

CASE STUDY



Covid and people's incomes

Treasury uses Understanding Society to gauge impact of pandemic

The government's immediate response to the Covid-19 pandemic in March 2020 supported the poorest working households the most, according to analysis from the Treasury which used Understanding Society data.

The treasury document, *Impact of COVID-19 on working household incomes: distributional analysis as of May 2020*, also showed that the government's interventions were worth an average of around a fifth of incomes for working households, and reduced the scale of losses for working households by up to two-thirds.

This case study explores how the Treasury used our data to calculate the impact of the government support which began in March 2020, including:

- the Coronavirus Job Retention Scheme (CJRS)
- the Self-Employment Income Support Scheme (SEISS)
- a temporary increase in Universal Credit of £20 a week
- a temporary increase in Working Tax Credits of £20 a week
- a temporary suspension of the Minimum Income Floor in Universal Credit
- an increase in the Local Housing Allowance

How they use the data

The Treasury used data from Understanding Society's Covid-19 Survey to compare employment status, and any change in take-home pay, in May 2020 compared with February, before lockdown was introduced. They also calculated the probability of people at different earning levels losing their job, being furloughed, or seeing their earnings/profit drop, again using our Study.

Understanding Society is a household survey, broadly representative of the UK's population, giving researchers detailed information on household characteristics. Our Covid survey, which launched in April 2020, assessed the impact of the pandemic – and the measures taken to combat it – on people's and families' welfare, covering subjects such as health, wellbeing and employment.



Once the Treasury had calculated the probabilities of the various effects the lockdown was likely to have, they used these statistics to simulate a 'shock' to employment and earnings on a similar scale using their distributional analysis model.

Their Intra-Governmental Tax and Benefit Microsimulation model (IGOTM) uses data from the Office for National Statistics' Living Costs and Food Survey. It allows researchers to ask what will happen if there are changes to taxes and benefits, and to see who will lose or increase their earnings. Microsimulation allows the Treasury to produce charts for Budgets, and to advise Ministers – and helps others to model alternative policies.



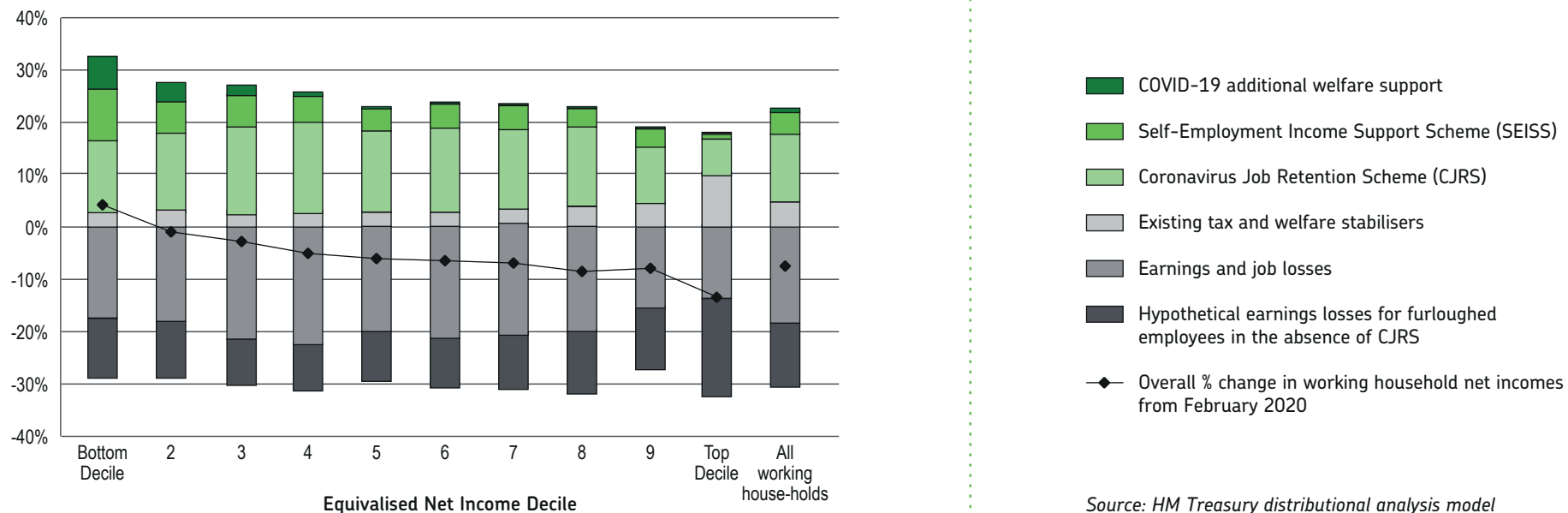
Findings

The Treasury ranked households in net income deciles – dividing the population into ten groups, from lowest earning to highest – and calculated average gains and losses in each group.

The charts show that household income for the lowest decile actually increased slightly in May 2020, compared to February the same year, as a result of extra welfare support, SEISS, CJRS and other existing welfare payments.

In the first nine deciles – in other words, all but the highest earners – the various types of government support kept any drop in household income below 10%. The average across all households was also under 10%.

