

# Worktime Reduction and the Future of Work

FMM Progressive Perspectives In Times Of Polycrisis

Plenary session III: Inequality, overconsumption and work-life balance

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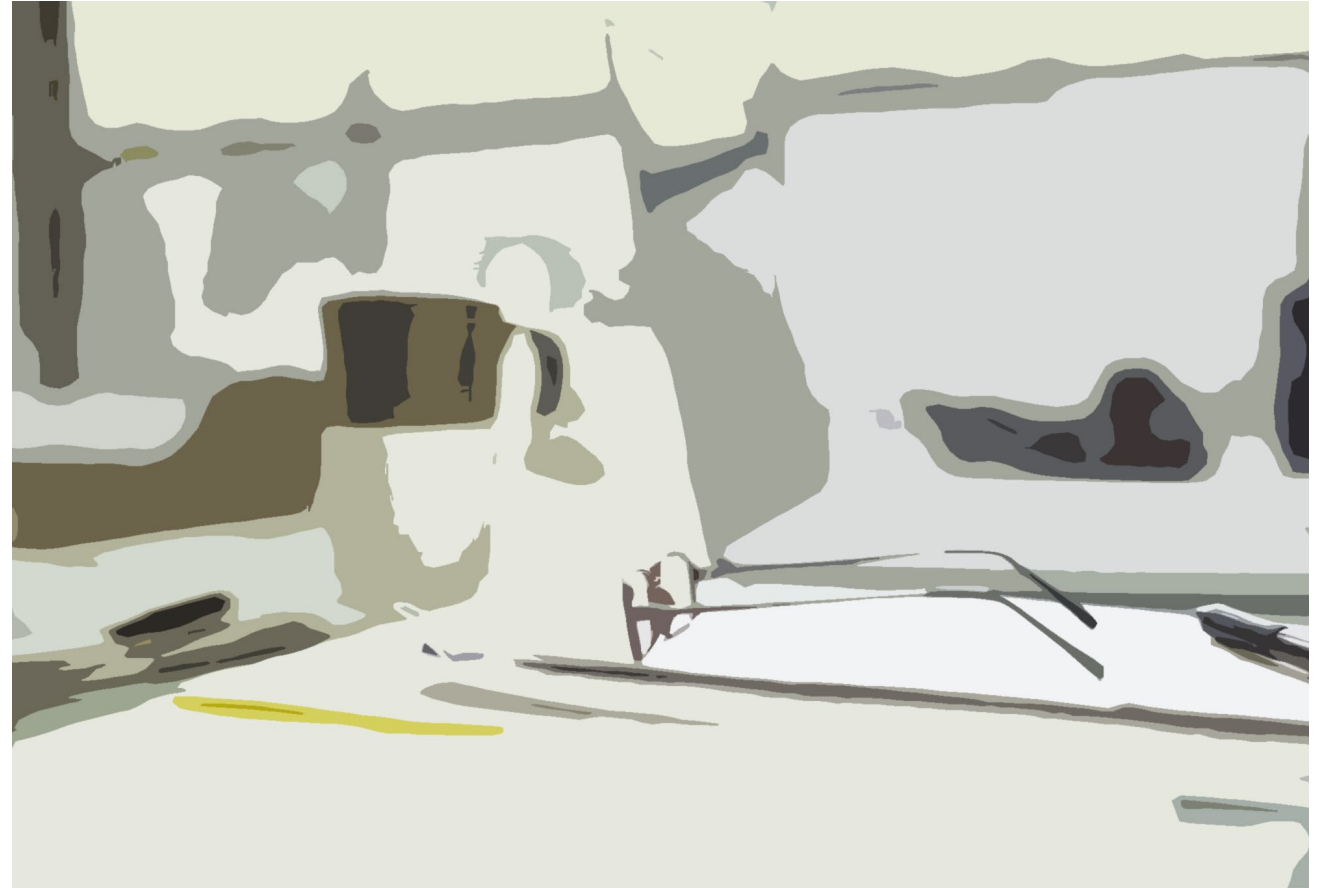
October 26<sup>th</sup>, 2024

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University College Dublin

# Overview

1. The rise in worktime reduction (WTR)
2. The 4-Day Week Global Trials
3. Work-life balance, inequality, overconsumption; Is worktime reduction part of the solution?
  - i. Work-life balance and other social outcomes
  - ii. (gender)inequality
  - iii. Overconsumption
4. Unanswered questions
5. Q&A



