

# Inequalities in education, skills, and incomes: Implications of the COVID-19 pandemic

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Richard Blundell (IFS and UCL)

<https://www.ucl.ac.uk/~uctp39a/>

EEA-ESEM Invited Session:

“Inequality Was Bad –  
Will the Pandemic Make it Worse?”

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# Covid-19 and Inequality

- Far from pushing inequality down the agenda, the pandemic has reinforced the need to deal with the challenges posed by inequality,
  - highlighting existing inequalities – in education, training, income, work, health, savings and wealth; by ethnicity, age...
  - at the same time, opening up new fissures along dimensions that were previously less significant – working at home, digital access, space at home,...
- Will there be a new emphasis on building a fairer society but with the challenge of doing so with unprecedented levels of (peace time) debt?
- Or, will the increase in demand for e-commerce and IT dominate? -> an increase in the education premium and for work from home.
- Increases in welfare have provided a temporary shield and the vaccine success has helped speed up recovery, but longer-term inequality challenges remain.
- We can't hope to address these longer run concerns about post-pandemic inequality by tax and welfare alone - challenge is to design balanced policy mix.
- Use UK as a running example, and draw on IFS-Deaton Review: Inequalities in the 21st Century, <https://www.ifs.org.uk/inequality/>

# Prior to the Covid-19 pandemic, a range of economic inequalities had become more salient:

- Educational outcomes varied significantly by socio-econ background with fewer paths to good jobs for those without university education.
- Increasing earnings inequality, with adverse labour market shocks coupled and poor wage progression for lower educated workers.
- Diverging life-cycle wage profiles by education and by part-time work, and low rates of on-the-job training for lower educated workers.
- Increasing in-work poverty, with employment alone (increasingly) not enough to escape poverty and low earnings.
- Increasing family earnings inequality-> female labour supply doing little to off-set the rise, due to part-time work, gender gap & assortativeness.
- Large differences in the prosperity of different groups in society (e.g. between people of different ethnicities) and between different regions.
- Increasing financial and housing wealth inequalities, with a large fraction of poorer households with low savings and high debt.

# Evolution of the Gini during the pandemic without and with policy

Citation Countries	Method	Without policy response	With policy response (Overall effect)
Almeida et al. (2020) EU (27)	Simulating effect of policies	+3.6%	-0.7%
Brunori et al. (2020) Italy	Simulating effect of policies	+0.67% (0.3396)	-0.67% (0.3396)
Clark et al. (2020) DE, ES, FR, IT, SE	Evolution over time	+2.17% (0.322)	-2.48% (0.322)
Li et al. (2020) Australia	Comparison market and post-tax and transfers income	+3.33% (0.539)	- 7.57% (0.330)
O'Donoghue et al. (2020) Ireland	Comparison market and post-tax and transfers income	+20.64% (0.499)	- 6.62% (0.317)
Palomino et al. (2020) EU (29)	Simulating effect of policies	+3.5% to +7.3%	NA

Source: Stancheva (Economic Policy, 2021)

But most policies have been temporary, and income is a narrow measure of the impact on inequality.... we need to go *beyond the Gini* and look at the drivers and the longer-run consequences of inequality.

# To focus ideas, we develop a life-cycle view of the impact of Covid-19

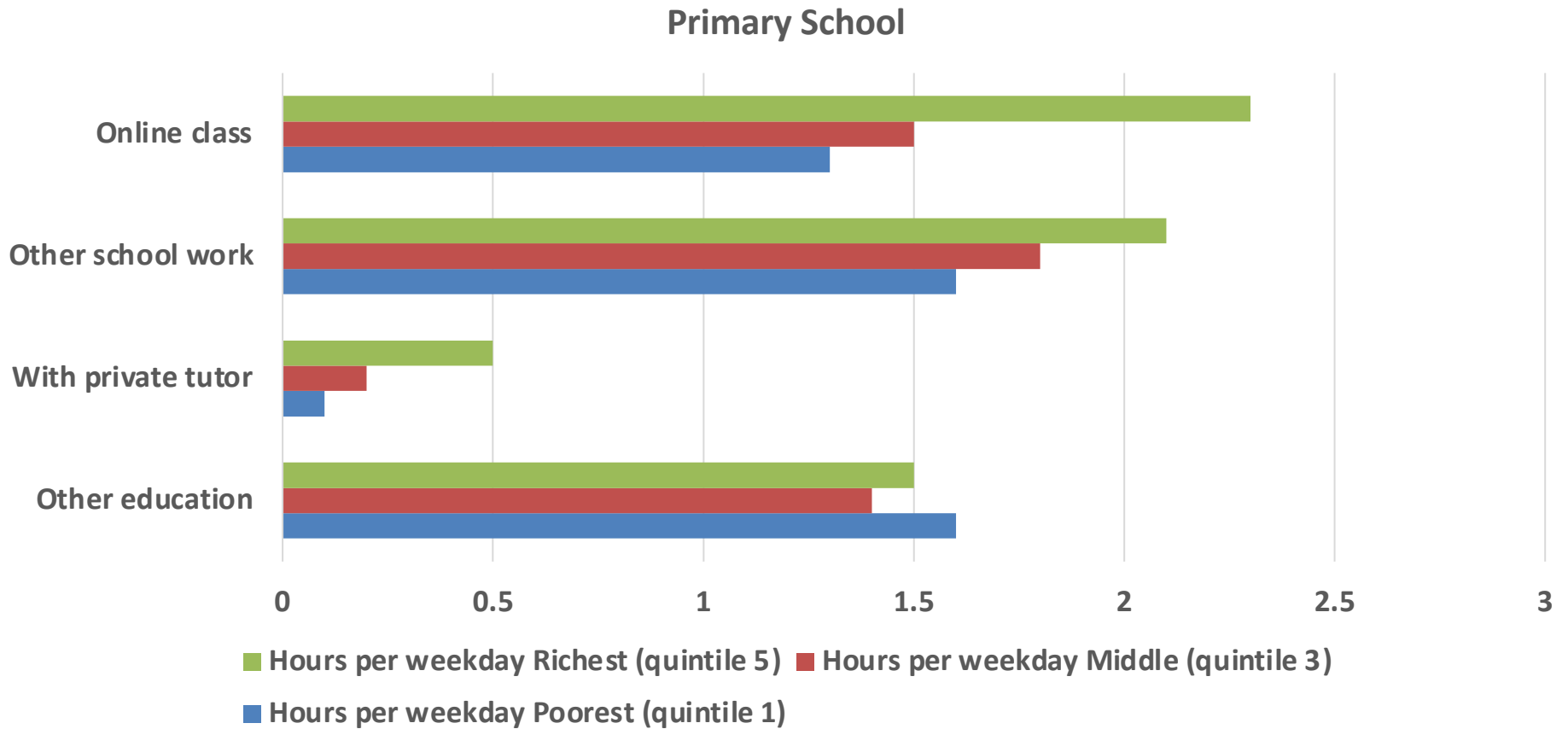
- I. Loss of learning; in early years, in schooling and in training;
    - Schooling inputs vary by socio-economic class, reductions in work-related training for non-university educated.
  - II. Loss of work;
    - Fall in employment and earnings larger for young and lower educated, strong earnings gradient in 'work from home' and 'e-commerce'.
  - III. Increased demands for childcare at home;
    - Gender bias in hours of care.
  - IV. Increase in isolation and poor mental health;
    - Particularly acute for young mothers.
  - V. Gaps in the social safety net;
    - Pandemic has highlighted short-comings in existing social insurance and welfare support, new schemes often effective but largely temporary.
  - VI. Increase in savings, housing and financial wealth inequalities.
- Use this analysis to build a comprehensive policy response.

# I. Loss in Learning: School closures

Country	Authors	Phenomenon	Direction
192 countries	Psacharopoulos et al. (2020)	Loss in earnings	Increase
US	Fuchs-Schündeln et al. (2020)	Loss in earnings	Increase
US	Fuchs-Schündeln et al. (2020)	High school degree	Decrease
DE, AT, CH	Huber and Helm (2020)	Learning	Decrease
DE	Grewenig et al. (2020)	Learning	Decrease
U.K.	Andrew et al. (2020)	Learning	Decrease
US	Agostinelli et al. (2020)	Learning	Decrease
NL	Engzell et al. (2020)	Learning	Decrease
BE	Maldonado and De Witte (2020)	Learning	Decrease
US	Bacher-Hicks et al. (2021)	Search intensity	Decrease
US	Bao et al. (2020)	Reading ability	Decrease
DE, AT, CH	Huber and Helm (2020)	Technology	Insufficient
U.K.	Andrew et al. (2020)	Technology	Insufficient
IE	Doyle (2020)	Technology	Insufficient

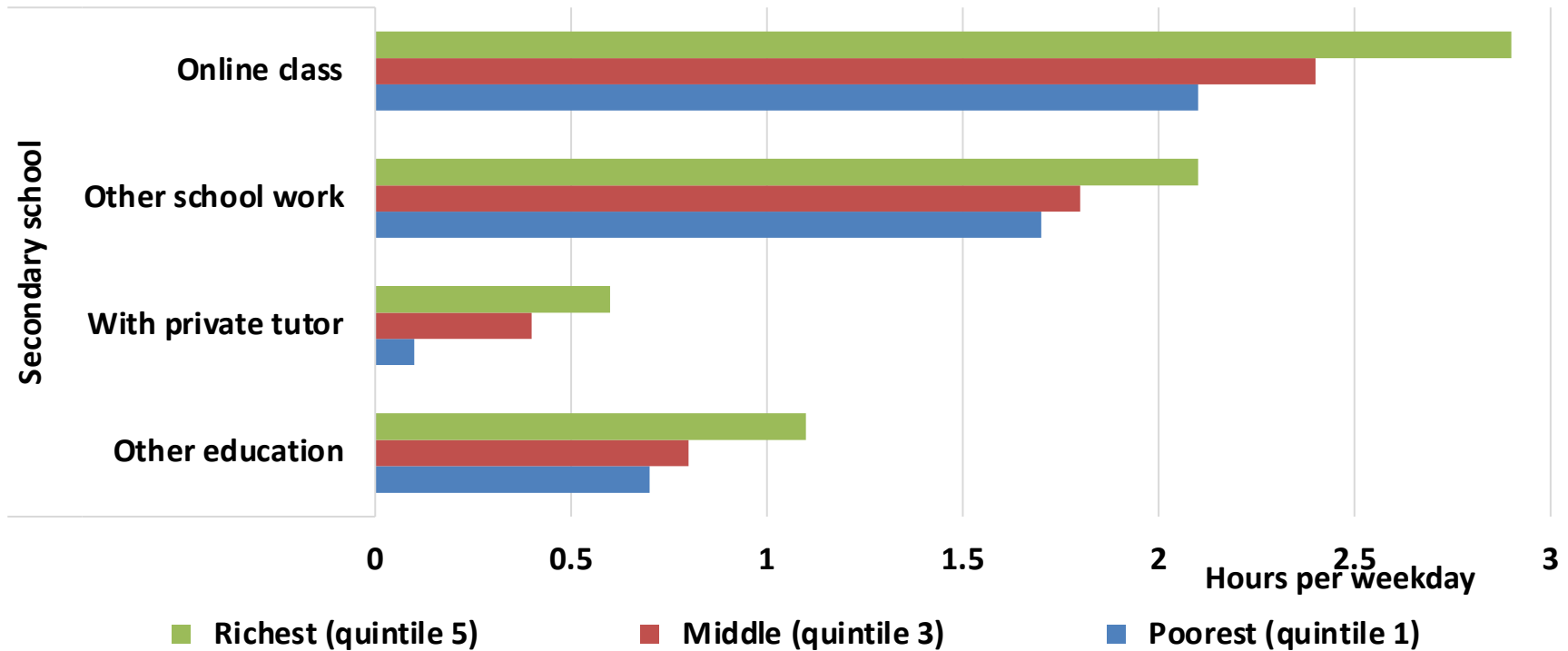
Source: Stancheva (Economic Policy, 2021)

# Loss of learning: Variation in children's learning activities (hours per day) conditional on socio-economic background.



Source: UK analysis of lockdown. Andrew et al. (IFS, 2020).

