



UNIVERSITY OF WARSAW  
Faculty of Economic Sciences

# Work from Home and Careers in the Post-Covid Context: Evidence from a Discrete Choice Experiment

Anna Matysiak - Agnieszka Kasperska - Ewa Cukrowska-Torzewska

Interdisciplinary Center for Labour Market and Family Dynamics (LabFam)

University of Warsaw



 LabFam

# THE AIM OF THE PAPER AND ITS CONTRIBUTIONS

We analyze **effects of WFH on workers' career opportunities** (promotion, salary increase, training) in the UK:

- Late-/Post-covid context (2nd half of 2022)
- Gender and parenthood perspective
- Mechanisms that drive different career opportunities of workers who WFH
- Experimental design: self-designed discrete choice experiment

# THEORETICAL FRAMEWORK: WHY WFH AFFECTS CAREER OPPORTUNITIES?

WORK PERFORMANCE

WORK COMMITMENT

# THEORETICAL FRAMEWORK: WHY WFH AFFECTS CAREER OPPORTUNITIES?

## WORK PERFORMANCE

### POSITIVE:

- fewer workplace distractions
- higher job satisfaction
- less commuting
- larger effort in exchange for flexibility

### NEGATIVE:

- lack of consistent communication with colleagues, knowledge exchange or interpersonal networking
- more workplace distractions, family-to-work spillover

## WORK COMMITMENT

# THEORETICAL FRAMEWORK: WHY WFH AFFECTS CAREER OPPORTUNITIES?

## WORK PERFORMANCE

### POSITIVE:

- fewer workplace distractions
- higher job satisfaction
- less commuting
- larger effort in exchange for flexibility

### NEGATIVE:

- lack of consistent communication with colleagues, knowledge exchange or interpersonal networking
- more workplace distractions, family-to-work spillover

## WORK COMMITMENT

### POSITIVE:

- high work commitment
- WFH for organisation-serving motives

### NEGATIVE:

- Low work commitment
- WFH for individual-serving motives

# THEORETICAL FRAMEWORK: GENDER & PARENTHOOD

## WORK PERFORMANCE

### POSITIVE:

- fewer workplace distractions
- higher job satisfaction
- less commuting
- larger effort in exchange for flexibility

### NEGATIVE:

- lack of consistent communication with colleagues, knowledge exchange or interpersonal networking
- **more workplace distractions, family-to-work spillover**

## WORK COMMITMENT

### POSITIVE:

- high work commitment
- WFH for organisation-serving motives

**FATHERS** (fatherhood premium)

### NEGATIVE:

- Low work commitment
- WFH for individual-serving motives

**MOTHERS**

**FATHERS** (ideal worker norms)

# PAST EVIDENCE (pre-Covid)

## OBSERVATIONAL STUDIES

- Weeden (2005): + effect on wages
- Leslie et al. (2012): + effect but only if the request to WFH not driven by personal motives
- Arntz et al. (2022): + effect on hourly wages **for fathers**, unless mothers change employers
- Golden and Eddleston (2020): no effect on promotions but **lower salary growth**

## EXPERIMENTAL STUDIES

- Bloom (2015): - effects on promotion despite increases in productivity
- Fernandez-Lozano et al. (2020): - effects on promotion
- Munsch (2016): - effects on promotion but their magnitude **lower** for workers who request WFH for **childcare reasons** (especially fathers)

# DATA



Online **discrete choice experiment** (July and December 2022)

- an online opt-in panel
- each respondent was presented with three pairs of workers' profiles and had to **choose one** of them for promotion and salary increase



**Managers** (N=937) from the UK who:

- Supervise at least 5 employees
- Work in companies with at least 10 employees
- Work in occupations in which at least 50% of jobs can be done at home (Dingel & Neiman, 2020)
- Quota sample, representative by manager's gender, firm size and firm location



# AN EXAMPLE OF THE PAIR OF PROFILES

Please, familiarise yourself with the two profiles and answer the questions below.

	<b>Worker A</b>	<b>Worker B</b>
<b>Performance rank</b> (below satisfactory, satisfactory, exceptional)	not provided	not provided
<b>Work experience in the sector</b> (in full-time equivalent)	13 years	8 years
<b>Family situation</b> (number of children of age 14 and below)	0 children	3 children
<b>Working mode</b> (full time, 5 days a week)	3 days at office; 2 days at home	5 days at office
<b>Sex</b>	men	women
<b>Skills rank</b> (1 very weak, 5 very strong)	social 2, analytical 3	social 3, analytical 2
<b>Age</b>	40 years old	38 years old

**Full-time teleworker:** 5 days at home  
**Hybrid:** 2 days at home, 3 days at office  
**Onsite:** 5 days at office

# AN EXAMPLE OF THE PAIR OF PROFILES

Please, familiarise yourself with the two profiles and answer the questions below.