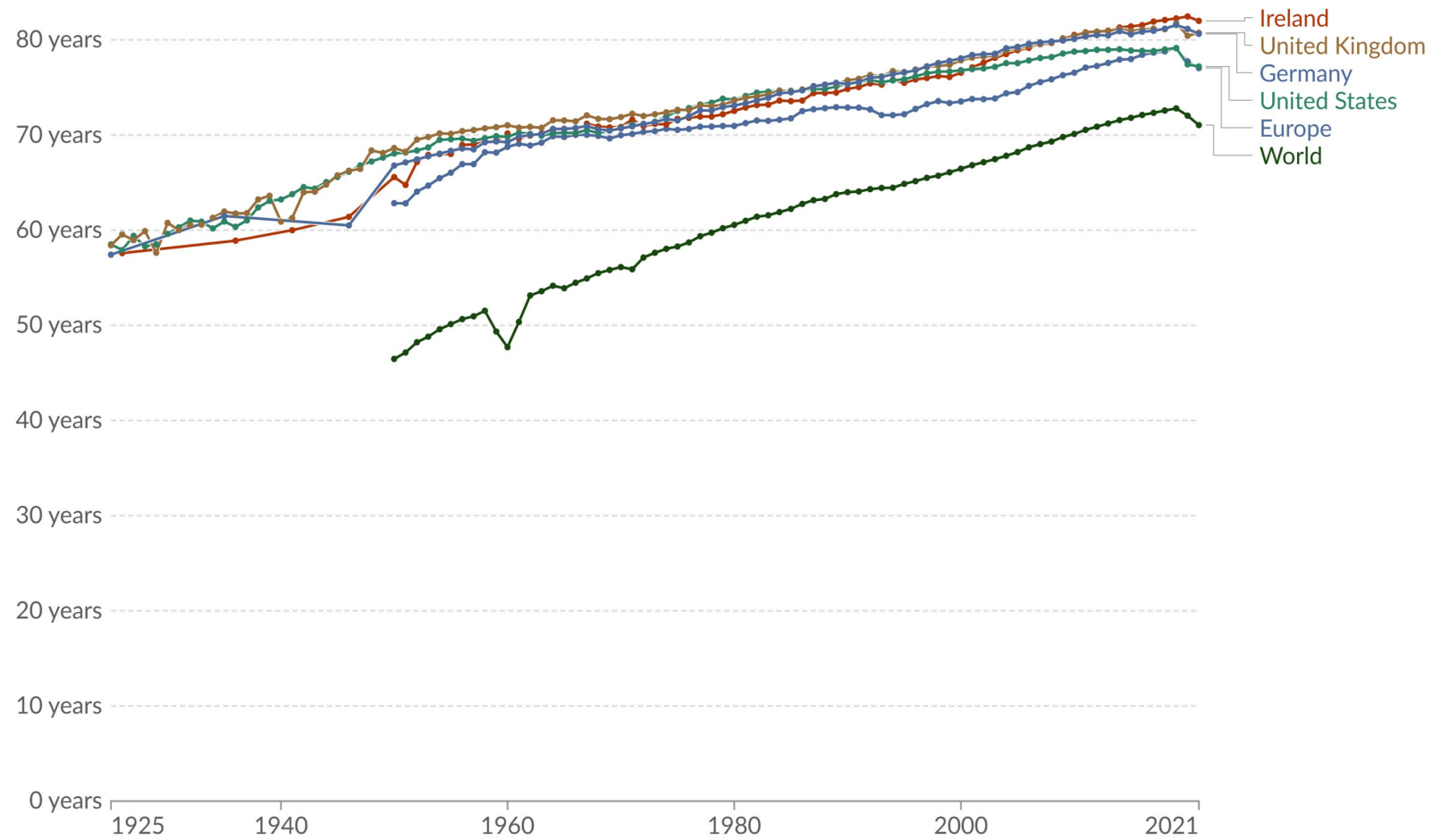
# Early Predictions

“I would predict that the standard of life in progressive countries a hundred years hence will be between 4 and 8 times as high as it is today’... At that point, everybody will need to do some work if he is to be contented ... a 15-hour week may put off the problem for a great while...”

-John Maynard Keynes ‘Economic possibilities for our grandchildren’. 1930, (pp. 21- 23).

# Life expectancy

The period life expectancy<sup>1</sup> at birth, in a given year.



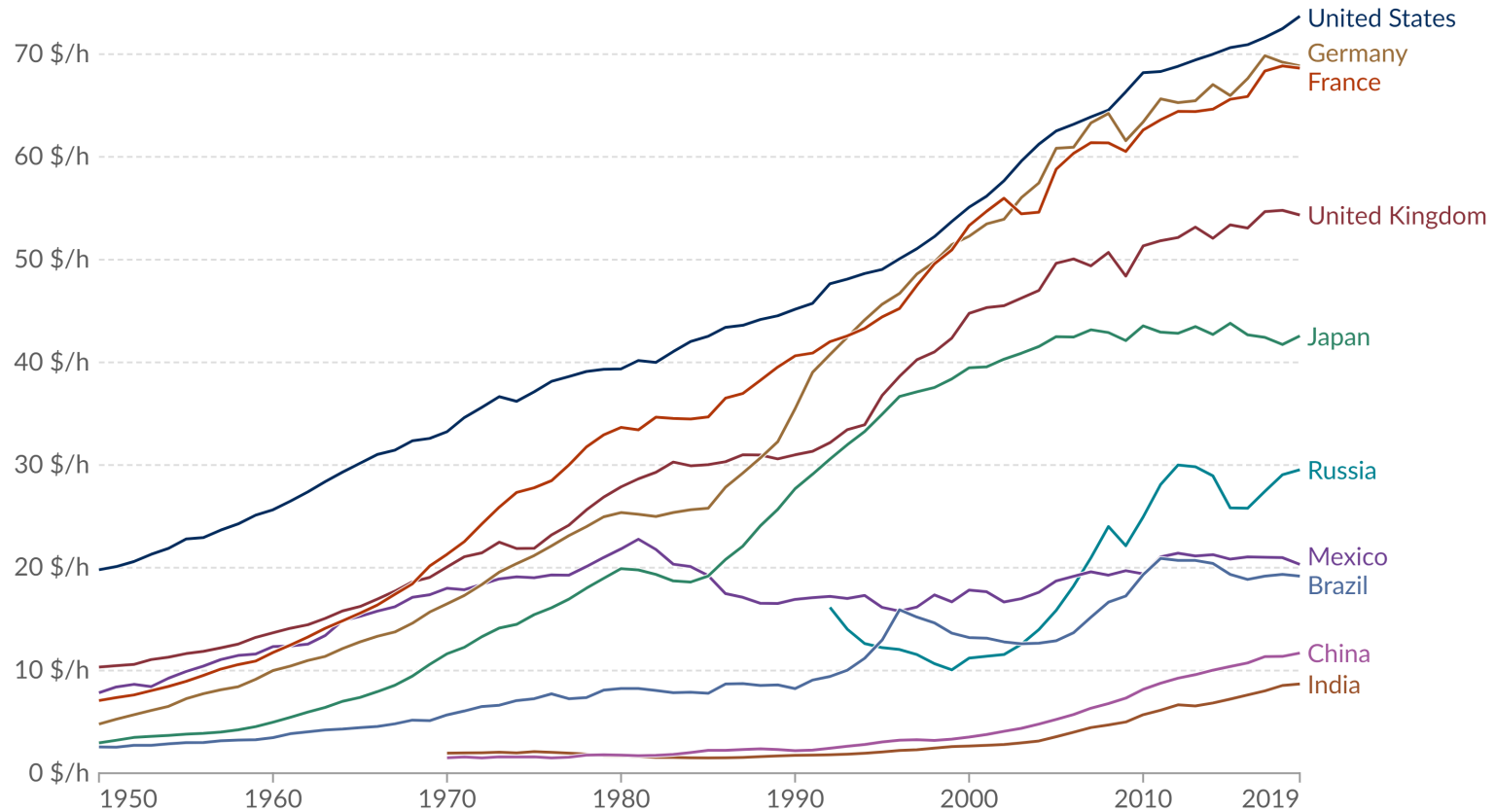
Data source: UN WPP (2022); HMD (2023); Zijdeman et al. (2015); Riley (2005)

