1.33	1.21	1.19	1.45
South West	0.72	1.02	0.89	0.85	1.20
Northern Ireland	0.41	0.57	0.54	0.48	0.70
Scotland	0.73	1.05	0.92	0.85	1.24
Wales	0.66	1.01	0.89	0.79	1.28
Individual Characteristics (Sex, married, age, ethnicity, long-term health condition)	Yes	Yes	Yes	Yes	Yes
With industry sectors	No	Yes	No	No	Yes
With occupational groups	No	No	Yes	No	Yes
With degree	No	No	No	Yes	Yes
R2	0.012	0.143	0.137	0.046	0.221



Exploring change in working at home patterns post-pandemic

- Pooled APS (Jan-Dec) 2019 & 2023
- Binary logistic regression with mainly working at home as dependent variable (in odds ratios)
- Interaction terms between region, job and personal characteristics with Year dummy (2023)
- Employees, 16-64 year
- Number of observations: 151,328, $R^2=0.306$



Change of regional pattern (2023-2019)

	OR	SE	p-value
REGION (Ref. London)			
North East#2023	1.01	0.14	0.92
North West#2023	1.04	0.12	0.70
Yorkshire and Humbers#2023	0.92	0.11	0.48
East Midlands#2023	0.92	0.13	0.57
West Midlands#2023	0.92	0.11	0.47
East of England#2023	1.02	0.12	0.88
South East#2023	0.98	0.10	0.86
South West#2023	0.67	0.08	0.00
Northern Ireland#2023	0.75	0.12	0.07
Scotland#2023	1.27	0.15	0.04
Wales#2023	1.14	0.14	0.28

Source: APS 2023 & 2019 pooled. Full model includes: region, industry, occupation, degree, sex, age, ethnic group, long-term health condition, married, 2023 year dummy as main effects – and for all variables interaction terms with the 2023 year dummy.



Change of social pattern (2023-2019)

	OR	SE	p-value
Occupation (Ref. Managerial)			
Professional#2023	1.740	0.128	0.000
Associate Professional#2023	1.415	0.109	0.000
Admin & Secretarial#2023	1.508	0.126	0.000
Skilled trades#2023	0.685	0.110	0.018
Caring, Leisure, other services#2023	0.350	0.056	0.000
Sales & Customer services#2023	2.045	0.309	0.000
Process, plant, machine#2023	0.472	0.137	0.010
Elementary#2023	0.315	0.072	0.000
Degree#2023	1.288	0.058	0.000

Source: APS 2023 & 2019 pooled. Full model includes: region, industry, occupation, degree, sex, age, ethnic group, long-term health condition, married, 2023 year dummy as main effects – and for all variables interaction terms with the 2023 year dummy.



Change of demographic pattern (2023-2019)

	OR	SE	p-value
Women#2023	0.849	0.045	0.002
Age#2023	0.981	0.002	0.000
Married#2023	0.799	0.042	0.000
Ethnic group (Ref. White)#2023			
Asian#2023	0.902	0.093	0.321
Black#2023	2.120	0.509	0.002
Other#2023	0.826	0.133	0.236

Source: APS 2023 & 2019 pooled. Full model includes: region, industry, occupation, degree, sex, age, ethnic group, long-term health condition, married, 2023 year dummy as main effects – and for all variables interaction terms with the 2023 year dummy.



Conclusion

- Homeworking revolution has not turned around the UK spatial economy
 - Reduced regional disparities but due to shift within 'South' of England
 - Northern English regions have not benefitted
 - Large industry effects, especially Midlands – but Northern Ireland is different
- Increase of homeworking in sales & customer services and administrative and secretarial occupations
- Demographic profile has changed: younger, less associated with traditional lifestyle, less feminised, more ethnically diverse
- More representative – but of the highly educated workforce



THANK YOU !

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