	<b>Worker A</b>	<b>Worker B</b>
<b>Performance rank</b> (below satisfactory, satisfactory, exceptional)	not provided	not provided
<b>Work experience in the sector</b> (in full-time equivalent)	13 years	8 years
<b>Family situation</b> (number of children of age 14 and below)	0 children	3 children
<b>Working mode</b> (full time, 5 days a week)	3 days at office; 2 days at home	5 days at office
<b>Sex</b>	men	women
<b>Skills rank</b> (1 very weak, 5 very strong)	social 2, analytical 3	social 3, analytical 2
<b>Age</b>	40 years old	38 years old

**Half of the pairs of profiles has no info on work performance**

# AN EXAMPLE OF THE PAIR OF PROFILES

Please, familiarise yourself with the two profiles and answer the questions below.

	<b>Worker A</b>	<b>Worker B</b>
<b>Performance rank</b> (below satisfactory, satisfactory, exceptional)	not provided	not provided
<b>Work experience in the sector</b> (in full-time equivalent)	13 years	8 years
<b>Family situation</b> (number of children of age 14 and below)	0 children	3 children
<b>Working mode</b> (full time, 5 days a week)	3 days at office; 2 days at home	5 days at office
<b>Sex</b>	men	women
<b>Skills rank</b> (1 very weak, 5 very strong)	social 2, analytical 3	social 3, analytical 2
<b>Age</b>	40 years old	38 years old

1. Which employee would you give **promotion** to?
2. Which employee would you give **salary increase** to?
3. Which employee would you give **training** to?
4. Which employee do you consider to be more **committed** to work?

# DATA ANALYSIS

**Logistic regression** with **working mode** as main explanatory variable

**Outcome variables:** promotion, salary increase, training

**Control vars:** workers' sex, age, work experience, skills (social and analytical), parenthood status

**Testing the role of work performance in explaining the WFH effect:**

Model on total sample with interaction WFH#performance, Models on subsamples (performance unknown vs. known)

**Testing the role of work commitment in explaining the WFH effect:**

Models on the sample with known performance & controlling for commitment, Mediation analysis

# Results I: the effect of WFH on careers

PERFORMANCE  
UNKNOWN

	promotion	salary increase
<b>Mode of work (ref: office)</b>		
Hybrid	0.717*** (-3.442)	0.740** (-3.12)
Home	0.632*** (-4.776)	0.672*** (-4.15)

---

\* 0.05 \*\* 0.01 \*\*\* 0.001, z-score in parentheses.

# Results I: mediating effect of work performance

PERFORMANCE  
UNKNOWN

	promotion	salary increase
<b>Mode of work (ref: office)</b>		
Hybrid	0.717*** (-3.442)	0.740** (-3.12)
Home	0.632*** (-4.776)	0.672*** (-4.15)

PERFORMANCE  
KNOWN

	promotion	salary increase
<b>Mode of work (ref: office)</b>		
Hybrid	0.954 (-0.469)	0.952 (-0.489)
Full-time telework	0.617*** (-4.705)	0.734** (-3.018)

\* 0.05 \*\* 0.01 \*\*\* 0.001, z-score in parentheses.

# Results I: mediating effect of work commitment

PERFORMANCE  
KNOWN

	Promotion	Salary increase
<b>Natural indirect effect</b>		
Hybrid vs Office	0.90* (-2.17)	0.91* (-2.16)
Full-time telework vs Office	0.71*** (-6.52)	0.72*** (-6.47)
<b>Natural direct effect</b>		
Hybrid vs Office	1.06 (0.82)	1.05 (0.65)
Full-time telework vs Office	0.93 (-0.96)	1.06 (0.8)
<b>Total effect</b>		
Hybrid vs Office	0.96 (-0.51)	0.95 (0.56)
Full-time telework vs Office	0.66*** (-4.77)	0.77** (-3.12)

due to perceived  
work commitment

\* 0.05 \*\* 0.01 \*\*\* 0.001, z-score in parentheses.

# Results I: mediating effect of work commitment

PERFORMANCE  
KNOWN

	Promotion	Salary increase
<b>Natural indirect effect</b>		
Hybrid vs Office	0.90* (-2.17)	0.91* (-2.16)
Full-time telework vs Office	0.71*** (-6.52)	0.72*** (-6.47)
<b>Natural direct effect</b> ←		
Hybrid vs Office	1.06 (0.82)	1.05 (0.65)
Full-time telework vs Office	0.93 (-0.96)	1.06 (0.8)
<b>Total effect</b>		
Hybrid vs Office	0.96 (-0.51)	0.95 (0.56)
Full-time telework vs Office	0.66*** (-4.77)	0.77** (-3.12)

\* 0.05 \*\* 0.01 \*\*\* 0.001, z-score in parentheses.



