Institute for Fiscal Studies

IFS Briefing Note BN336

Peter Levell

Consumption spending in the wake of the pandemic

Economic and Social Research Council

Nuffield Foundation

Consumption spending in the wake of the pandemic

Peter Levell

Copy-edited by Judith Payne

Published by **The Institute for Fiscal Studies**

ISBN 978-1-80103-059-5

The author gratefully acknowledges the support of the Nuffield Foundation under the grant ‘Saving, spending and financial resilience in the wake of the pandemic’ (WEL/FR-000023226). The Nuffield Foundation is an independent charitable trust with a mission to advance social well-being. It funds research that informs social policy, primarily in Education, Welfare and Justice. It also funds student programmes that provide opportunities for young people to develop skills in quantitative and scientific methods. The Nuffield Foundation is the founder and co-funder of the Nuffield Council on Bioethics, the Ada Lovelace Institute and the Nuffield Family Justice Observatory. The Foundation has funded this project, but the views expressed are those of the author and not necessarily the Foundation. Visit www.nuffieldfoundation.org. Support from UKRI under the grant ‘Modelling the effects of pandemic control measures and financial support on businesses, regions, and households’ (ES/V010026/1) and from the ESRC Centre for the Microeconomic Analysis of Public Policy (ES/T014334/1) is also gratefully acknowledged.

Executive summary

This briefing note compares trends in output, consumer spending and saving from the 2020 recession with those from two previous recessions beginning in 1990 and 2008. It also draws on individual-level data collected during the pandemic. Three facts suggest that savings built up during the pandemic are more likely to be drawn down slowly than quickly: (i) falls in spending during this recession were primarily in purchases of services rather than durable goods (durables purchases being both easier to postpone and less likely to be smoothed over time); (ii) increases in net wealth over the pandemic were more common among higher-income households, who were less likely to experience economic uncertainty and income losses during the pandemic, and so are less likely to change their spending behaviour as the economy recovers; and (iii) survey questions on how individuals would respond to a hypothetical payment suggest low propensities to spend out of income growth.

Key findings

1. The recent recession was untypical in a number of ways. **It stands out relative to previous recessions in that purchases of services fell far faster than purchases of various types of goods.** Purchases of services fell by a dramatic 30% relative to pre-recession levels, compared with a decline of just 4% at the equivalent point following the 2008 financial crisis.

2. There were also large increases in the household saving rate, which remained high in the second quarter of 2021 (at 18%). **Net wealth increases over the pandemic were more common among individuals who had greater long-run incomes**, who also tended to be less affected by economic uncertainty during the pandemic. These individuals are more likely to draw down accumulated savings slowly as the economy recovers.

3. **Responses to questions on how people would respond to a hypothetical payment of £500 indicate low propensities to spend.** On average, only 11% of the value of these payments would be spent over the next three months in March 2021, suggesting the appetite to spend out of income growth is not unusually high. Richer households are more likely than poorer households to

report they would add to their savings. Poorer households are more likely than richer households to report they would reduce their debts.

4 **Consumption growth in the next few months is still likely to be rapid, and to be accompanied by additional inflation.** This would be expected as demand and household saving return to pre-pandemic levels and firms have to adjust to new spending patterns. However, the fact that additional savings accumulated during the pandemic are likely to be drawn down slowly limits the degree to which consumer spending will drive both the recovery and inflation in future.

1. Introduction

The recent recession – induced by the COVID-19 pandemic and measures to control its spread – was unusual in several ways. It was unusually deep, the increase in household savings was particularly large, and it was associated with very sharp drops in household purchases which, in contrast to previous recessions, came largely from a prolonged fall in purchases from the services sector.