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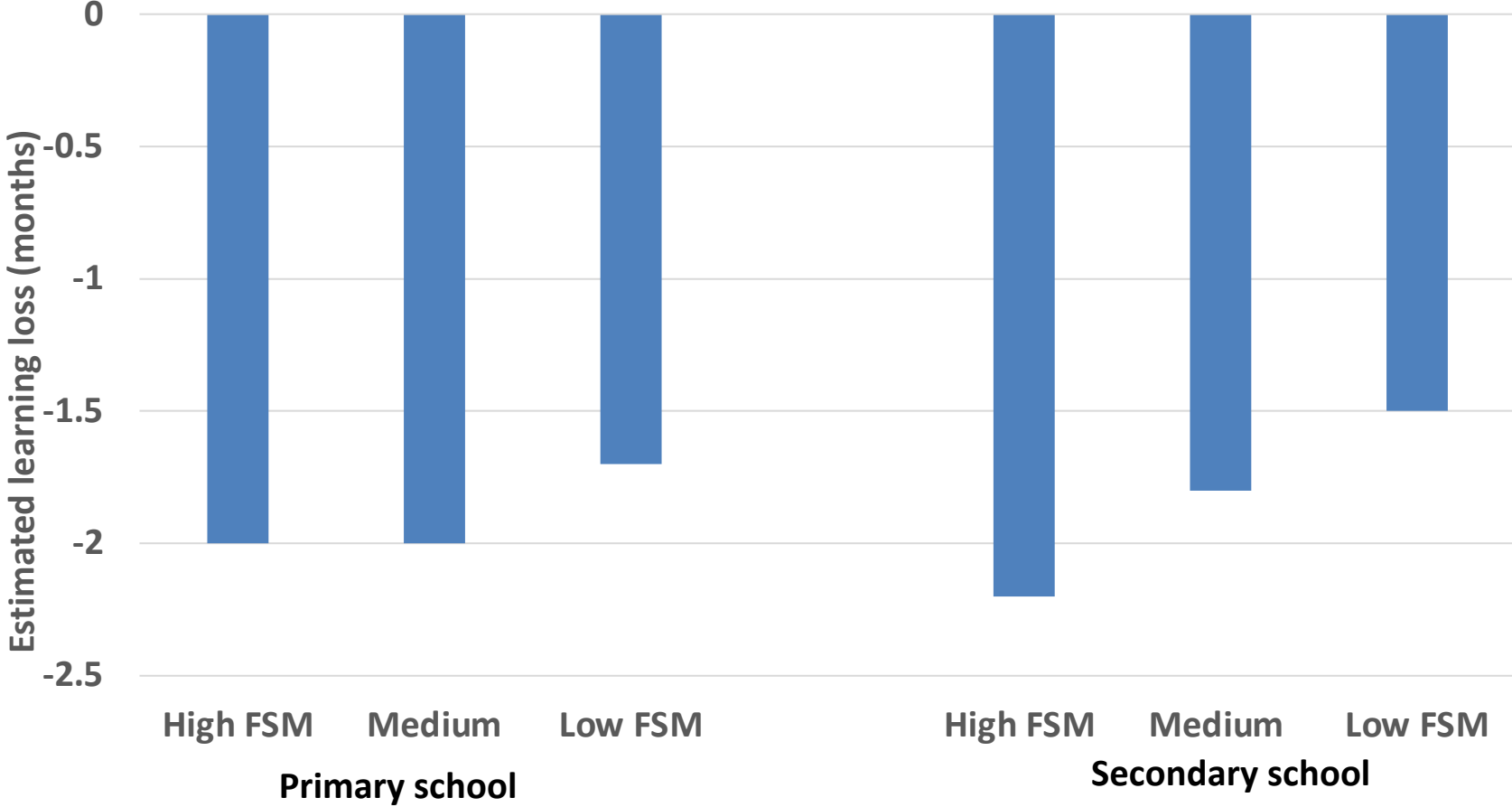


Source: UK analysis of lockdown. Andrew et al. (IFS, 2020).

Children in better-off families spent more on nearly every educational activity than their peers from less well-off families.



# Loss in learning: Mean learning loss in reading for primary and secondary aged pupils by level of severe disadvantage



From UK [DfE \(2021\)](#): - High FSM (Free School Meals) = 25%+, Medium FSM= 10%-25%, Lower deprivation: <10%.

# Loss in learning: Change in Math Lessons Completed in the U.S. Relative to January 2020, by income group

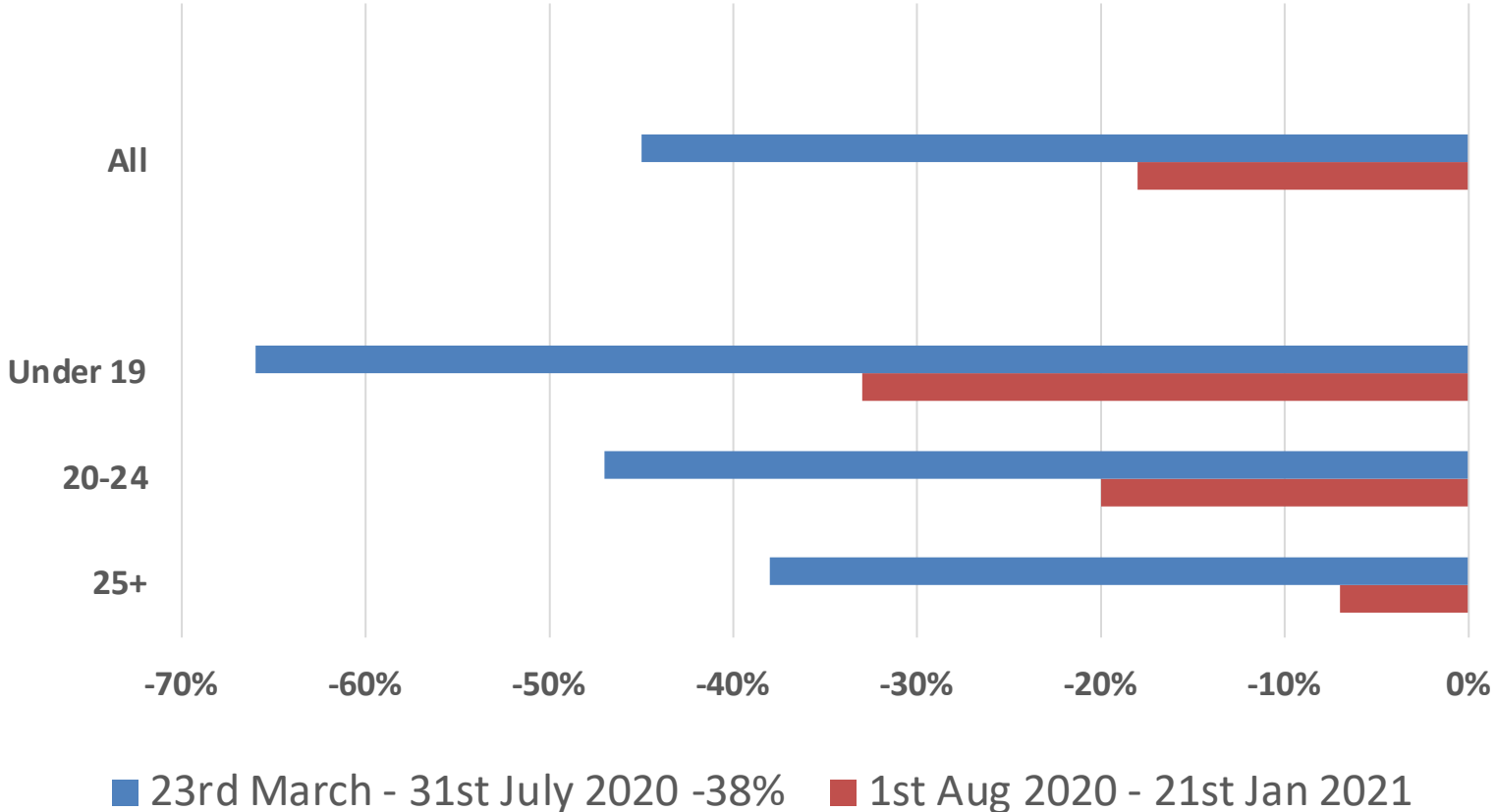


Source: Stantcheva (2021), figure from Chetty et al. (2020).

Notes: Shows the change in online math assignments completed by students in the U.S. relative to January 2020, by three groups of schools, ranked into quartiles based on their share of students eligible for free or reduced price lunches.

# Loss in learning: work-related training and apprenticeships.

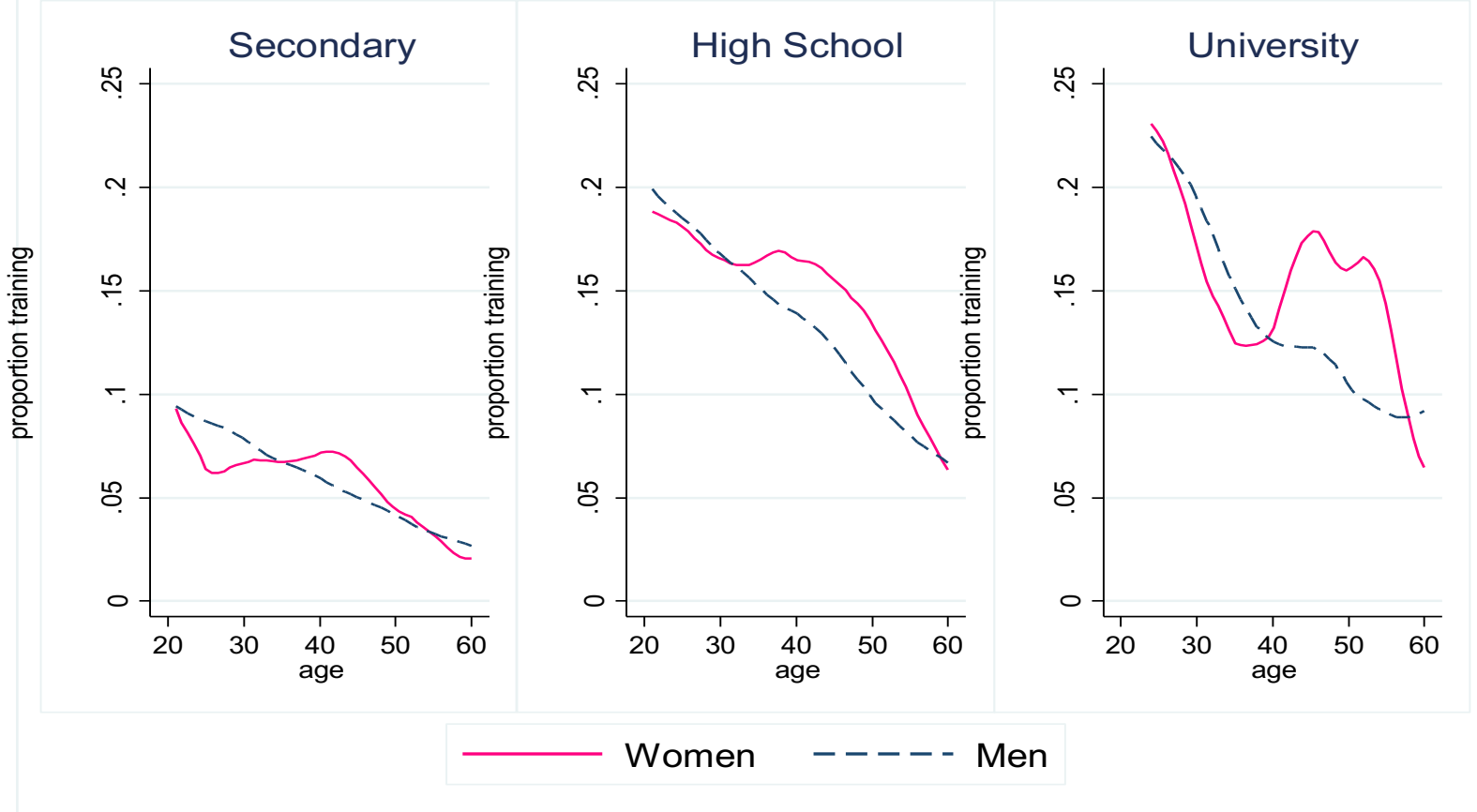
Change in number of Apprenticeship starts during pandemic compared to same time a year earlier, by age