# Results II: the effect of WFH on careers for fathers/mothers

## FATHERS

### PERFORMANCE UNKNOWN

	promotion	salary increase
<b>Mode of work (ref: office)</b>		
Hybrid	0.693* (-2.137)	0.649* (-2.514)
Home	0.571** (-3.207)	0.604** (-2.892)

### PERFORMANCE KNOWN

	promotion	salary increase
<b>Mode of work (ref: office)</b>		
Hybrid	1.09 (0.487)	0.919 (-0.475)
Home	0.671* (-2.228)	0.799 (-1.263)

\* 0.05 \*\* 0.01 \*\*\* 0.001, z-score in parentheses.

	FATHERS	
	Promotion	Salary increase
<b>Natural indirect effect</b>		
Hybrid vs Office	0.87 (-1.92)	0.87 (1.92)
Full-time telework vs Office	0.70*** (-3.7)	0.72*** (-3.68)
<b>Natural direct effect</b>		
Hybrid vs Office	1.24 (1.61)	1.07 (0.48)
Full-time telework vs Office	1.02 (0.14)	1.14 (0.96)
<b>Total effect</b>		
Hybrid vs Office	1.08 (0.48)	0.93 (-0.51)
Full-time telework vs Office	0.71* (-2.24)	0.83 (-1.28)
Observations	913	

# Results II: the effect of WFH on careers for fathers/mothers

## MOTHERS

### PERFORMANCE UNKNOWN

	<u>promotion</u>	<u>salary increase</u>
<b>Mode of work (ref: office)</b>		
Hybrid	0.907 (-0.58)	1.089 (0.504)
Home	0.821 (-1.204)	0.774 (-1.573)
<b>Mode of work (ref: office)</b>		
Hybrid	0.833 (-1.042)	0.973 (-0.158)
Home	0.484*** (-4.117)	0.714 (-1.917)

← NO EFFECT!

← NEGATIVE EFFECT

### PERFORMANCE KNOWN

\* 0.05 \*\* 0.01 \*\*\* 0.001, z-score in parentheses.

# Results II: the effect of WFH on careers for fathers/mothers

## MOTHERS

### PERFORMANCE UNKNOWN

	<u>promotion</u>	<u>salary increase</u>
<b>Mode of work (ref: office)</b>		
Hybrid	0.907 (-0.58)	1.089 (0.504)
Home	0.821 (-1.204)	0.774 (-1.573)
<b>Mode of work (ref: office)</b>		
Hybrid	0.833 (-1.042)	0.973 (-0.158)
Home	0.484*** (-4.117)	0.714 (-1.917)

### PERFORMANCE KNOWN

	MOTHERS	
	Promotion	Salary increase
<b>Natural indirect effect</b>		
Hybrid vs Office	0.93 (-0.86)	0.94 (-0.86)
Full-time telework vs Office	0.73*** (-3.57)	0.74*** (-3.52)
<b>Natural direct effect</b>		
Hybrid vs Office	0.92 (-0.67)	1.05 (0.42)
Full-time telework vs Office	0.74* (-2.43)	1.02 (0.17)
<b>Total effect</b>		
Hybrid vs Office	0.86 (-1.03)	0.98 (-0.12)
Full-time telework vs Office	0.54*** (-4.17)	0.75* (-1.96)
Observations		975

\* 0.05 \*\* 0.01 \*\*\* 0.001, z-score in parentheses.

# CONCLUSIONS

- **Hybrid and home-based workers face worse career opportunities than onsite workers (are less likely to be chosen for promotion or salary increase)**
- The negative effect of hybrid WFH is explained mostly by employers' assumptions about workers' performance; the rest by employers' perceptions about workers' commitment
- The negative effect of full-time WFH is explained by employers' perceptions about workers' commitment

# CONCLUSIONS

- **Hybrid and home-based workers face worse career opportunities than onsite workers (are less likely to be chosen for promotion or salary increase)**
- The negative effect of hybrid WFH is explained mostly by employers' assumptions about workers' performance; the rest by employers' perceptions about workers' commitment
- The negative effect of full-time WFH is explained by employers' perceptions about workers' commitment
- **The two channels (work performance and work commitment) explain fully the ,career penalty' for WFH**
- These findings hold for fathers (no fatherhood bonus), but not mothers!