OurWorldinData.org/life-expectancy | CC BY

# Productivity: output per hour worked



Productivity is measured as gross domestic product (GDP) per hour of work. This data is adjusted for inflation and differences in the cost of living between countries.



Data source: Feenstra et al. (2015), Penn World Table (2021)

OurWorldinData.org/economic-growth | CC BY

Note: This data is expressed in international-\$<sup>1</sup> at 2017 prices per hour.



# WTR Early years

## Europe

- France; 1997 to 2000 working hours reduced 39 to 35 per week.
- German; Metal industry 35 hours - 1993 (incremental)
- 6-hour days and other innovative models in the Nordic counties
  - Icelandic government 2015-2019, 40-hour to 35/36-hour
  - Retirement home Gothenburg (6/5 model)

## USA

- 1970s-1980s 40 hours in 4 days
- 2008 Utah Governor 18,000 employees (out of 25,000) to 4 days no reduction in salary

# 'A four-day workweek is coming,' billionaire Mets owner Steve Cohen declares—and you can thank the rapid rise of AI

BY JANE THIER

April 3, 2024 at 9:47 PM GMT+1



WTR post-pandemic

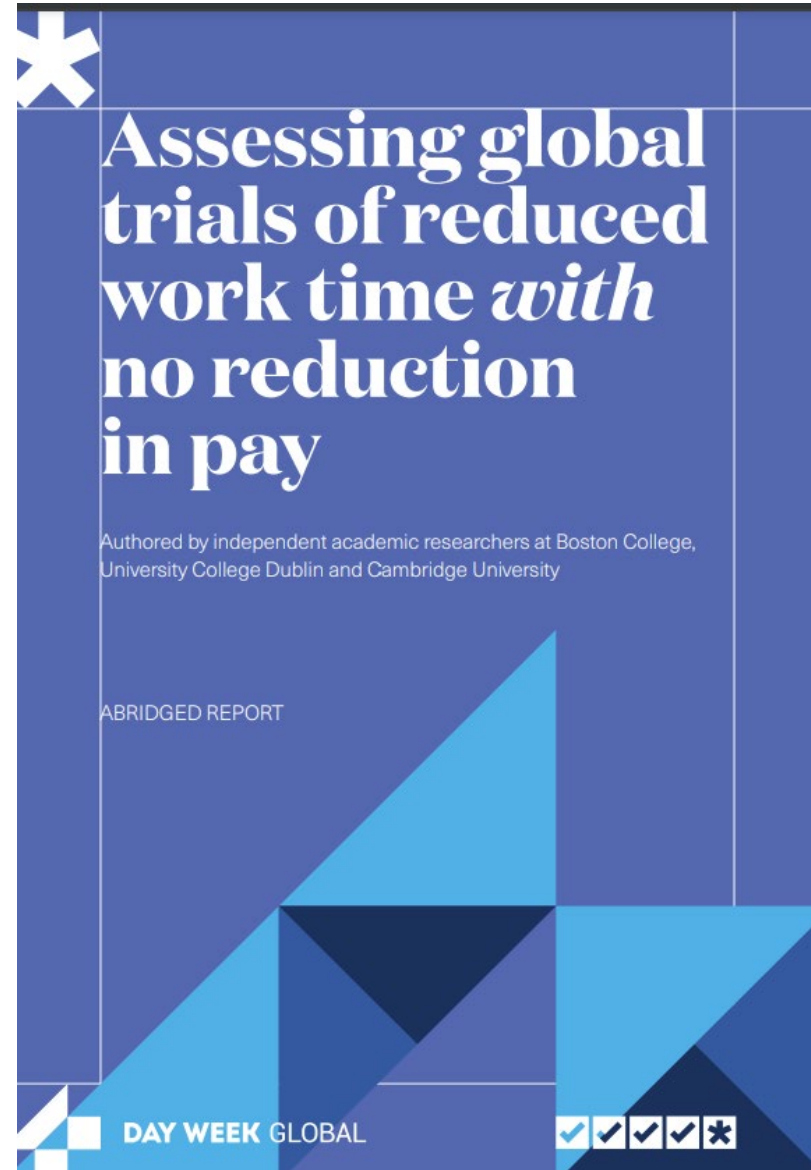
## Government (supported) pilots

- Scottish Government - 2024
- South Cambridgeshire, UK- 2023
- Valentia month-long trial 2023
- Spain SMEs trial 10 million-2024

## 32-hour workweek bills

- UK Labour MP Peter Dowd- September 2022
- California-Mark Takano-December 2021
- US Senator Bernie Sanders -March 2024

# Quantitative Evidence from the 4 Day Week Global Trials





Key: No Pay Reduction  
(100-80-100 Model)