Source: UK <https://researchbriefings.files.parliament.uk/documents/SN06113/SN06113.pdf>

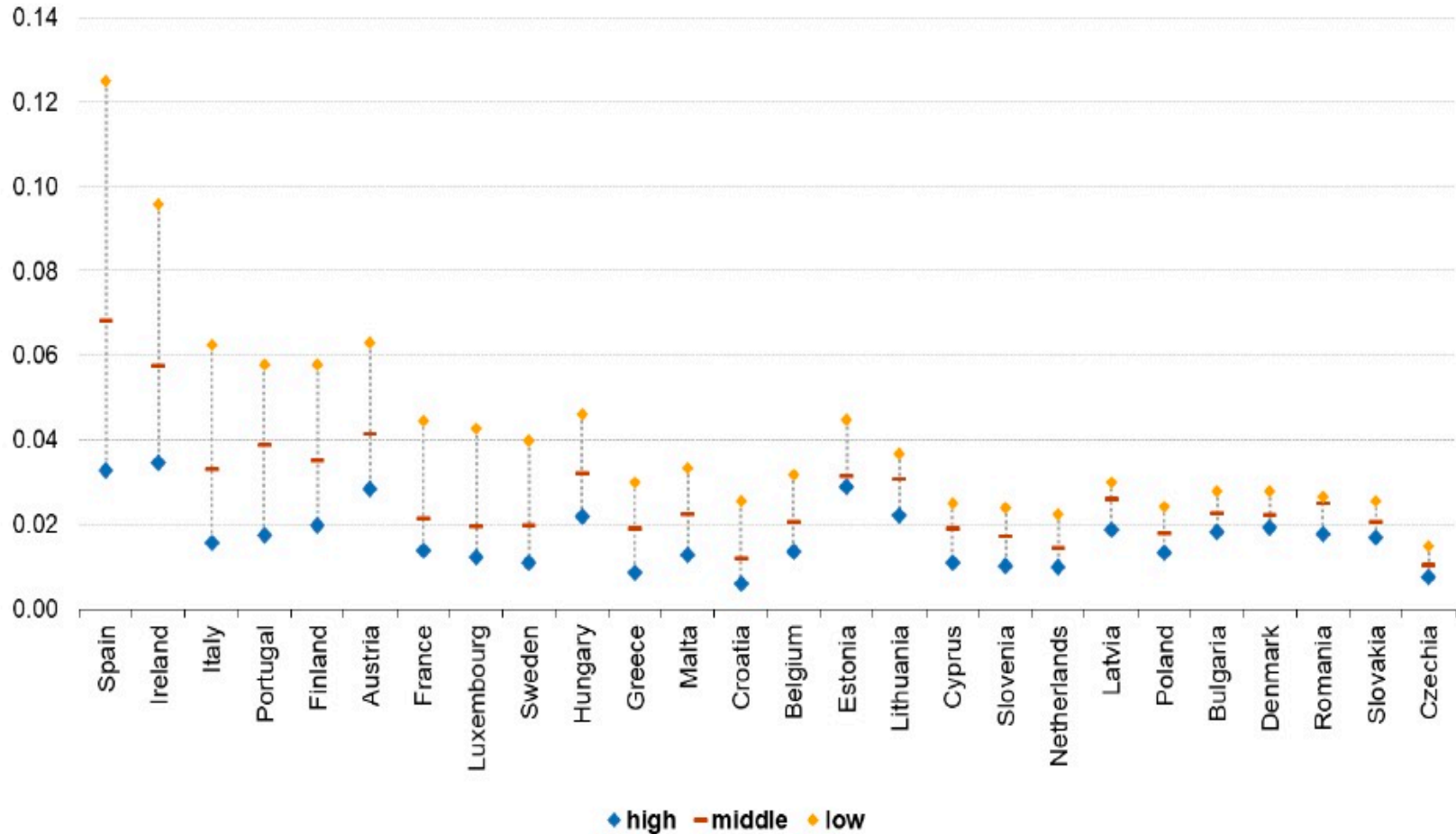
# Training was already low and strongly complementary with education

## Prevalence of training over past year All training, 50+ hours



Source: Blundell, Costa-Dias, Goll and Meghir (2021), Notes: Work-related training UK HLS

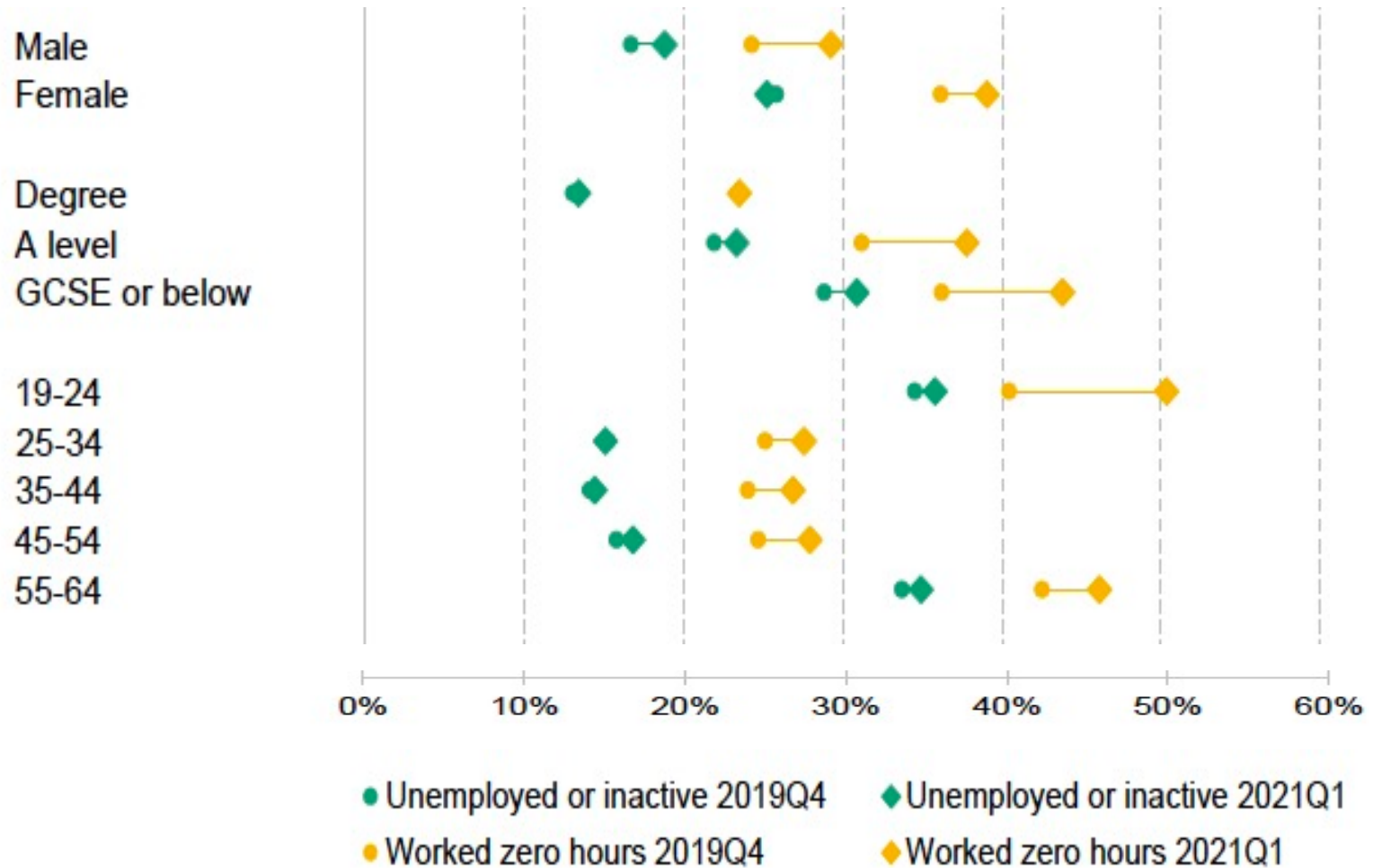
## II. Loss of work: Risk of job loss in Europe between first and second quarter of 2020, by income and country



Source: Stantcheva (2021).

Notes: Figure from Eurostat, Covid-19 labor effects across the income distribution (December 2020).

# Loss of work: Share not working, by gender, education and age, UK 2019Q4 and 2021Q1

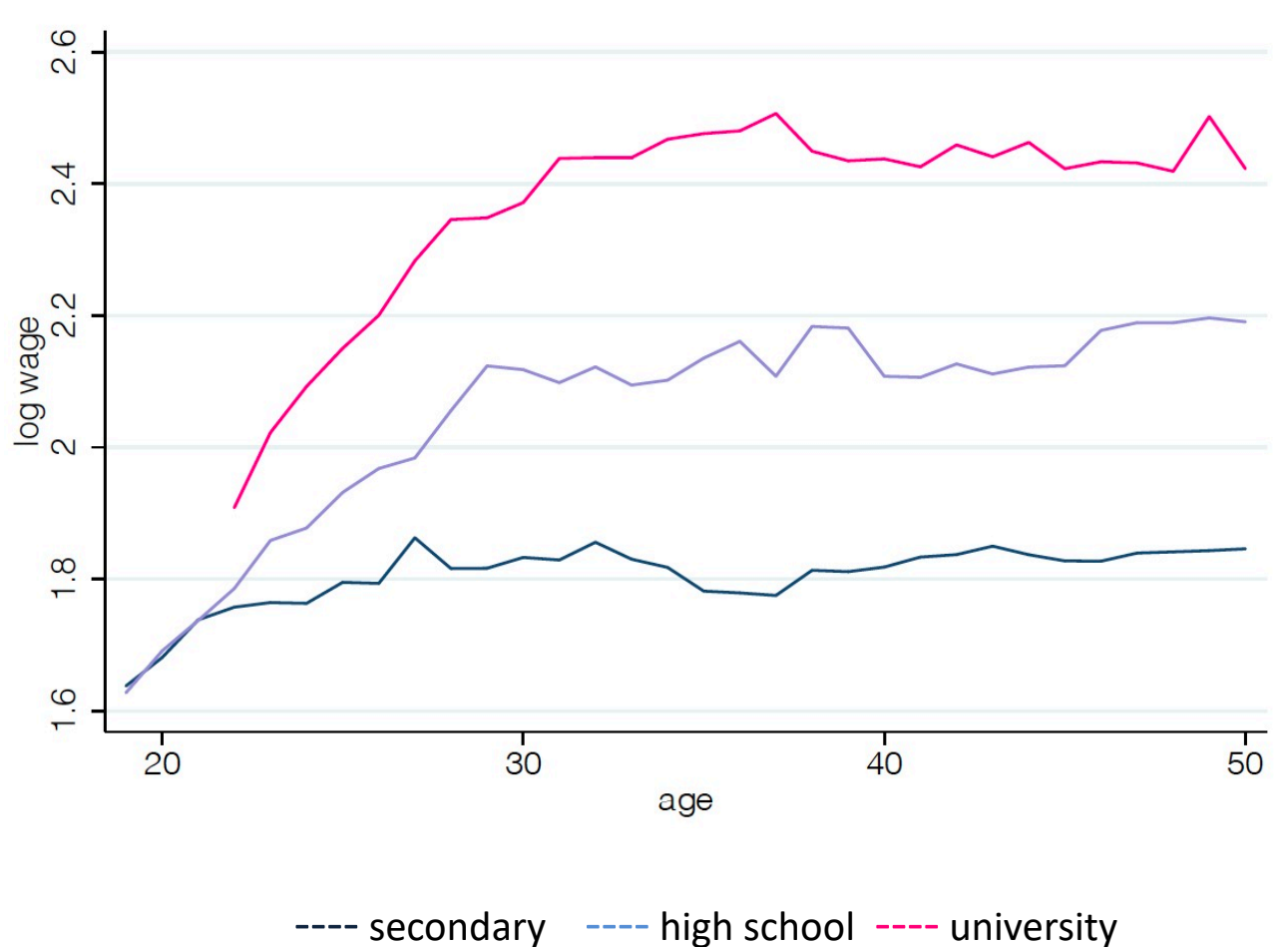


Source: IFS 2021, UK Quarterly Labour Force Survey

Notes: Includes people aged 19–64.