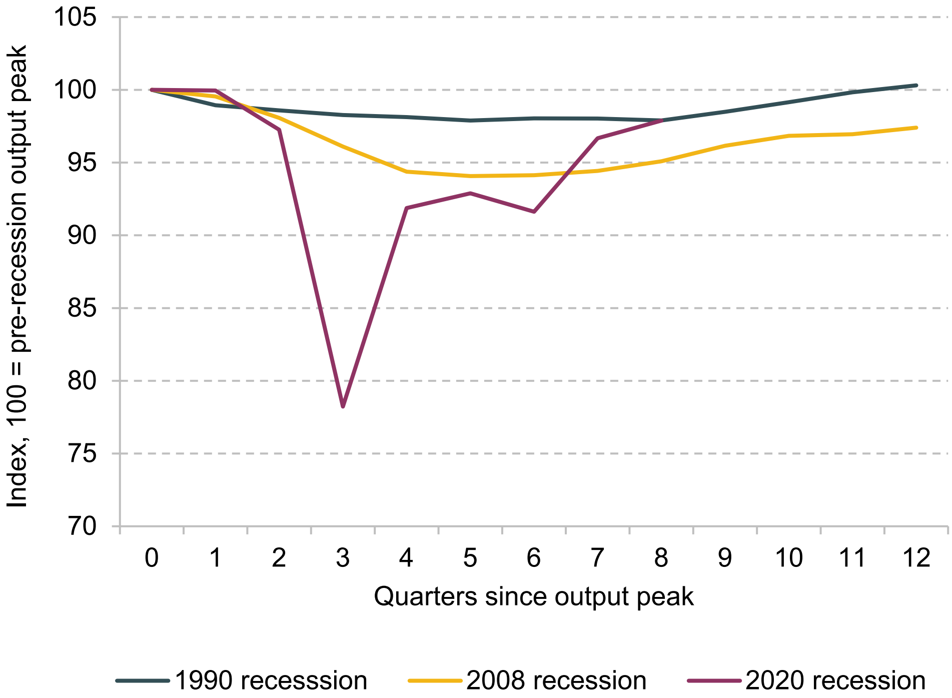
Could the savings accumulated by households over the last 18 months or so fund not only a recovery in consumption to pre-pandemic levels but a temporary consumption boom? The question matters for understanding what might happen to economic growth in the short term and, given supply-side constraints, for the path of inflation. This briefing note uses both aggregate and household-level data to argue that this is unlikely.

Section 2 puts trends in output, consumption spending and saving from the most recent recession in historical context. Section 3 draws on that analysis in combination with household-level data collected during the pandemic from the Understanding Society COVID Study to assess the extent of pent-up demand. Section 4 concludes that household savings are unlikely to be drawn down rapidly, and thus while consumption spending might recover to pre-pandemic levels, it is unlikely to increase much beyond this in the short term.

2. Comparison with previous recessions

The 2020 recession was unusual in several respects. It was unusually deep. Output declined by 22% from its peak in the third quarter of 2019 to its trough in the second quarter of 2020. This compares with peak-to-trough declines of 6% during the recession following the 2008 Great Financial Crisis and just 2% in the recession that started in 1990. The recovery in output this year has been rapid so far, but incomplete (the Office for Budget Responsibility currently forecasts that output will rebound to pre-pandemic levels by the turn of the year; Office for Budget Responsibility, 2021). Real output remained just over 2% below its pre-pandemic peak in the third quarter of 2021. At the equivalent point following the Great Financial Crisis, output was almost 5% below its peak (see Figure 2.1).

Figure 2.1. Real output relative to peak in three recessions



Source: Office for National Statistics (2021), series ABMI.

Figure 2.2. Real consumption spending over three recessions

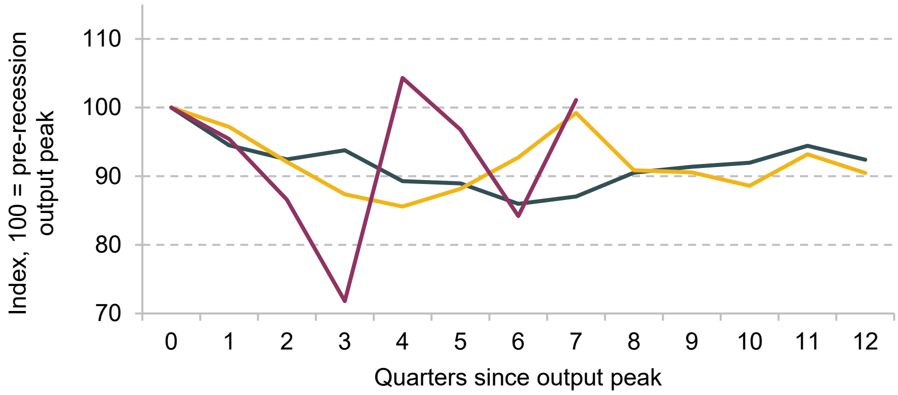
Source: Office for National Statistics (2021), series ABJR.

There were also important differences in the trajectory of real household consumption spending relative to previous recessions. Because we are dealing in *real* values, adjusted for price changes, this can be equivalently thought of as reflecting the quantity ('volume') of consumers' purchases. Figure 2.2 shows that real consumption spending fell at a similar rate to output initially, by 23% between 2019Q3 and 2020Q2. However, the recovery in consumption spending was slower, and real consumption spending remained 5% below its pre-recession level in 2021Q3, at the same level as at the equivalent point in the 2008 recession.