Percentage change in household income, by working household net income decile, as of May 2020



Source: HM Treasury distributional analysis model

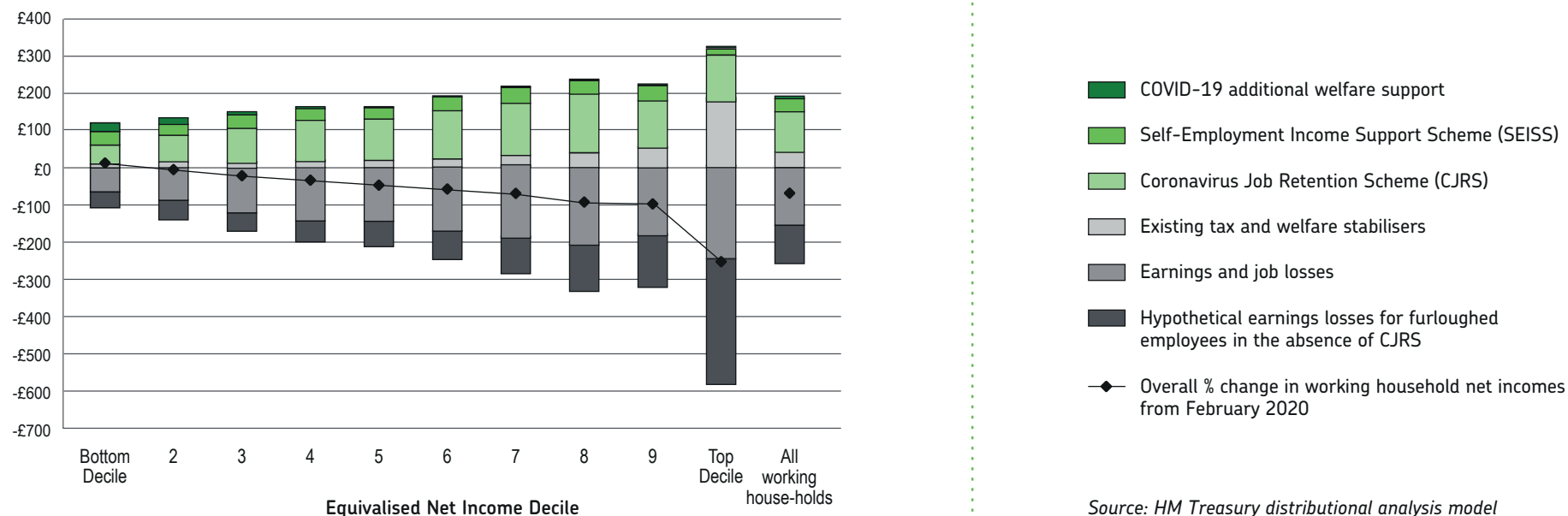
The modelling also allowed the Treasury to estimate what would have happened to household income if the furlough payments (CJRS) had not been introduced.

On average, household incomes for people who were furloughed would have fallen by almost 20% without the job retention scheme.

When they modelled the change in household income per week, the results showed that those in the lowest income decile would have lost about £100 per week without government support, but that the various schemes cancelled out this loss. This modelling also showed a slight increase in income for those in the lowest earning group.

For those in the top income decile, earnings and job losses, together with hypothetical losses without the furlough scheme, added up to almost £600. The various forms of government support added up to a little over £300 for this group.

Change in household income, £ per week, by working household net income decile, as of May 2020



Source: HM Treasury distributional analysis model

Further Treasury use of our data

The Treasury used our data again for its [distributional analysis for the March 2021 Budget](#). On this occasion, they were able to use our Covid-19 data up to November 2020 to estimate job and earnings losses and furloughing.

Again, the modelling showed that government interventions were supporting the poorest working households the most (as a proportion of pre-Covid income).

There were smaller earnings losses for the lower income deciles, and these were *“more than offset by government support, meaning that across all working age households the poorest have been protected the most from income losses”*.



This use of Understanding Society data formed part of a report which showed that during the coronavirus crisis, the UK suffered its biggest annual fall in output in 300 years – but that the labour market stayed surprisingly steady compared to previous recessions.

The report also found that, in the years before Covid-19

- real median household income growth was greater for households in the lower- and middle-income quintiles than in the highest income quintile
- the UK labour market was performing strongly, with earnings growth strongest among the lowest earners and employment reaching a record high.

“Government interventions since March have supported the poorest working households the most”

HM Treasury, July 2020

Microsimulation resources

The Institute for Social and Economic Research, where Understanding Society is based, at the University of Essex, is now home to [UKMOD, a free tax and benefit model for the UK](#), developed with funding from the Nuffield Foundation.

There are several UK tax-benefit models, such as the Treasury's IGOTM and the Department for Work and Pensions Policy Simulation Model (PSM), but they are not widely available outside the organisation that owns them.

UKMOD allows organisations and individuals outside academia and government departments to carry out tax-benefit modelling, and promotes the use of microsimulation as a way to improve the evidence base to inform policy debates.

This case study is part of a series aimed at potential users of Understanding Society data, including policy makers, researchers and people in a position to influence social policy.

If you would like to discuss how we can help to support and raise awareness of the policy impact of your research, please email ccoates@essex.ac.uk