# It's been increasingly depressing for low educated in the labour market

## divergent wage-age profiles by education with age

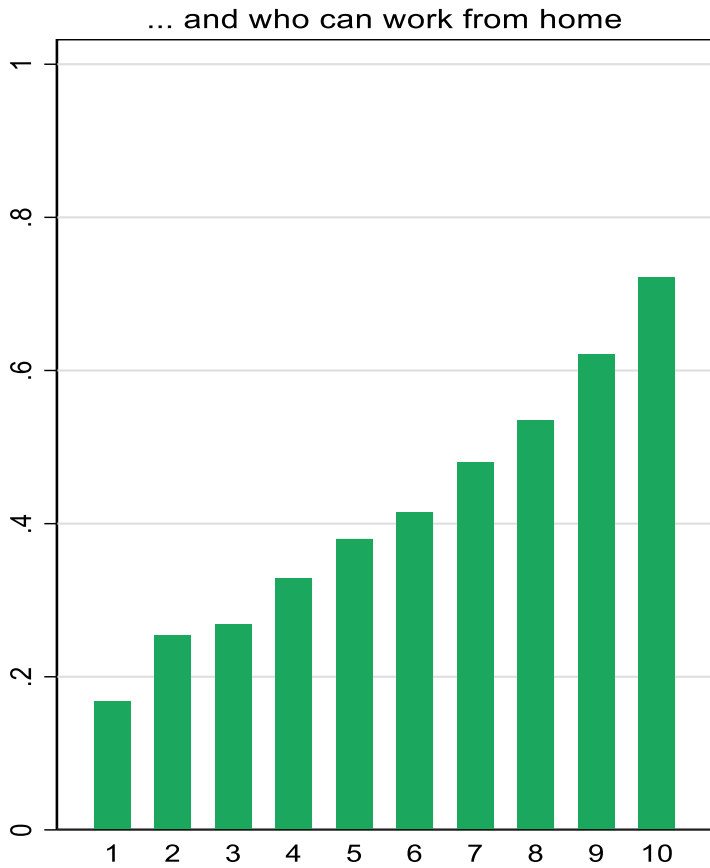
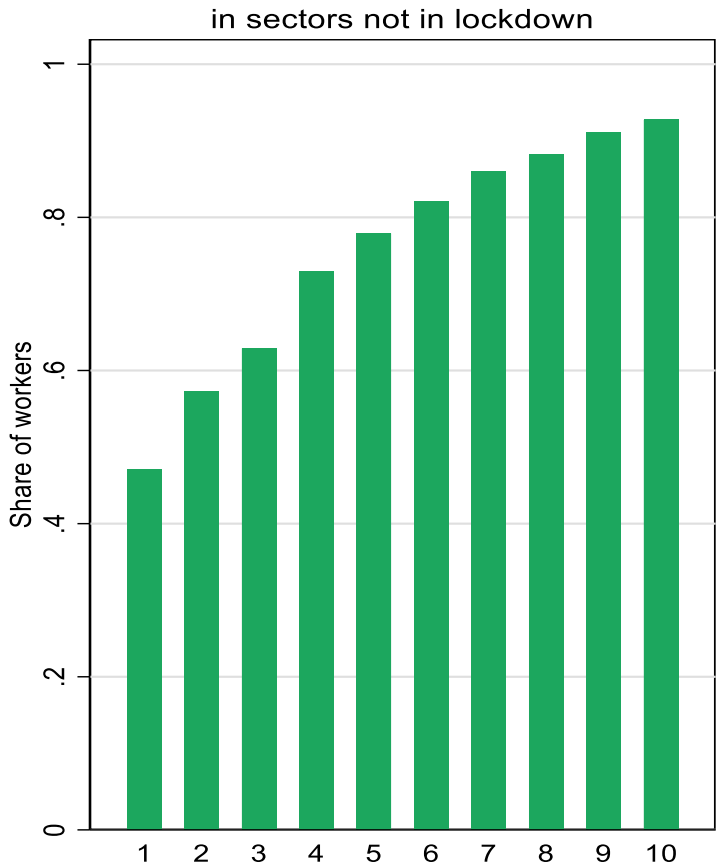


See similar for UK men and for recent cohorts in the US and France.

Source: Blundell, Costa-Dias, Meghir and Shaw (2016, updated)

Notes: Average log hourly wage, Women, UK HLS, 1991 -

# Loss of work: Share of workers in sectors not in lockdown and who can work from home, excluding key workers, decile of earnings distribution

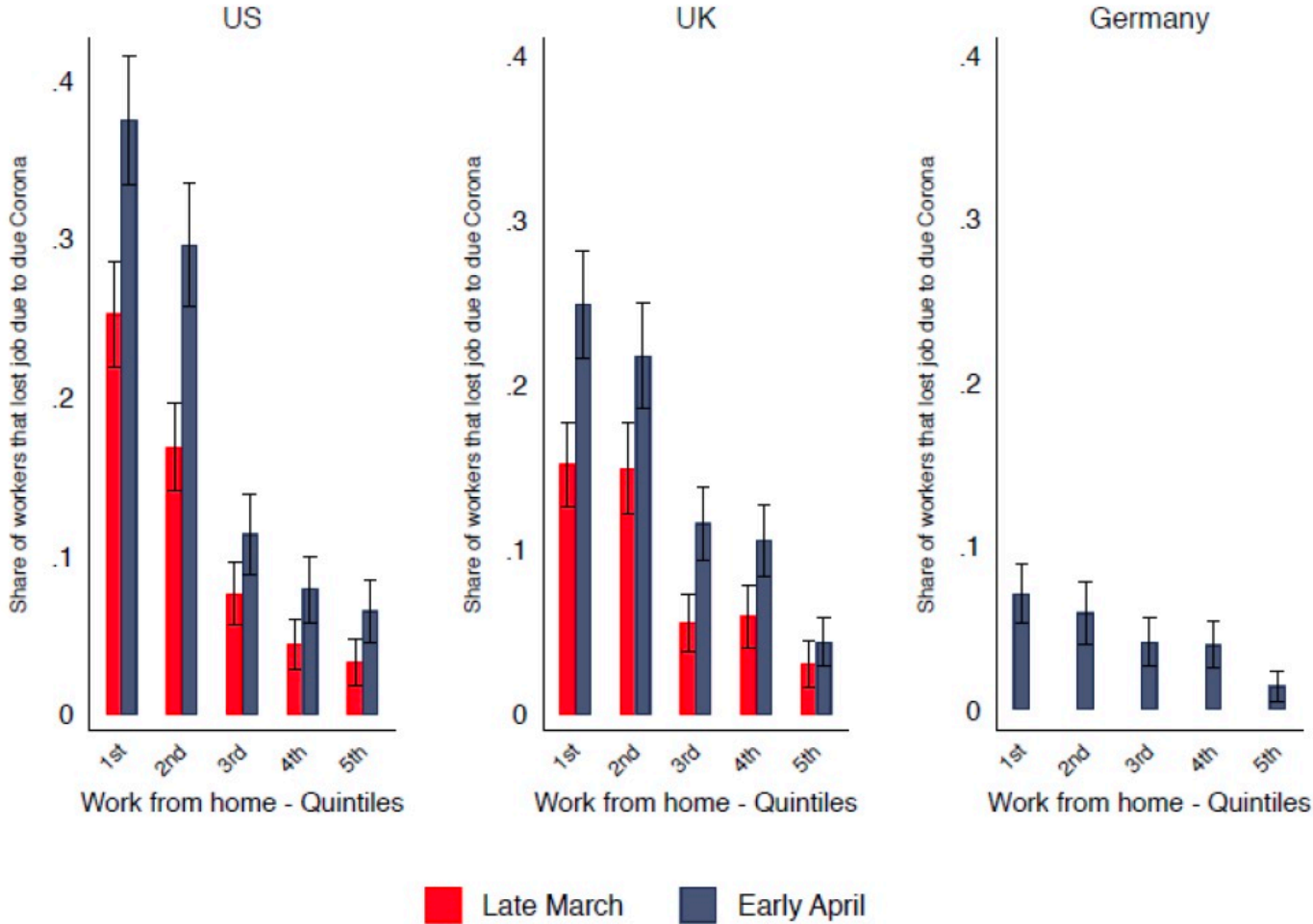


Source: Blundell et al (IFS, 2020), Figure 8,  
Notes: UK Labour Force Survey Data



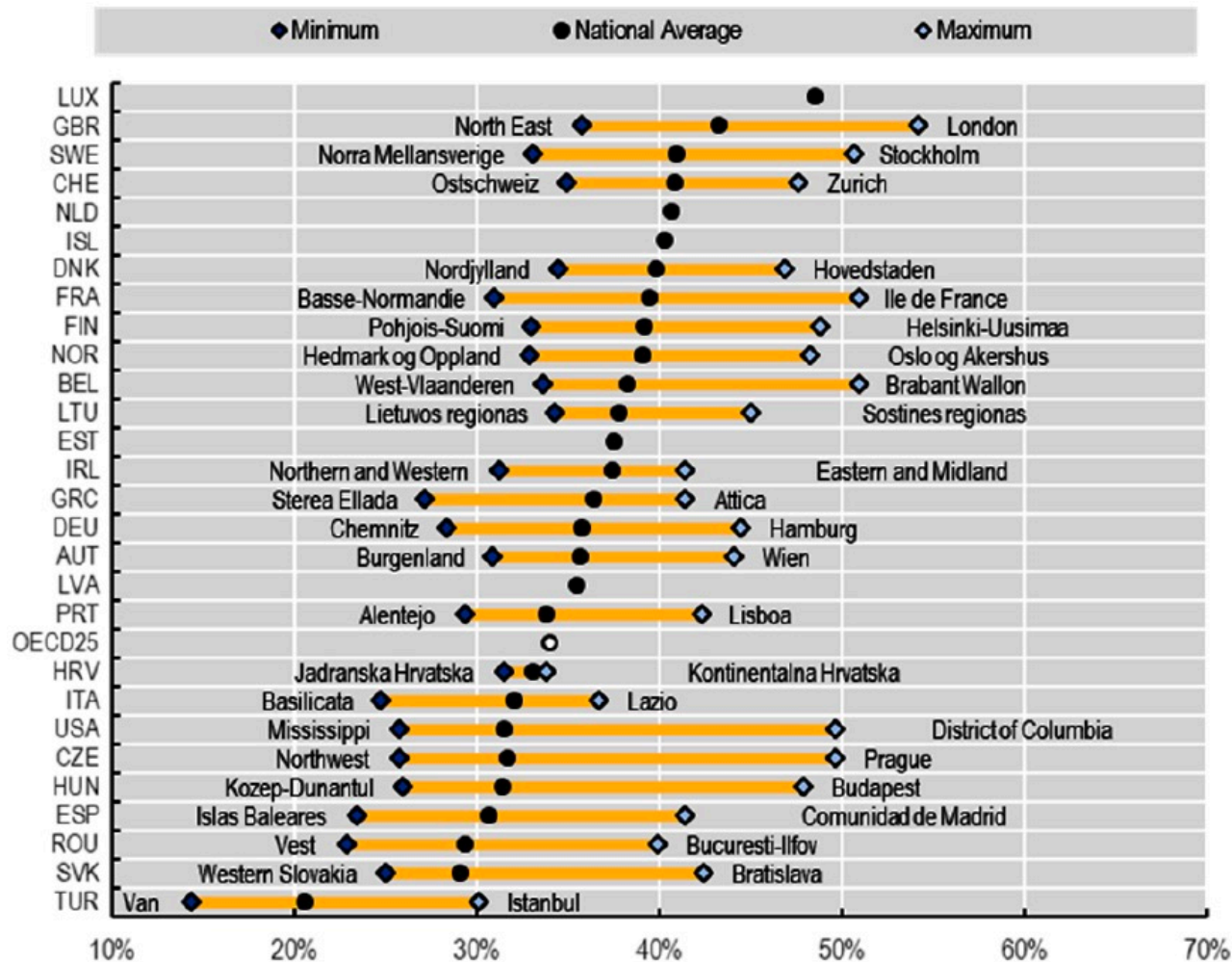
# Loss of work: Job Loss by tasks that can be done at home:

- much smaller gradient in Germany



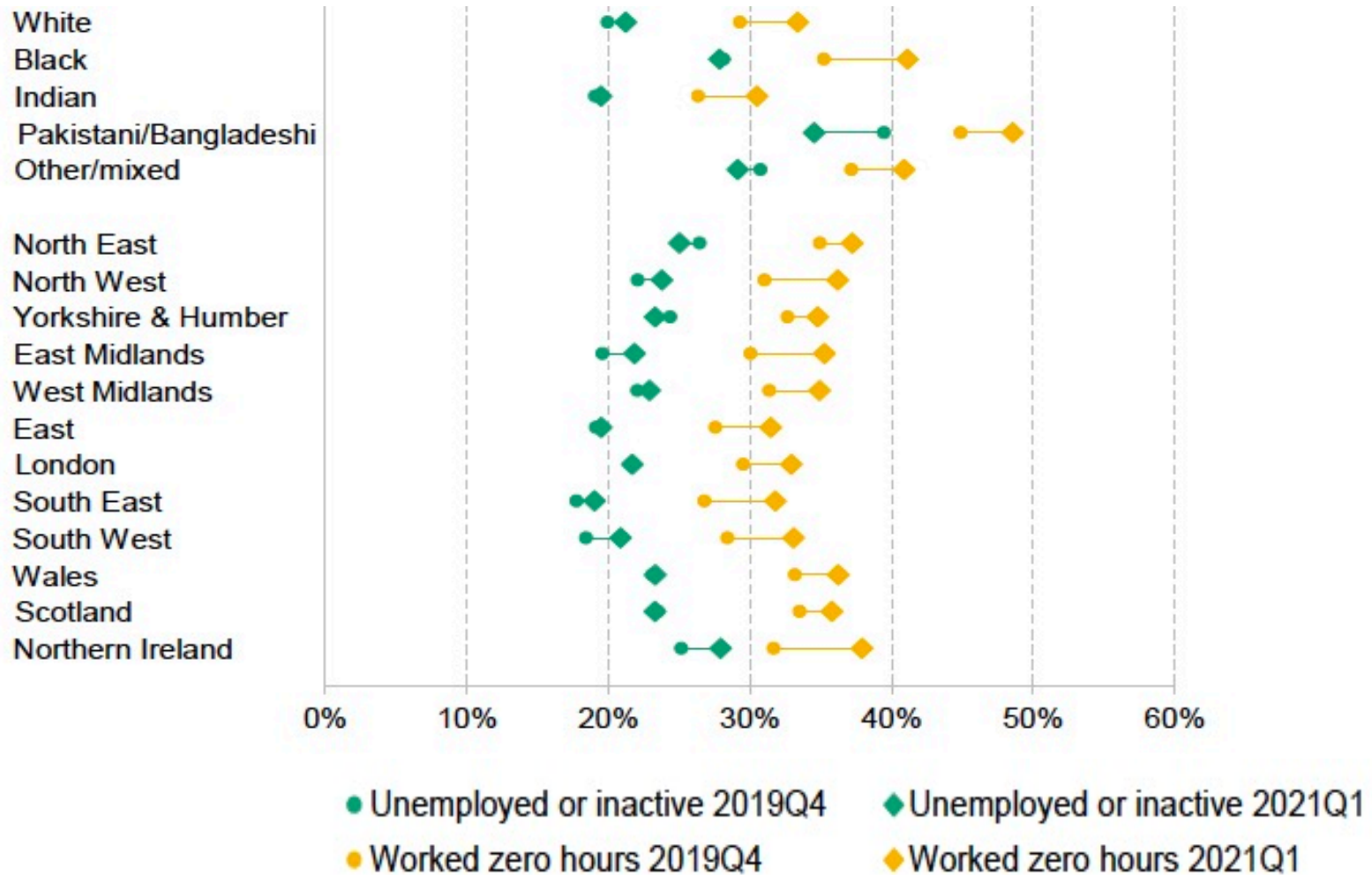
Source: Adams-Prassl et al. (2020b)

# Loss of work: Share of jobs that can potentially be performed remotely, between and within countries in Europe, 2018



Source: Stantcheva (2021), figure from Ozguzel et al. (2020).

# Loss of work: Share not working, by ethnic group and region, UK 2019Q4 and 2021Q1

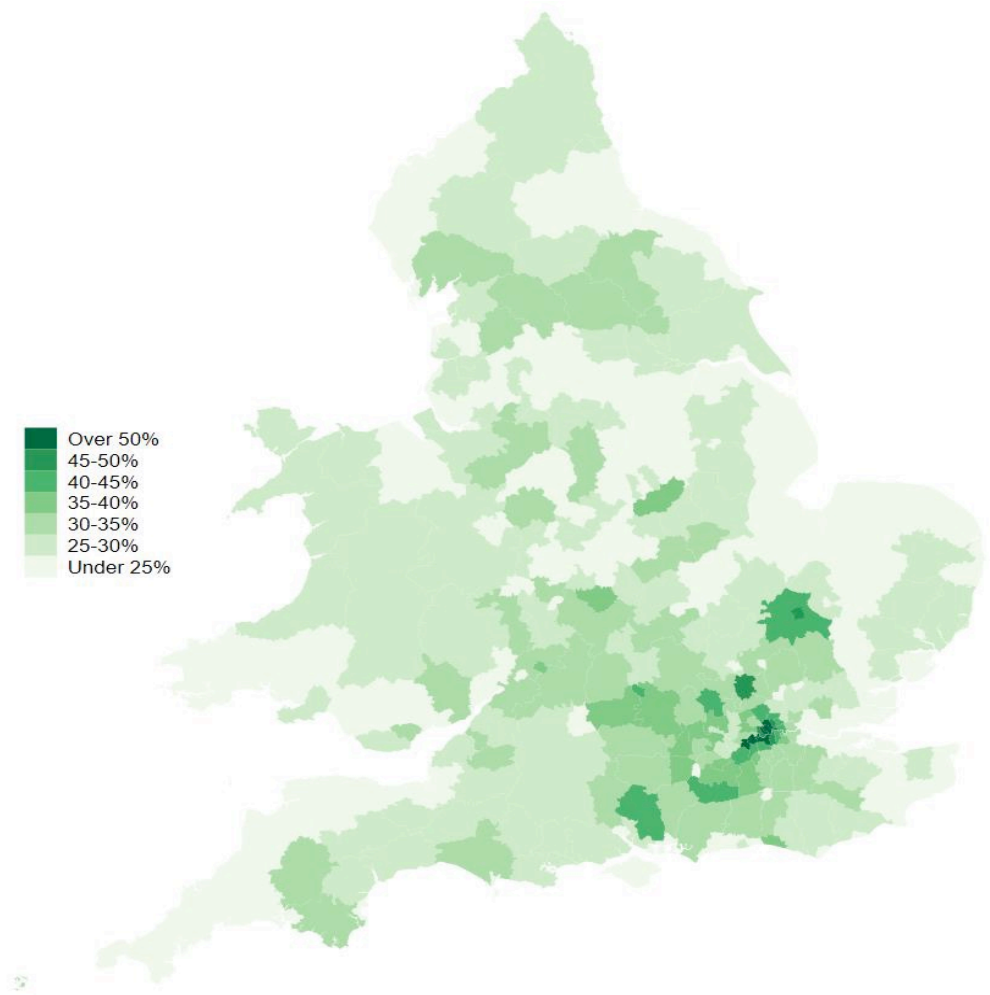


Source: IFS UK Quarterly Labour Force Survey

Notes: Includes people aged 19–64.

# Regional disparities in education

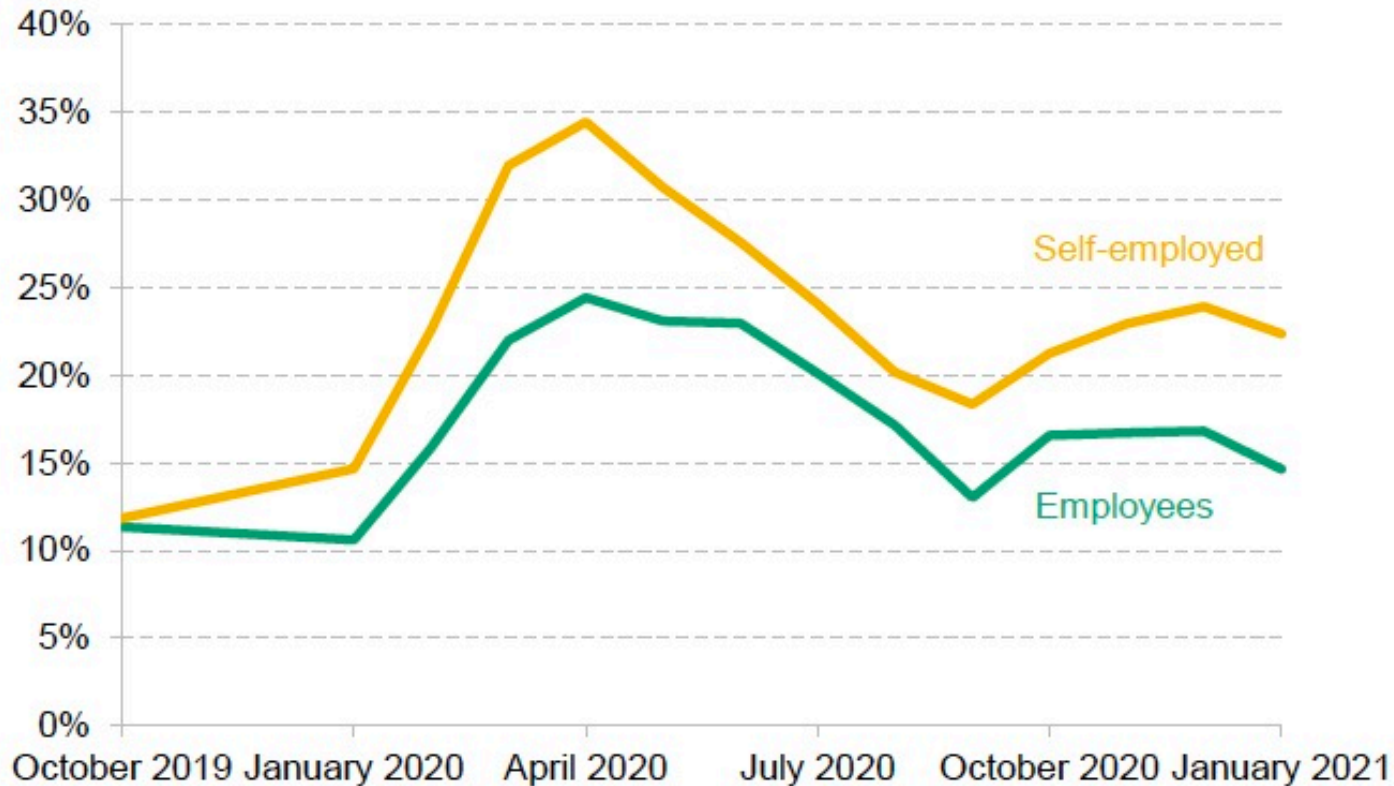
## Share of UK Population with Post A-level Qualifications



Source: Blundell et al. 2020 (Figure 1).