# Methods: Mixed



EMPLOYER SURVEY

EMPLOYEE SURVEY

TIME USE

INTERVIEWS

Monthly

3 Waves

Mid-point

End of Trial

Productivity

Wellbeing

Activities

Management Experience

Retention

Stress/Health

Household/Care Work

Lessons Learned

Absenteeism

Job Satisfaction

Time Affluence

Employee Experience

Energy Use

Pro Envi. Behaviour

Energy Use

## Trial Timeline

Cohort	Time Period	Main Countries	Participants	Companies
I	Feb 2022–July 2022	Ireland and US	618	16
II	Apr 2022–Sept 2022	US and Canada	300	18
III	Jun 2022–Nov 2022	United Kingdom	2548	57
IV	Aug 2022–Jan 2023	Australia and New Zealand	758	27
V	Oct 2022–Mar 2023	US and Canada	597	22

# Participating Organizations by Sector

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Industry	Percentage
Professional Services	21%
Admin, IT & Telecoms	18%
Arts / Entertainment	10%
Marketing/Advertising	10%
Non-profit	10%
Manufacturing	9%
Educational services	6%
Healthcare or social assistance	6%
Finance and Insurance	5%
Construction / Housing	4%
Food	1%
Retail	1%

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# POLYCRISIS

Is WTR part of the solution?

1. Work life balance

# Work-Life Balance & Wellbeing

## Risks of long working hours:

- Cardiovascular disease, gastrointestinal and reproductive disorders, musculoskeletal disorders
- Limit opportunities for restorative sleep: greater risks of workplace accidents, mental illness, chronic disease, and premature death
- Unhealthy lifestyle habits: smoking and alcohol abuse, irregular diet, and lack of exercise

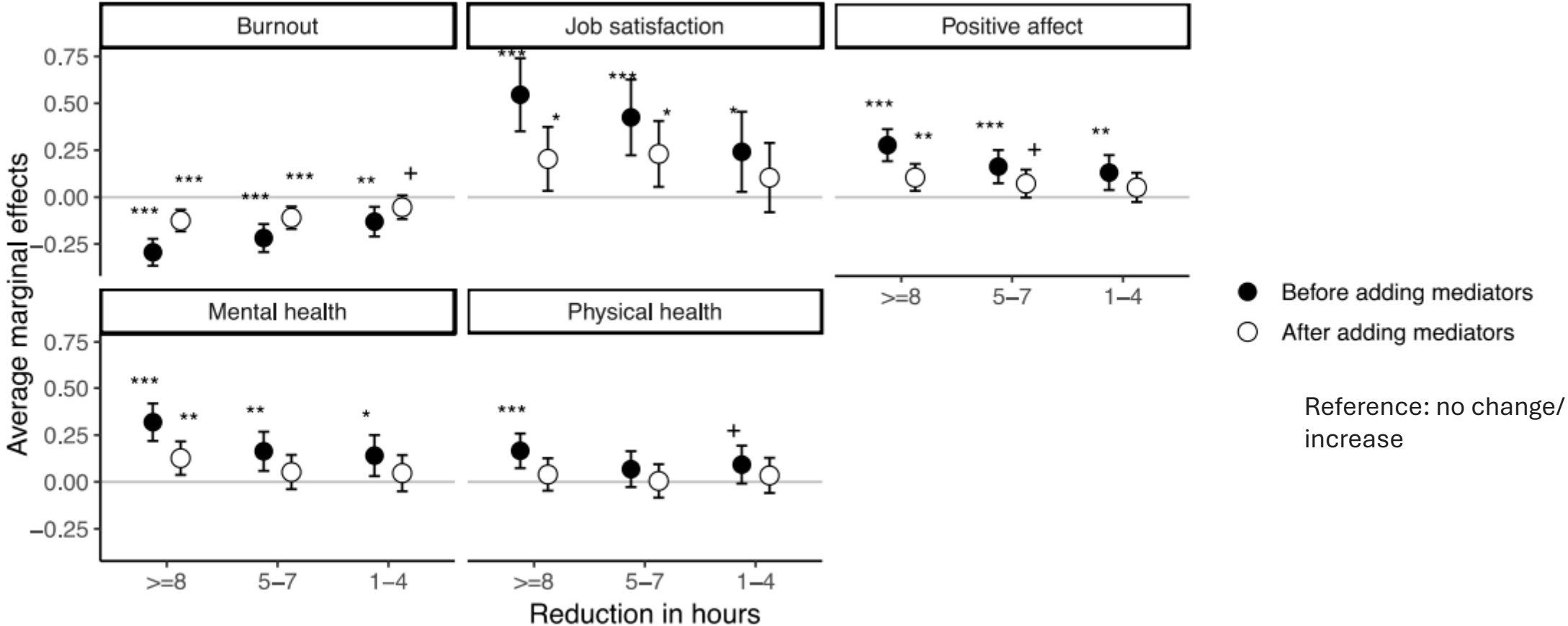
## Gains from WTR:

- Improvement in satisfaction among Japanese and Korean workers
- Gains in well-being in both France and Portugal, even with work intensification
- improvement in their work-life balance and a better quality of their leisure time in Iceland

# Our Analysis

- Data collected from 2,134 employees in 123 organisations
- Changes in wellbeing ; burnout, job satisfaction, positive affect, physical health and mental health
- Job demands-resources (JD-R) building demands-control model of Karasek.
- Hypotheses
  1. Employee well-being outcomes will improve between the pre-trial baseline measurement and the trial endpoint six months later.
  2. The greater the reduction in working hours, the larger the improvements in employee well-being over the six-month trial period.
  3. The relationship between work time reductions and changes in well-being will be mediated by gains in “resources at organisational (workability, work autonomy, work intensity) and personal level (exercise frequency, reduced sleep problems, and fatigue)
- Mixed-effects regression models employees nested within organisations.
- Well-being outcomes we include changes in hours and a comprehensive set of covariates, including the lagged dependent variable (i.e., well-being measured at baseline)

**Fig. 2 Average marginal effects of reductions in work hours: Before and after adding mediators**



Data points are estimates of the average marginal effects of reductions in hours (relative to stable or increased hours) on changes in well-being. Error bars are 95% confidence intervals. N = 2,134. \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , +  $p < .1$ .