# CONCLUSIONS

- Mothers who WFH have similar chances for promotion and salary increase as onsite working mothers as long as employers do not know their performance
- Once employers know their performance they tend to evaluate teleworking mothers far more critically
- **Employers assume (expect ?) teleworking mothers to be more productive when they work from home (in exchange for the flexibility?)**
- They also consider teleworking mothers as less committed to work

# Thank you!



ecukrowska@uw.edu.pl



POLSKIE POWROTY  
POLISH RETURNS



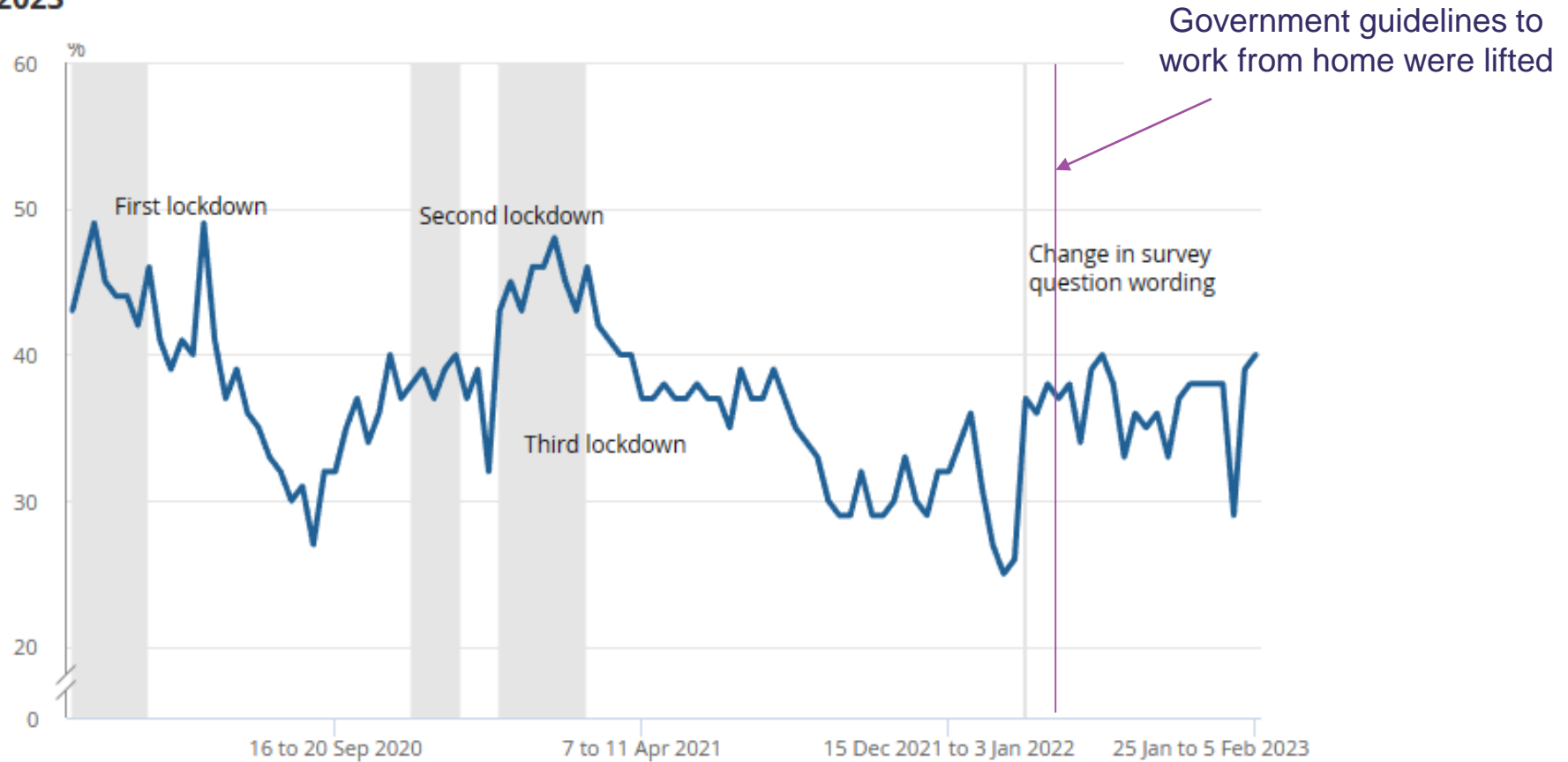
UNIVERSITY OF WARSAW  
**Faculty of Economic Sciences**

 **LabFam**

# BACKGROUND

Proportion of working adults in Great Britain, March 2020 to February

2023



**BEFORE THE  
PANDEMIC:  
5.7%**