# Loss of work: larger impact on self-employed

Share of workers working zero hours in the last week, by employment status

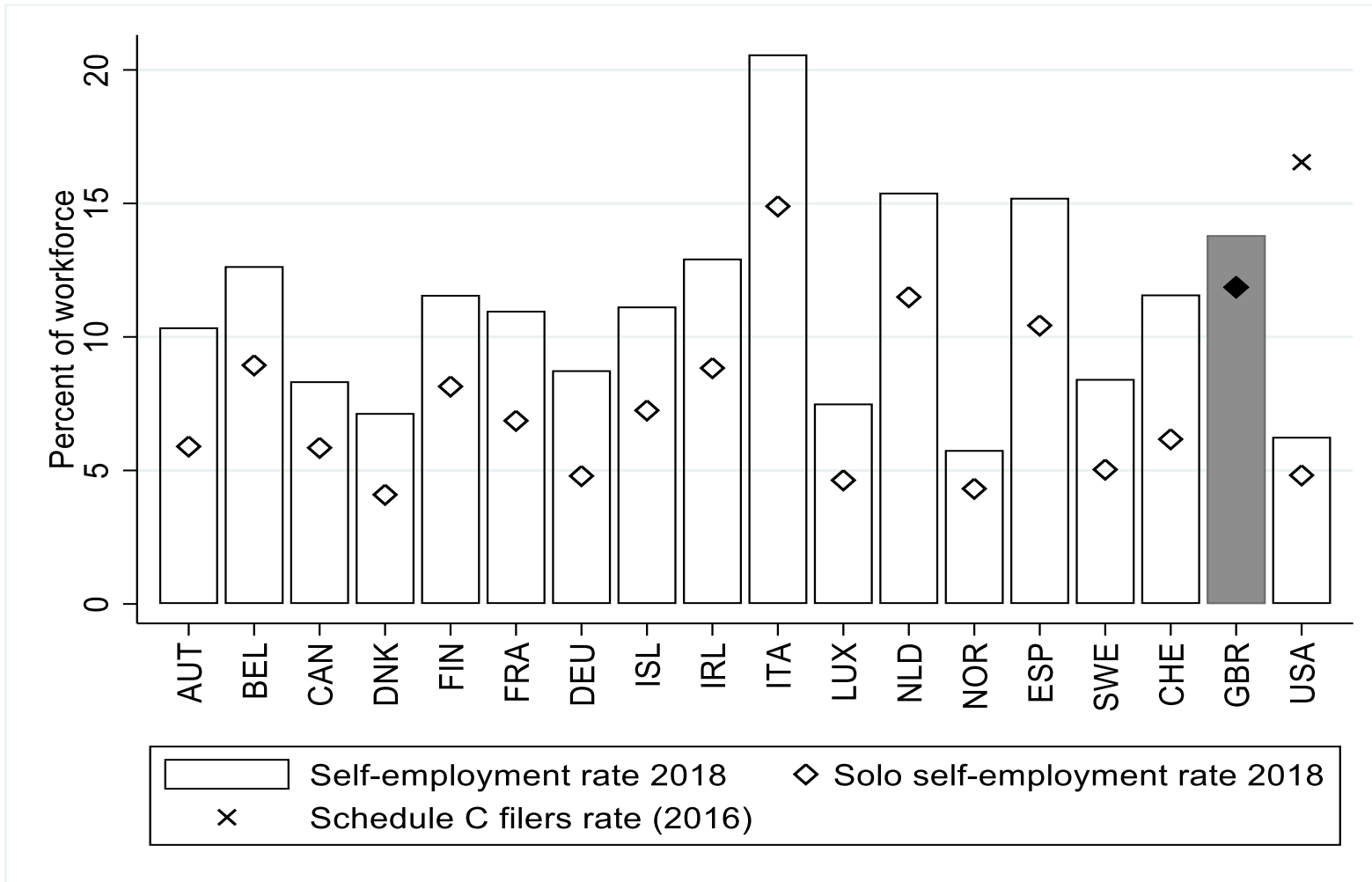


Source: IFS, 2021

Notes: UK Quarterly Labour Force Survey. Includes people aged 19–64.

# Self-employment across countries

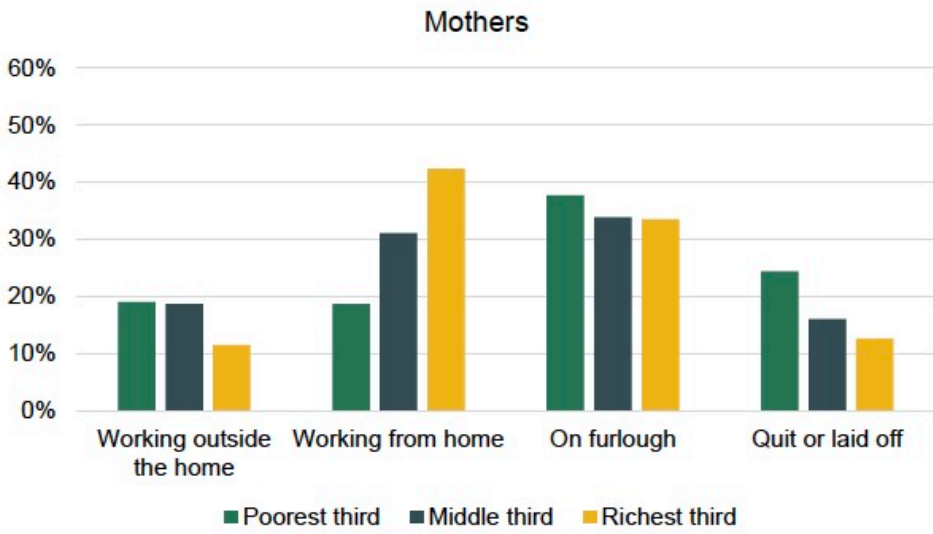
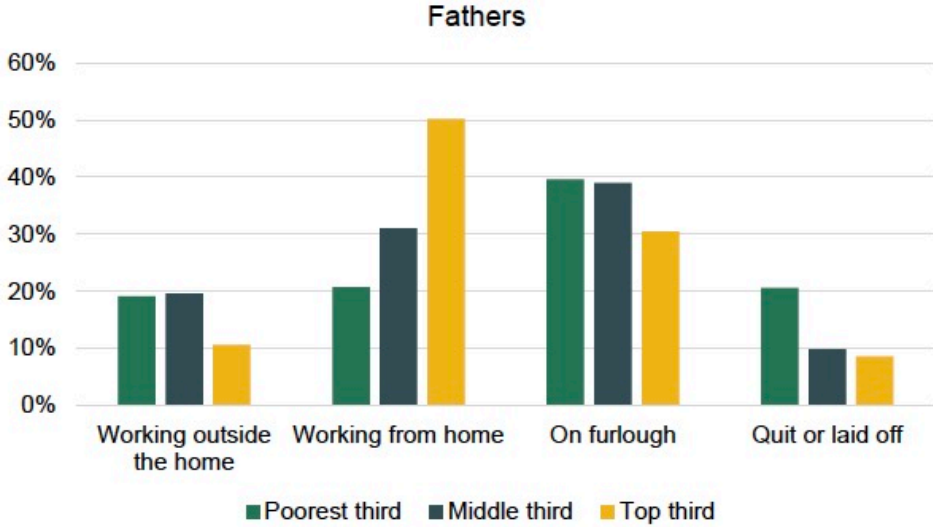
## Self-employment as percent of workforce



Source: Giupponi and Machin (Deaton Review, IFS, 2020)

### III. Gender and childcare:

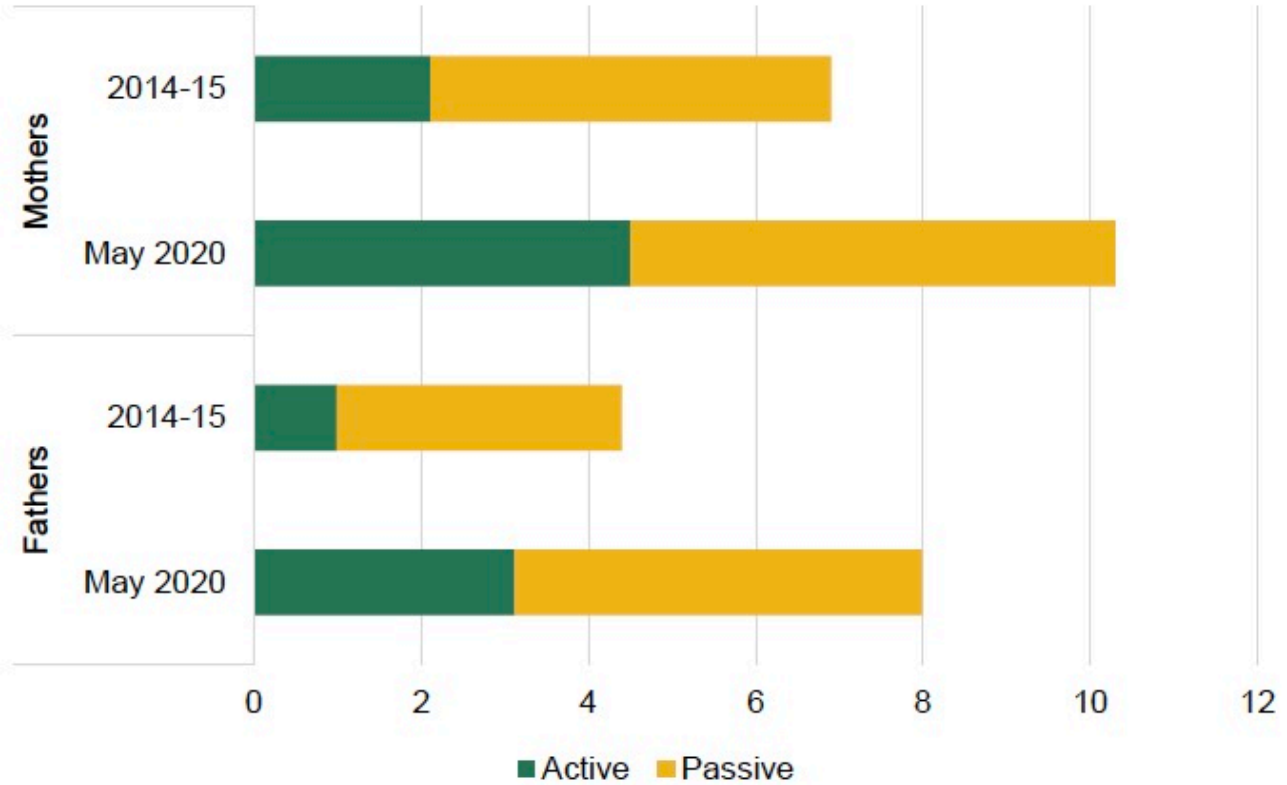
Current engagement in paid work by gender for parents who were in paid work in February 2020 by pre-lockdown family income



Source: Andrew et al (IFS, 2020)

# Gender and childcare:

Hours spent on active and passive childcare, before and during the lockdown

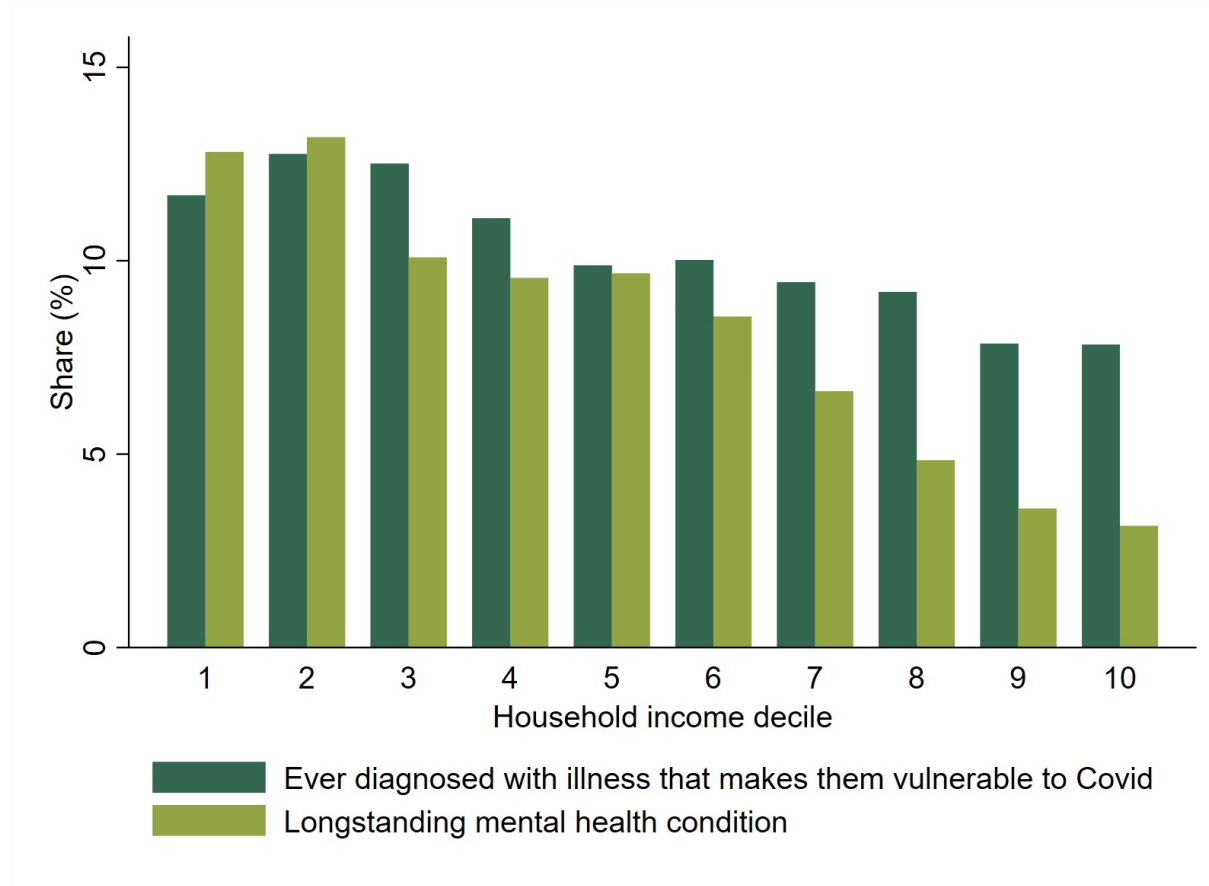


Source: Andrew et al (IFS, 2020)