# POLYCRISIS

Is WTR part of the solution?

## 2. Inequality

# Inequalities within the workforce

- Ideal worker norms by greedy institutions particularly common in professional and managerial occupations
  - conflicting with “family devotion”
- Women in heterosexual relationships spend more time on household work
- More pronounced at the onset of parenthood (intensive)
- Long working hours increase:
  - work, family /work life conflict
  - exacerbates the gender pay gap
- Exclusionary towards those with care responsibilities e.g. Covid -19 “She-cession”
- Stigmatisation of workers who cannot, or are thought to be unable to, work long hours (or work at all)
  - 29% of respondents in the 2018 British Social Attitude Survey responded that they would ‘definitely’ or ‘probably’ experience a negative impact on their career if they were asked to work flexibly.

# Our Analysis

- Data collected from 2,134 employees in 123 organisations
- We investigate how reduced work time affected i) perceptions of work-life balance, ii) time use patterns (including time spent on childcare, household chores, cooking, other care, hobbies and sleep), as well as iii) satisfaction with time use across these domains
- The questions are sourced and adapted from the European Quality of Life Survey (EQLS).
- We estimate the outcome change connected to the reduced work time using ordered logit with individual fixed effects, specifically, the blowup and cluster (BUC) estimator introduced in Baetschmann et al. (2015).

## Hypotheses;

1a) All trial participants will experience gains in work-life balance

1b) The largest gains will be for mothers with children > 7 years old

# Changes in perceptions of balance for men

Improvements across all work-life balance domains

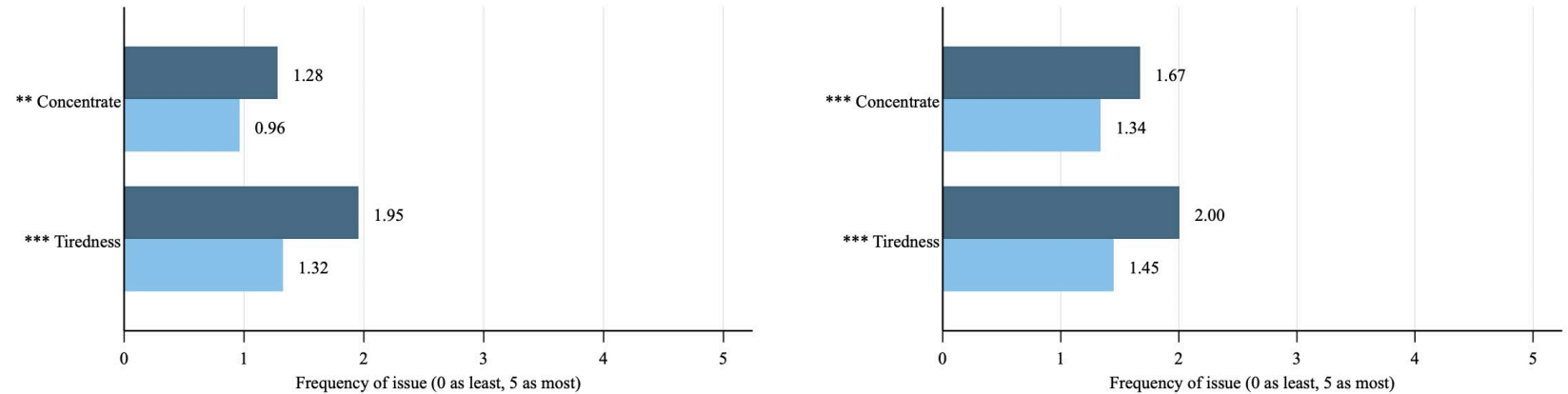
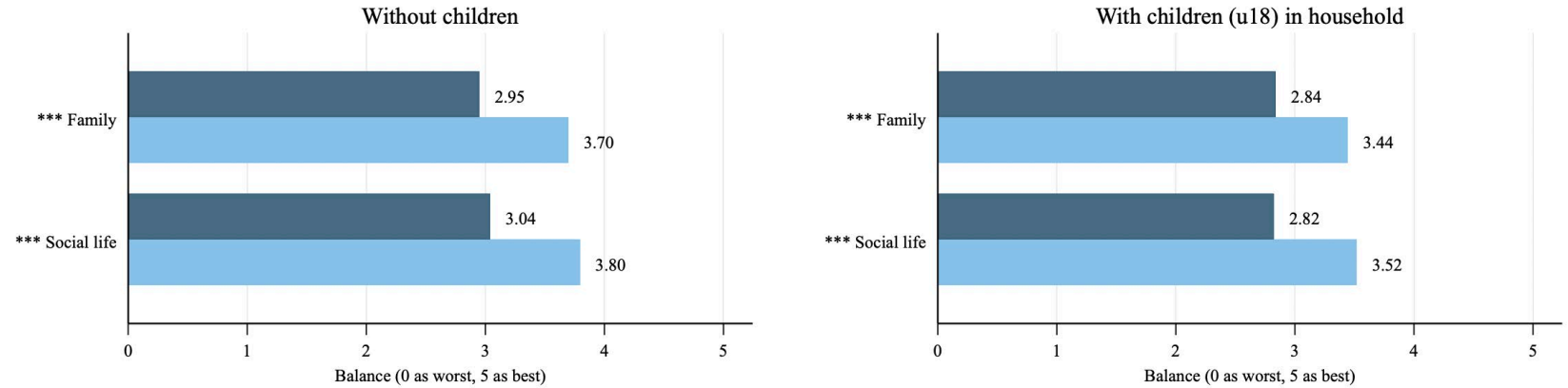
Male nonparents

