# Zoomshock: The consequences for retail and hospitality

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### Contributors

This presentation is based on an ongoing collaboration between

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### Introduction

- The pandemic has hit low paid industries hardest.
- Businesses and workers in retail and hospitality have been particularly vulnerable.
  - Workers are disproportionately low-paid.
  - 2019 average £9.58 per hour (£10.29 in London).
  - 5.5 million workers in England and Wales, 20% of labour force.
- A persistent increase in working-from-home post-pandemic will have lasting consequences for these businesses.
  - By changing where work happens (at home versus the office), the *zoomshock* leads to local demand shocks for locally consumed services.
- In this research we quantify the impact that the post-pandemic zoomshock will have on hospitality and retail spending in neighbourhoods across England and Wales.

### Introduction

- *De Fraja, Matheson, and Rockey (2021)* quantify the **zoomshock**: the geographic shift in economic activity that has taken place due to working-from-home during the public health crisis.
- We extend this work to quantify the spill over to expenditure in the retail and hospitality (*RH*) sector.
- Using new survey evidence on commuters' future WFH expectation and RH spending, we quantify:
  - The post-pandemic zoomshock;
  - The resulting change in retail and hospitality spending across UK neighbourhoods.

## Key points for the LPC

- 1. This shift is large. Post-pandemic working-from-home will increase 22 percentage points over 2019 levels.
- 2. RH demand becomes more geographically dispersed. A geographic shift of £3.5 billion (2% of total) in annual desired RH spending.
- This will have a disproportionally negative affect on low-paid RH workers.
   90,000 jobs will either need to move or be lost.
- 4. Demand for low-paid RH workers falls in urban centres and increases in affluent suburbs.

Quantifying the effect of the post-pandemic zoomshock on neighbourhood RH spending.

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 $spending change_{z} = \sum_{o} \left[ \left( WFH_{o,z}^{2022} - WFH_{o,z}^{2019} \right) \times \left( Spending_{o,z}^{2019} \right) \times E_{o,z}^{R} - \left( WFH_{o,z}^{2022} - WFH_{o,z}^{2019} \right) \times \left( Spending_{o,z}^{2019} \right) \times E_{o,z}^{W} \right]$ 

*o* denotes occupation, *z* denotes zone (MSOA).

 $E_{o,z}^W$  is the number of occupation o workers who work in zone z.

 $E_{o,z}^R$  is the number of occupation o workers who live in zone z.

 $WFH_{o,z}^T$  is the % of work done from home in year T.

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Spending inflow

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• WFH indices and average spending, by occupation and location (London, large city, other), calculated using information from the *Work-from-Home Survey*.

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- Employment and residential counts by occupation for each *Middle Super Output Area* come from ONS *Nomis* data.

# Working-from-home survey

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	Standard		
	Mean	deviation	Observations
Female (%)	65.5	(47.5)	17,996
University degree (%)	69.9	(45.9)	17,996
No work in reference week (%)	14.6	(35.3)	17,996
Days worked in reference week	3.8	(0.4)	17,996
WFH in reference week (days)*	2.7	(2.1)	15,690
WFH in 2019 (days)	0.4	(1.1)	17,996

\*Conditional on working in reference week.

- Survey covers January 2021-July 2021
- Samples UK adults age 20-65 who earned more than £10,000 in 2019.
- >2,500 completed surveys each month.
- Questions cover working arrangements, commuting, spending, and expectations and experiences related to WFH.
- Re-weighted using the 2019 Quarterly Labour Force Survey.

## Working-from-home survey

### Working from home post-Covid:

*After COVID, in 2022 and later, how often is your employer planning for you to work full days at home?* (mean = 26.7%, sd = 38.6)

### RH spending:

**In 2019**, when you worked at your employer's business premises, roughly how much money (in pounds) did you spend **during a typical working week** on

- food and drinks (e.g. lunch, coffee, snacks, etc.)? (mean = £4.70, sd = 7.00)
- shopping near work (e.g. gifts or clothes shopping during your lunch break of after work.)? (mean = £12.37, sd = 22.05)
- bars, restaurants, and other entertainment venues that are near your workplace? (mean = £11.62, sd = 23.37)

### Occupations and working-from-home



Occupations with high post-Covid WFH have high pre-Covid WFH.