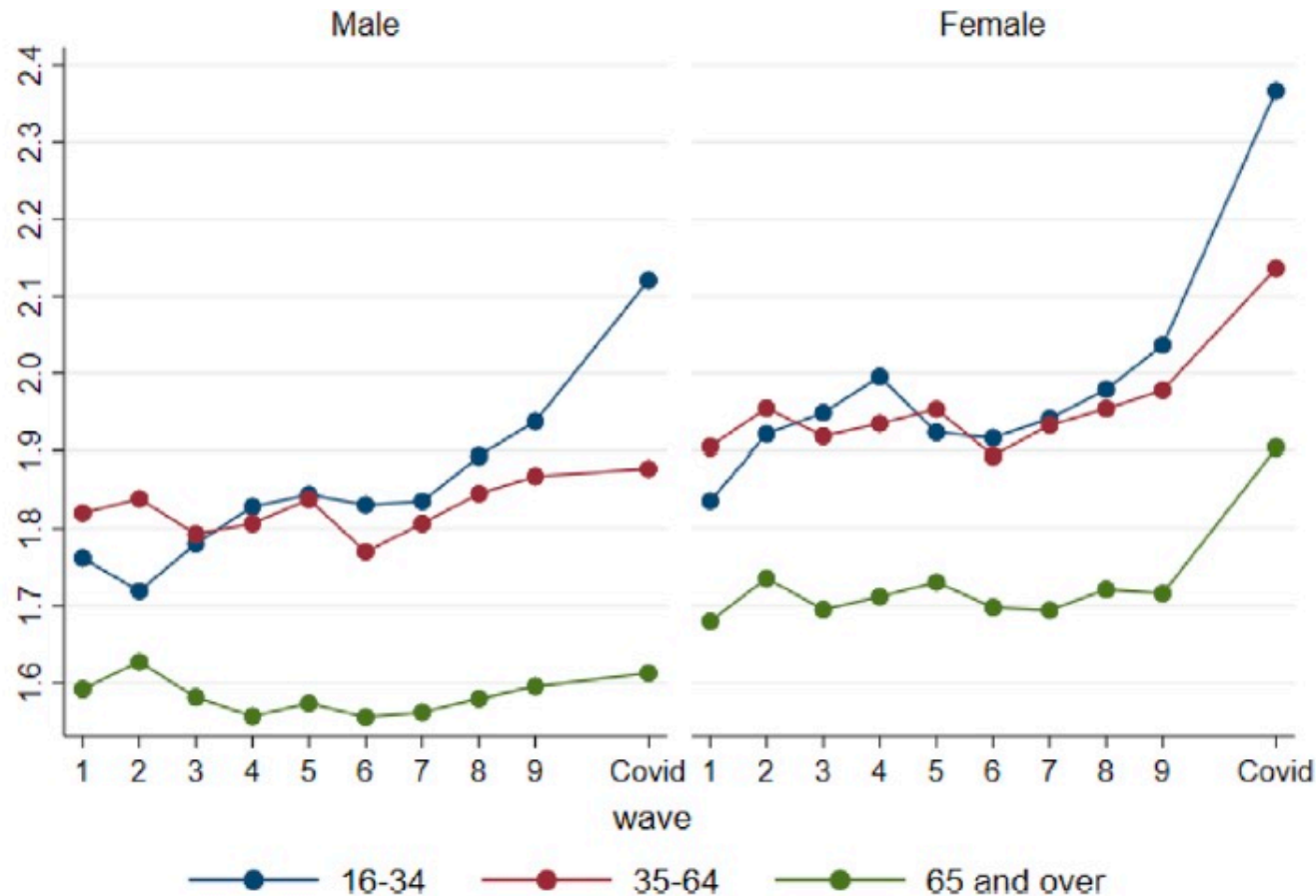
# IV: Increase in isolation and poor mental health

## Medical vulnerability to virus by household income



Notes: IFS calculations using UKHLS (ever diagnosed) and FRS (mental health). Diagnoses include asthma, congestive heart failure, coronary heart disease, emphysema, chronic bronchitis, cancer or malignancy, diabetes and high blood pressure. Mental health based on self-reported mental health condition lasting or expected to last over 12 months. Net incomes equalised using modified OECD scale.

# Unhappy or depressed, by gender and age group, UK HLS waves 1–9 (January 2009 to May 2019) and April 2020

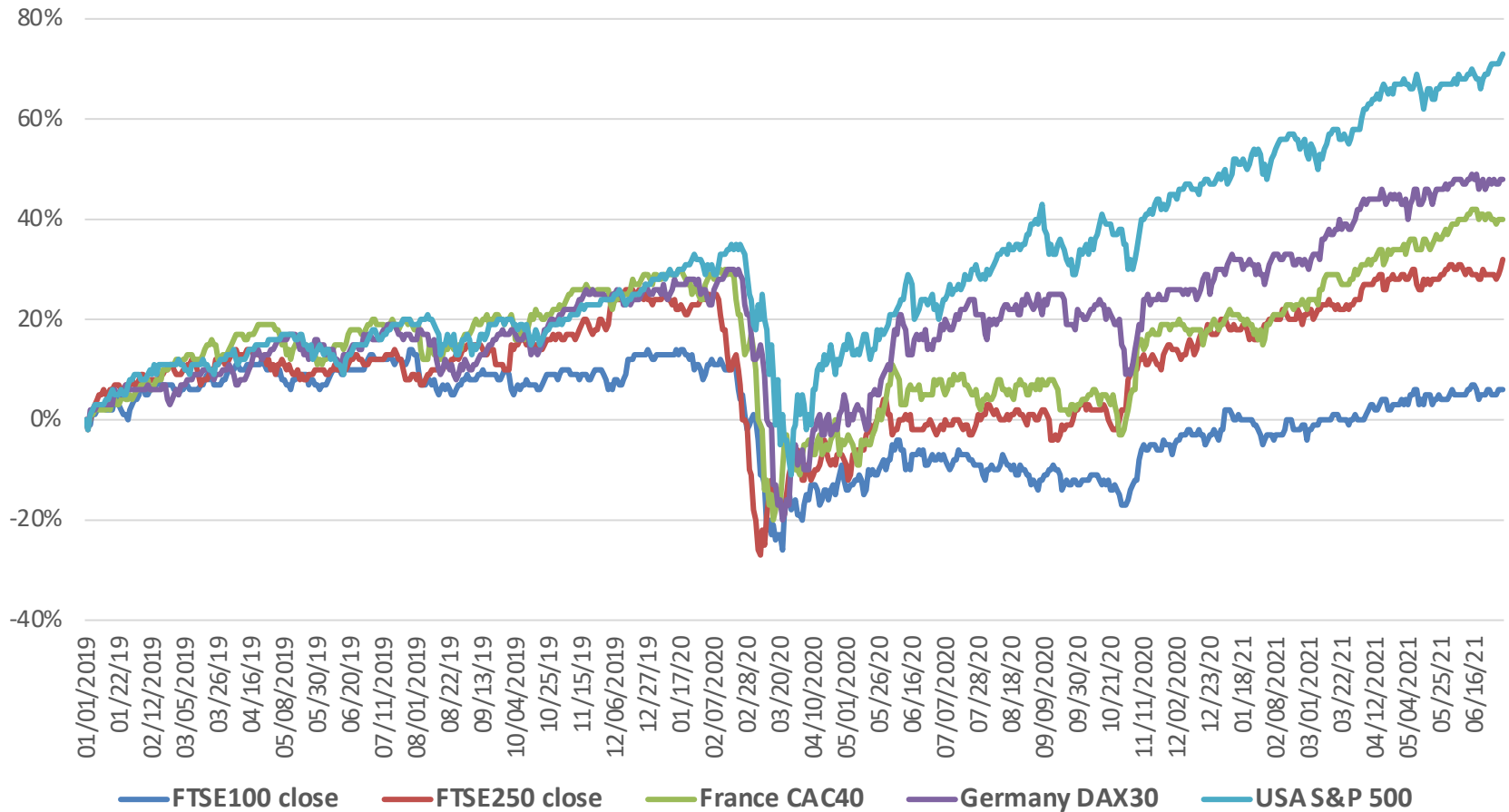


Notes: UKHLS waves 1–9 and April COVID-19 survey.

Source: Banks and Xu (IFS, 2021)

# V: Increase in savings, housing and financial wealth inequalities.

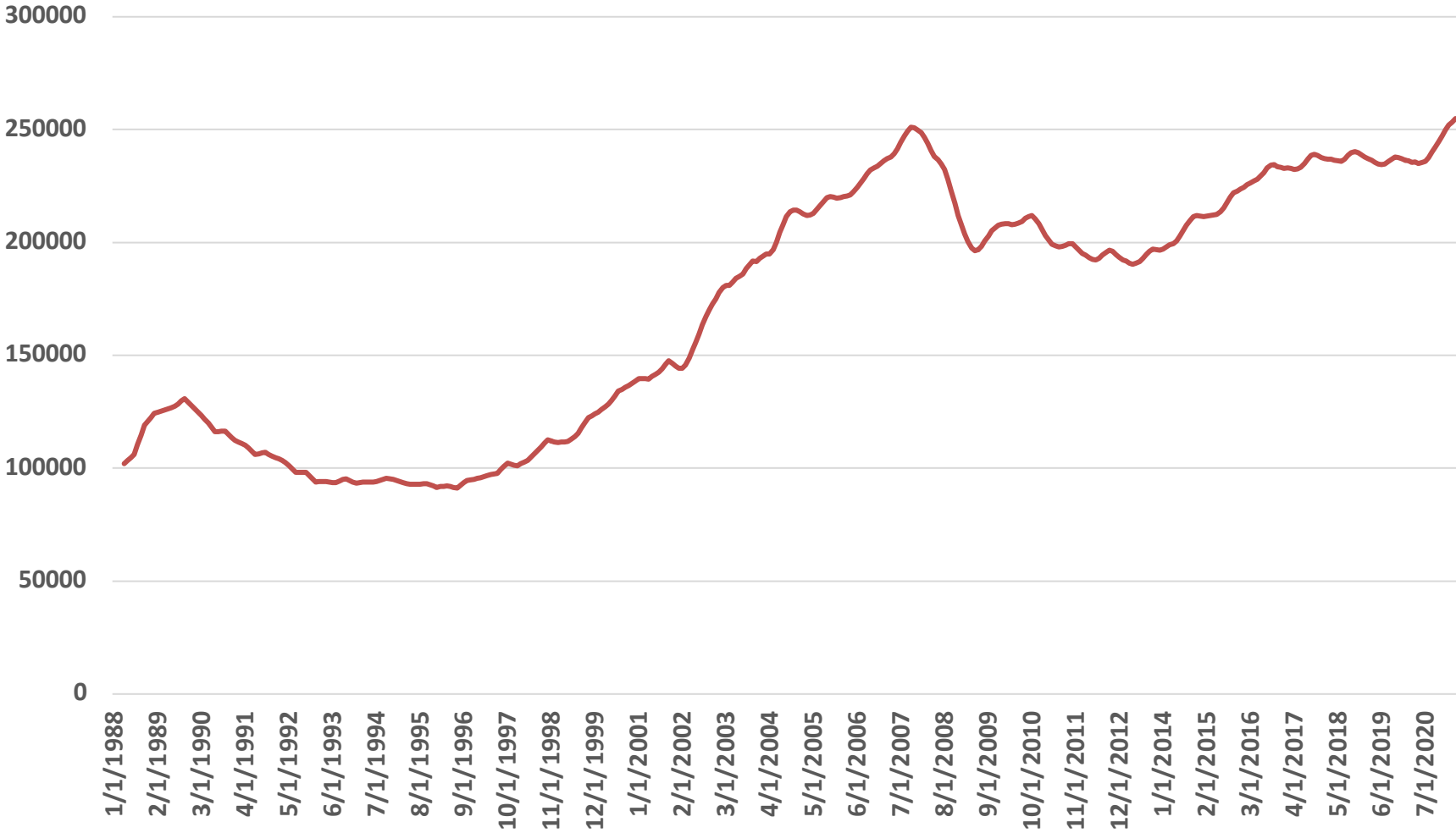
## Change in major stock market indices in UK, USA, France and Germany since January 2019.