- Family/work= +0.67
- Social /work= +0.72
- Concentration = -0.27
- Tiredness = -0.55

Male parents

- Family/work= +0.60
- Social /work= +0.70
- Concentration =-0.33
- Tiredness=-0.55

Difference between baseline and endpoint in perceptions of how work is balanced with other activities for men



Baseline Endpoint

Note: \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

# Changes in perceptions of balance for women

Improvements across all work life balance domains

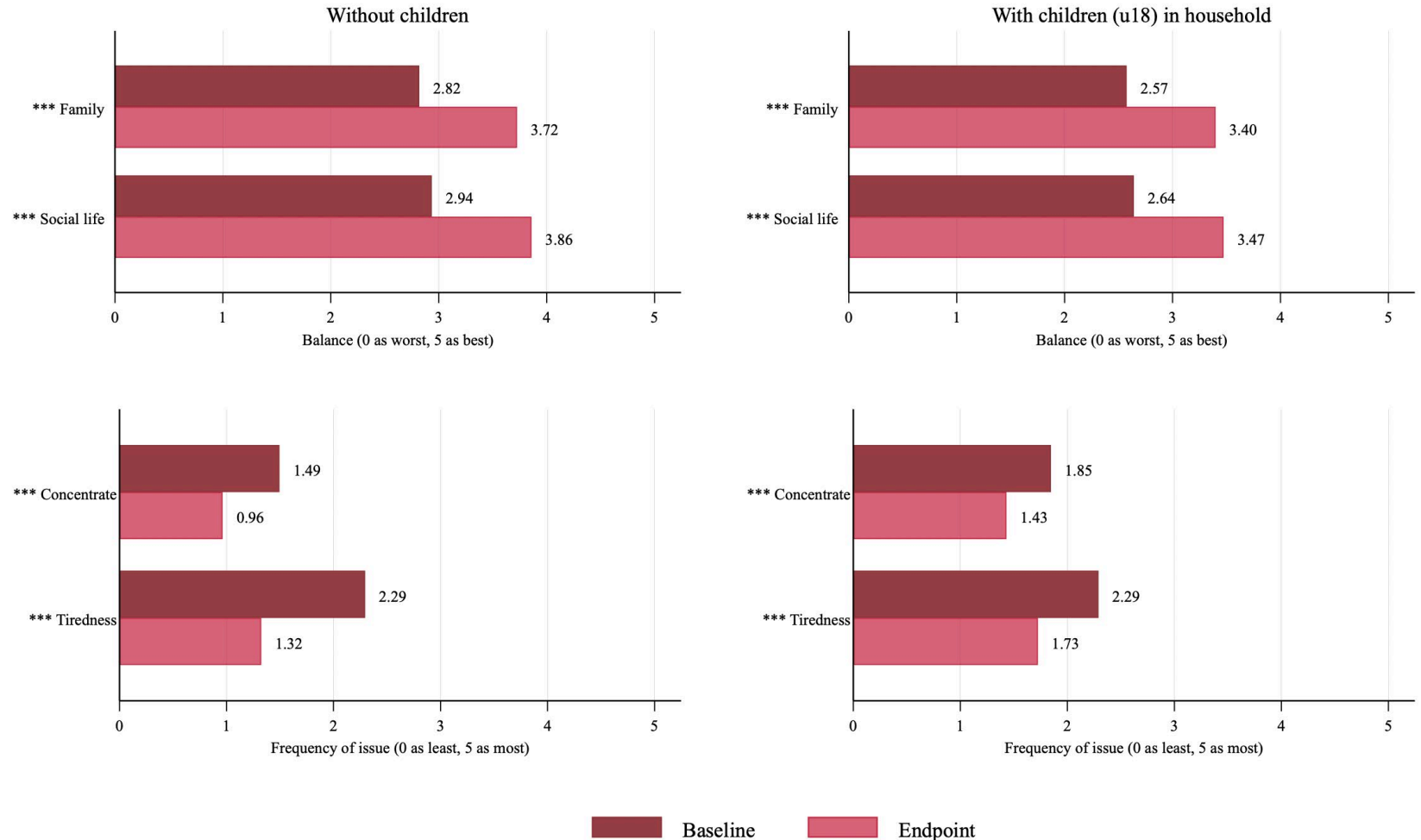
Female nonparents

- Family/work= +0.85
- Social /work= +0.91
- Concentration = -0.55
- Tiredness = -0.97

Female parents

- Family/work= +0.91
- Social /work= +0.83
- Concentration =-0.42
- Tiredness=-0.56

**Difference between baseline and endpoint in perceptions of how work is balanced with other activities for women**



Note: \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

# Changes in perceptions of work life balance by gender and parental status

(Model )	Care (1)	Social (2)	Family/ work conflict (3)	Work/life conflict (4)	(Model )	Care (1)	Social (2)	Family/ work conflict (3)	Work/life conflict (4)
Male no child <18	5.724*** (1.416)	6.630*** (1.331)	0.382*** (0.065)	0.175*** (0.030)	Female no child <18	8.718*** (1.818)	10.324*** (1.766)	0.259*** (0.036)	0.120*** (0.020)
N	250	586	562	156	N	758	1,540	874	1,124
Male with child <7	3.138*** (1.116)	4.880*** (1.381)	0.316*** (0.089)	0.232*** (0.064)	Female with child <7	6.962*** (2.127)	8.333*** (2.196)	0.283*** (0.063)	0.138*** (0.040)
N	240	294	200	234	N	414	448	308	296
Male with child 7-18	7.500*** (2.369)	7.000*** (1.822)	0.333*** (0.125)	0.146*** (0.059)	Female with child 7-18	10.455*** (4.169)	7.839*** (1.708)	0.239*** (0.048)	0.153*** (0.035)
N	238	256	152	204	N	504	548	352	408