# WFH and spending by occupation

	$WFH_{o}^{2019}$	$WFH_{o}^{2022} - WFH_{o}^{2019}$	$Spending_o^{2019}$
Transportation and material moving	2.4%	11.6%	£23.12 /week
Construction and extraction	3.3	19.0	35.59
Protective service	3.7	7.2	34.83
Food preparation and serving	4.9	13.2	33.29
Cleaning and building maintenance	5.2	15.2	19.05
Education	6.8	10.6	24.93
Architecture and engineering	7.7	32.6	28.92
Office and administrative support	8.2	29.4	28.49
Personal care and service	9.4	23.0	21.61
Management, business and financial	9.8	37.4	38.52
Healthcare practitioner and technical	9.9	9.6	26.81
Sales and related	10.3	23.2	36.92
Legal	12.6	34.7	40.11
Computer and mathematical	16.6	40.0	33.59
Arts, design, sports, and media	21.3	29.7	33.25

Significant variation in the incremental share of work that will be done from home. Little variation in at-work RH spending by occupation.

# WFH and spending by location of work

	WFH <sup>2019</sup>	$WFH^{2022} - WFH^{2019}$	Spending <sup>2019</sup>
Location of work*			
Other towns and cities	8.1%	16.5%	£25.64/week
Large cities (top 15 by population)	7.3	18.7	32.05
Central London	8.7	25.0	51.18
Outer London	11.5	29.9	41.66

\*Based on postcode of current job's premises.

### Both WFH and spending significantly higher in London.

The post-pandemic zoomshock will result in local RH demand shocks

The importance of the spending change will depend on how large the spending change is relative to **total spending** in neighbourhood *z*.

spending shock<sub>z</sub> =  $\frac{\text{spending change}_z}{\text{total spending}_z}$ ,

*spending shock*<sub>z</sub> reflects the **percent change in RH spending for neighbourhood z** attributable to post-pandemic working-from-home.

\*total spending<sub>z</sub> =  $OPW_{retail} \times E_{retail,z} + OPW_{hospitality} \times E_{hospitality,z}$  $OPW_o$  is the average output per worker for retail and hospitality (by region).



#### **Greater London Authority**.

30,800 fewer RH jobs required in Central London

• 27% are moved to outside the GLA.

MSOA	Borough	Spending change (%)	RH Jobs required
City of London	City of London	-32.5%	-8,192
Strand/St James/Mayfair	Westminster	-10.8%	-3192
Canary Wharf	Tower Hamlets	-35.4%	-2,385
Tooting Bec Common	Wandsworth	58.3%	111
Clapham Common West	Wandsworth	41.3%	97
Millwall South	<b>Tower Hamlets</b>	57.1%	105



#### **Greater Manchester.**

2,300 fewer RH jobs required in Manchester.

MSOA	Authority	Spending change (%)	RH Jobs required
Piccadilly/Ancoats	Manchester	-7.5%	-400
Castlefield/Deansgate	Manchester	-12.7%	-319
Ardwick	Manchester	-8.0%	-182
Timperley North	Trafford	23.3%	32
Tyldesley South	Wigan	19.3%	30
Westhoughton Daisy Hill	Bolton	<b>16.7%</b>	28

City	Spending (%)	Spending (£s	Jobs
		per week)	
Birmingham	-3.8%	-1,582,362	-2,375
Manchester	-4.7%	-1,387,471	-2,308
Leeds	-4.0%	-1,397,494	-2,188
Sheffield	-3.4%	-817,956	-1,278
Liverpool	-3.5%	-760,945	-1,225
Cardiff	-3.6%	-678,853	-1,224
Bristol, City of UA	-3.2%	-621,337	-1,052
Newcastle upon Tyne	-4.1%	-508,861	-992
Nottingham UA	-2.8%	-526,129	-858
Bradford	-2.1%	-430,140	-646
	Greater London		
Westminster	-8.2%	-7,913,798	-9,355
City of London	-32.5%	-6,895,806	-8,192
Camden	-11.2%	-2,991,248	-3,558
Tower Hamlets	-20.9%	-2,754,479	-3,265
Southwark	-16.4%	-1,481,304	-1,837
Islington	-11.2%	-1,449,906	-1,689
Hillingdon	-4.2%	-801,101	-929
Hammersmith and Fulham	-5.2%	-686,413	-765
Lambeth	-8.7%	-571,448	-717
Hackney	-9.7%	-511,487	-603

The post-pandemic zoomshock will reallocate £67 million per week in spending and 90,000 workers.

44% of the spending reallocation and 38% of the worker reallocation is attributed to London.

Why is central London so high?

- Very high concentration of jobs relative to residence.
- Large proportion of jobs that can be done from home.
- High reliance of RH businesses on commuter spending.

### Zoomshock and neighbourhood deprivation

Demand for low pay RH workers in high income neighbourhoods increases.



Spending increase is greatest in affluent neighbourhoods

WFH is greatest in affluent neighbourhoods

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Thank you