Source: Wall Street Journal

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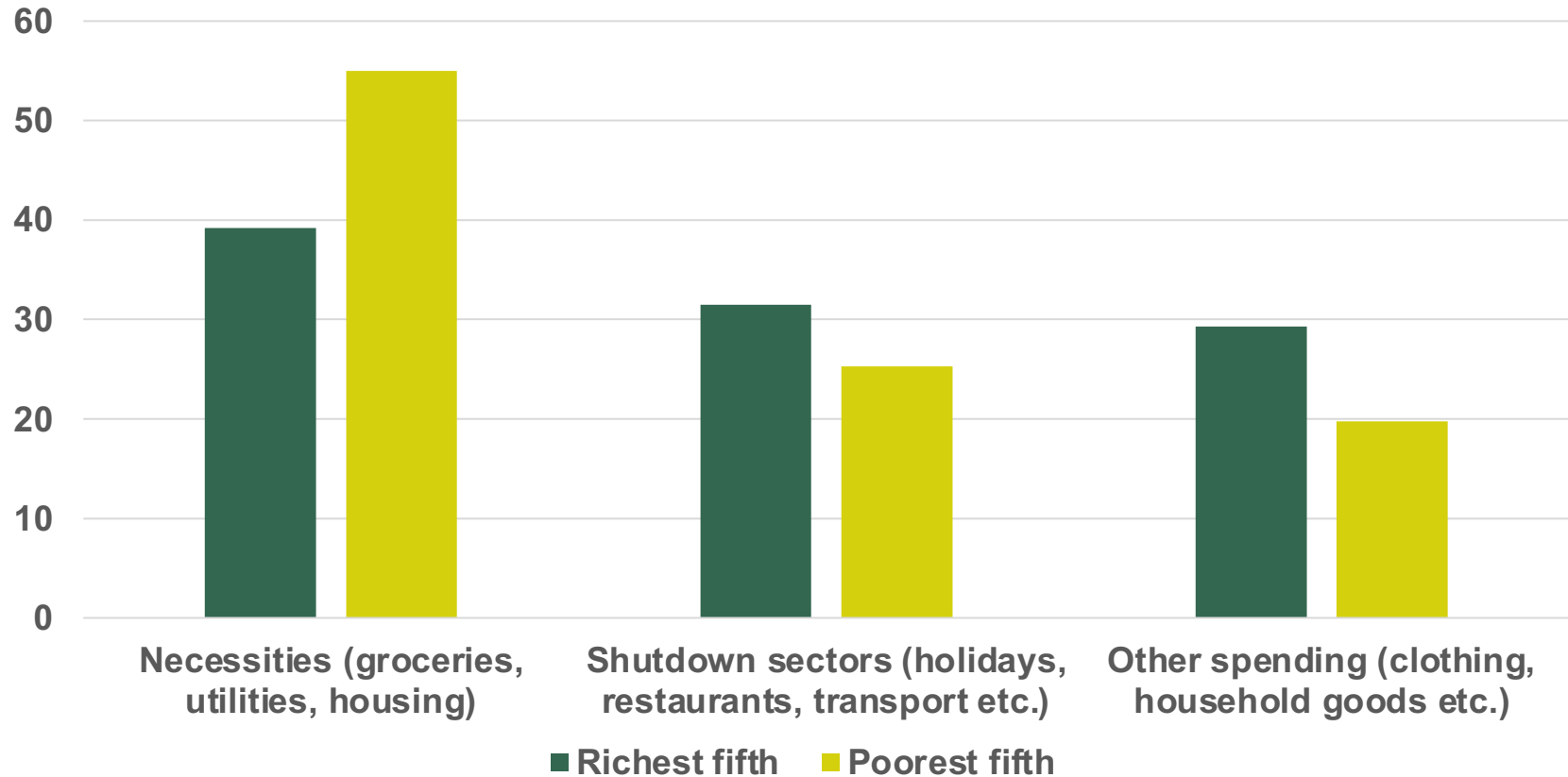
## Real average UK house prices 1988-2021 (£, April 2021 prices)



**Notes: CPIH deflated, April 2021 prices. FROM ONS.**

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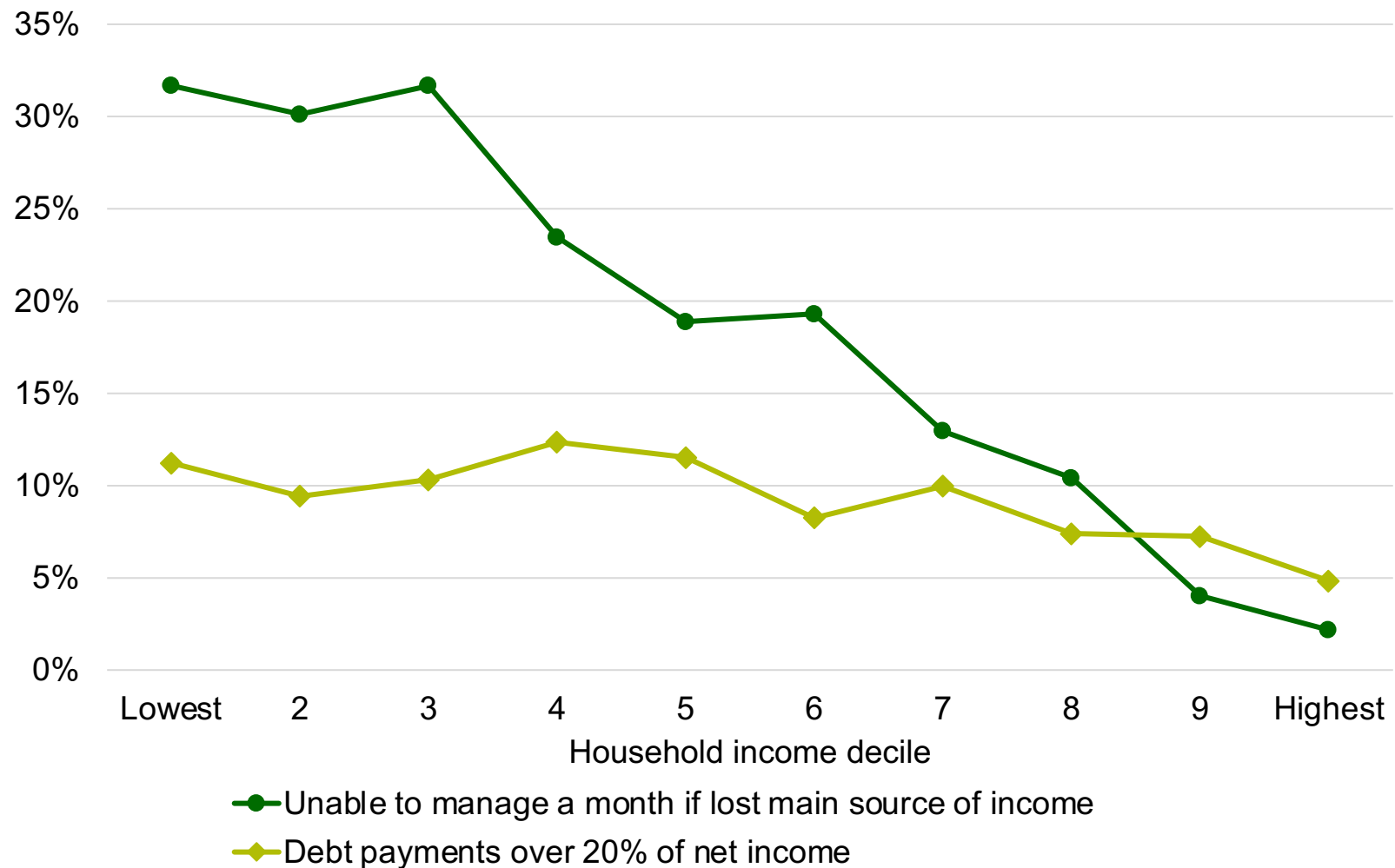
Average share of spending on different categories for the poorest and richest working households



Source: [Crawford et al. 2020](#) using the ONS Living Costs and Food Survey, 2017.

Notes: Figures are given as a share of total household spending including mortgage interest and capital costs. Calculations are restricted to households where the household head is working. All figures are weighted using LCFS survey weights. Income quintiles are defined using household income equivalised using the adjusted OECD equivalence scale.

# Liquid savings and debt by household income



Source: [Sturrock \(2020\)](#) IFS calculations using UK Wealth and Assets Survey (benefit unit level)

# The longer-term inequality challenges

## Educational inequalities

- The loss of learning hit people from poorer backgrounds harder, while higher income parents are more able to work from home, have space to educate their children and increased savings. Access to technology is key reason poorer kids benefited less from online learning.

## Wage and employment inequalities

- Increased reliance on technology and home working is favouring the educated, while young low earners mostly in shut-down sectors, with self-employed more likely to report negative impacts.

## Generational inequalities

- Under 35s more likely to have lost work and reduced earnings and those who would have entered work face long-term scarring from lost training & work experience.

## Gender inequalities

- Childcare and housework has fallen far more on mothers than fathers.

## Wealth inequalities

- The older higher educated have seen their financial and housing assets increase.

## In sum

- Younger generations with poor parents are hit most by learning loss, labour market disruption and skill miss-match with reduced opportunities for training & career progression.
- Young mothers particularly impacted when progress on gender gap already stalled.

# Designing post-covid policy mix to address key inequality challenges

## Educational disadvantage and diverging educational outcomes.

- large scale and long-term programme required to offset the learning loss in multiple subjects over a long period, unusual in recessions but returns are high,
- digital access to allow all pupils to harness the benefits of technology in schools and enable people to access training opportunities at distance.

## Vocational skills and a path to good jobs.

- re-think vocational training to focus on skills that complement wage progression, oriented towards new (e-commerce and green) technologies and local sector needs,
- focus on skills and matches with firms that deliver good jobs: career progression and opportunities for mobility.

## Increasing earnings inequality and diverging life-cycle wage profiles.

- avoid incentives for part-time work in welfare system,
- soft skills are important for wage progression, particularly for low educated.

## Stalling gender gap in earnings and care.

- policies toward quality childcare provision and equality, with tax credits for training that replaces lost work experience of parents.

## Differences in prosperity between places.

- policies to reverse educational flight and enhance agglomeration.

## Increasing generational inequalities housing and wealth.

- enhance capital gains, corporate tax and inheritance taxation, a la Mirrlees Review.



# But there are opportunities .... to end on a positive note!

Changes in attitudes – a tipping point for changing social norms....

A desire for large scale policies to address long-standing inequalities....

- More people will have experienced the welfare state, which could change attitudes. Safety nets have been challenged by the fall of earnings and employment across the distribution. A new emphasis on social insurance?
- The large numbers of young lower earners coming out of lockdown could force a rethink of vocational training, focusing on skills to complement new technologies.
- The experiences of people working from home could provide the tipping point for a change in the way we work. Which might spread prosperity across regions.
- Women are more likely to be key workers, and any pressure to increase the pay of key workers could help reduce gender inequalities, as well as income inequality overall.
- The experiences of childcare among many more men could provide a change in social norms, generating a balance in childcare that has been so hard to achieve to date.
- Health, economic and educational disadvantage come together and shine a light on pockets of local deprivation, giving additional urgency for effective place-based policies that build resilient communities.

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*(based on new report joint with Monica Costa-Dias, Jonathan Cribb, Rob Joyce, Tom Waters, Tom Wernham and Xiaowei Xu)*

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“Inequality Was Bad –  
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