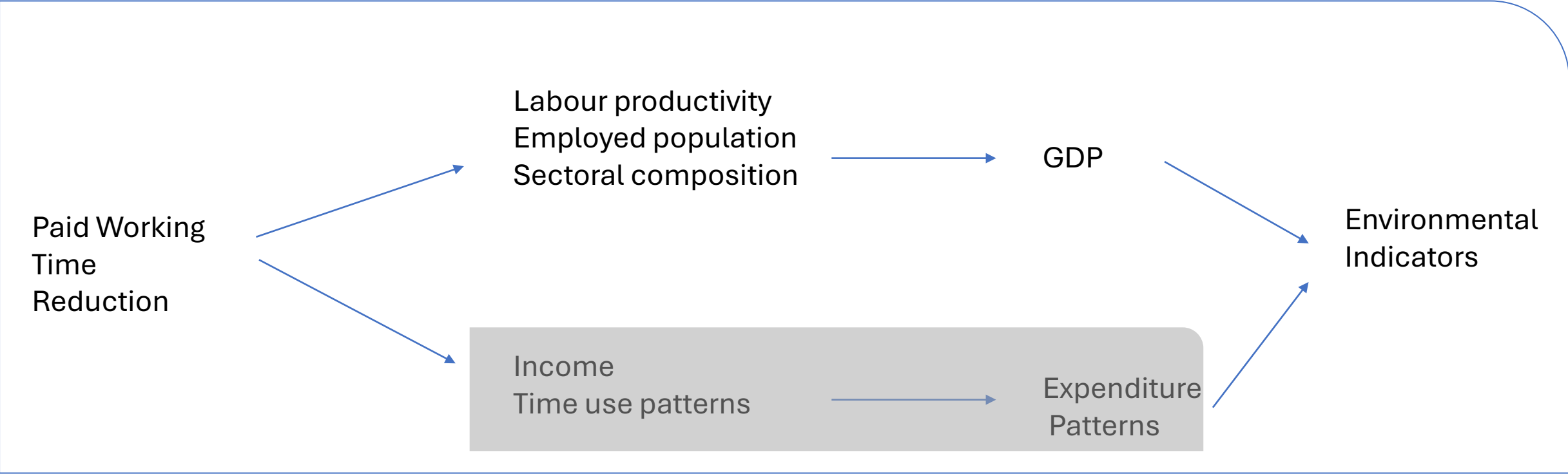
Note: This table presents the odds ratios derived from the post-estimation command following the ordered logistic regression for each of the six subsamples listed in the corresponding row. Standard errors are clustered at the firm level and reported in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Model controls for individual socio-demographic factors and trial cohort.

# POLYCRISIS

Is WTR part of the solution?

3. Overconsumption- Maybe

# WTR Scale and Compositional Effects





# WTR & Overconsumption

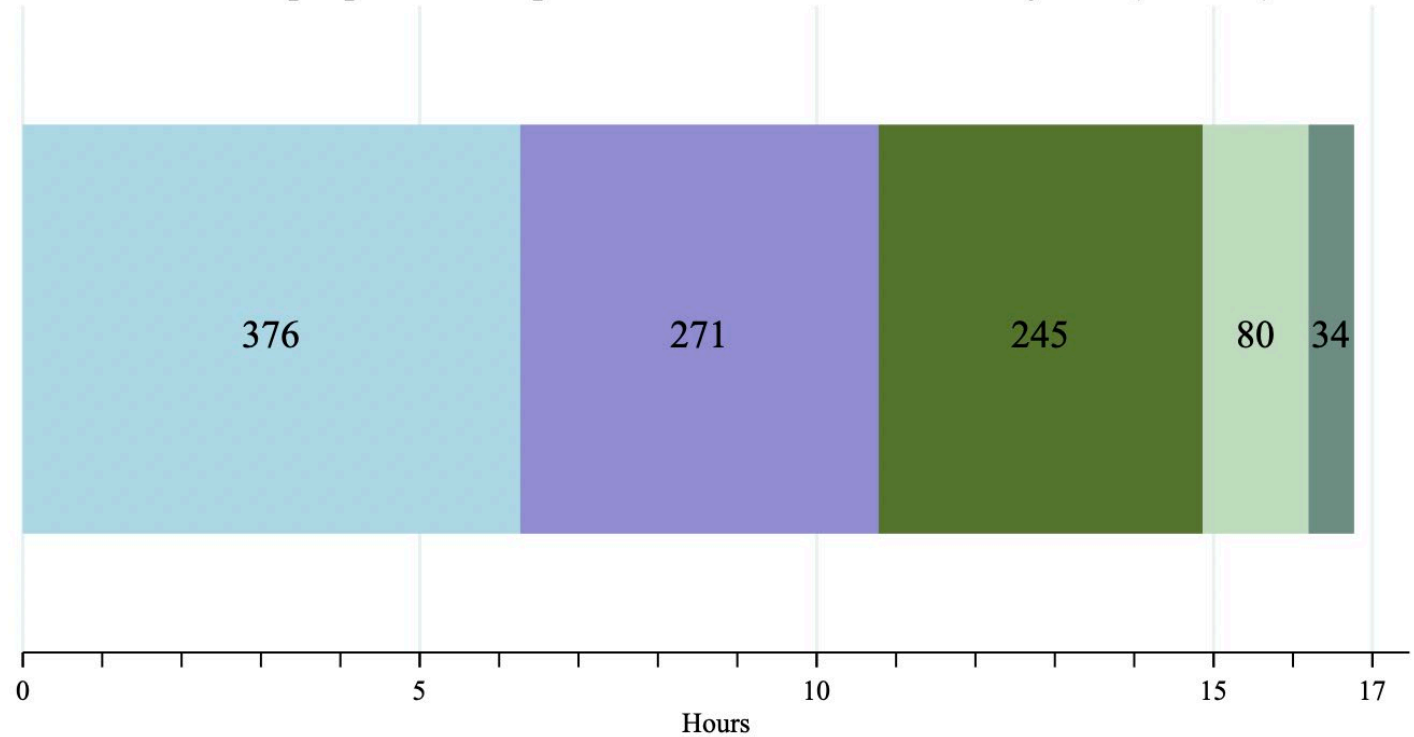
## Consumption Based

- Household level change in time use and expenditure patterns
- Move away from “work-spend” cycle
- Less carbon intensive activities
- Less commuting
- More time for pro-environmental behaviour

# Environment Analysis (Ireland)

Variable	Baseline	Endpoint	$\Delta$
Pro-environment behavior: recycling, buying eco friendly, walking cycling over driving	3.74 (0.77)	3.89 (0.80)	0.155 *
Pro-environment behavior: encouraging others and educating oneself about environmental protection	3.28 (1.21)	3.60 (1.08)	0.324 **
Pro-environment behaviour: volunteering	1.57	1.93	0.362 *
Commute time per week	2.38 (2.90)	2.21 (2.55)	-0.173
Domestic travel	0.20 (0.46)	0.76 (0.92)	0.565 ***

How do people tend to spend time on their additional day off? (minutes)



Time-use on day off

# Context Matters

## Work-life balance

- Positive, and increases commensurate with time off
- Mediators; workability, reduced sleep problems, reduced fatigue
- Must not degrade working conditions

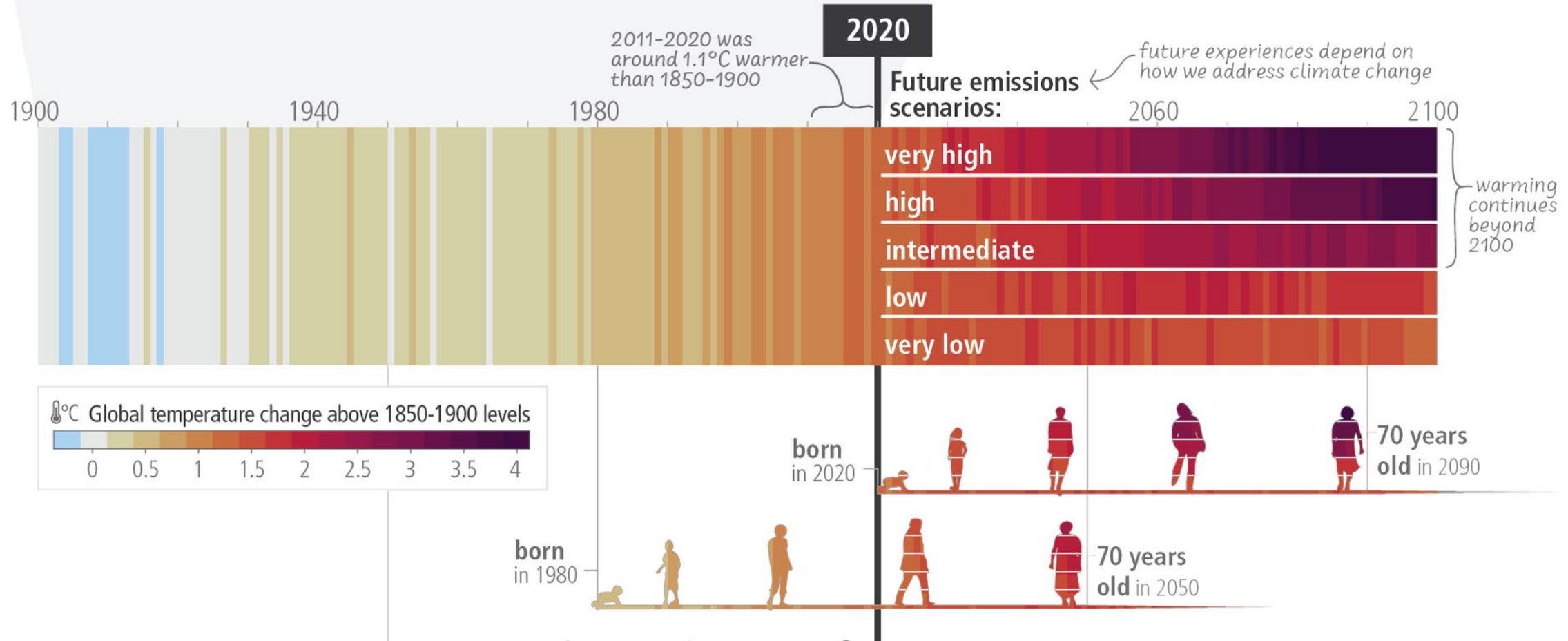
## Equality

- Organisation-wide interventions positive for those unable to fit ideal worker standard
- Cross sectoral
  - Depends on government support to roll out in more challenging sectors e.g. compensatory hires
  - Could offset worker displacement with the rise of AI

## Overconsumption

- Must be part of a broader suite of socio-ecological measures
- Potential for reimagining the day off

c) The extent to which current and future generations will experience a hotter and different world depends on choices now and in the near-term



Thank You

# Questions



# WTR & Environmental Outcomes

## Macro-level Studies

- US states: higher CO2 emissions (2007-2013) (Fitzgerald et al. 2018)
- OECD: Higher WT higher (1980-2000), but the relationship turned negative (2000-2010) (Shao & Rodríguez Labajos 2016)
- EU15: Higher WT is mostly associated with higher energy and CO2, but large regional differences (1970-2010) (Shao 2015)