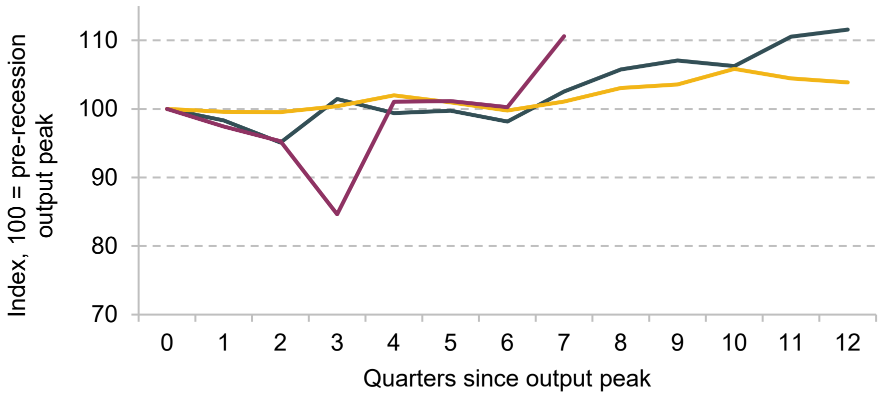
The three panels in Figure 2.3 show how different types of goods consumption evolved across these three recessions (this time up to the second quarter of 2021, the latest period for which we have data). Figure 2.4 shows the same but for real services spending. These reveal that the 2020 recession was again highly unusual: in contrast to previous recessions, it was primarily driven by a fall in purchases of services. Between 2019Q3 and 2020Q2, purchases of services fell by 30%, compared with a decline of just 4% at the equivalent point following the 2008 financial crisis. This of course reflects the imposition of social distancing measures and the outright closure of the hospitality sector during the first lockdown of the pandemic. Purchases of services remained low well into 2021, and were 14% below pre-recession levels in the second quarter of 2021 (social distancing restrictions were only fully lifted in July 2021, i.e. the start of the third quarter).

Figure 2.3. Real spending on durable, semi-durable and non-durable goods in three recessions

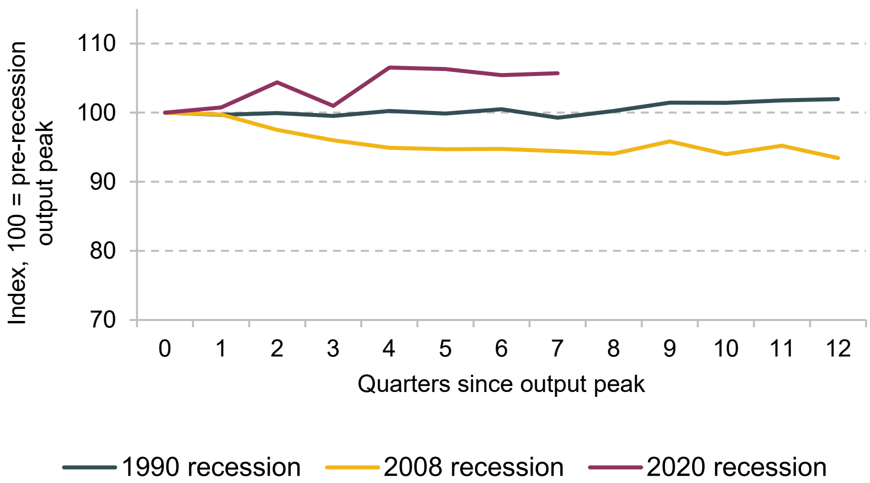
(a) Real durables spending



(b) Real semi-durables spending



(c) Real non-durables spending



Source: Office for National Statistics (2021), series UTID, UTIT and UTIL.

Figure 2.4. Real services spending in three recessions

Source: Office for National Statistics (2021), series UTIP.

In both 1990 and 2008, purchases of consumer durables (such as vehicles, large items of furniture and appliances) fell faster than other components of household consumption spending and remained depressed for a prolonged period (an increase in durable purchases in 2009 may have been driven by stimulus policies such as a temporary VAT cut and a car scrappage scheme; Crossley, Low and O'Dea, 2013). While there were initial falls in real spending on durables in 2020, purchases of these goods had exceeded their pre-recession levels by the second quarter of 2021, despite the fact that output had yet to recover to its pre-recession level by this time. The two dips in durables spending in the second quarter of 2020 and the first quarter of 2021 coincided with periods of severe lockdown.

Purchases of non-durables actually increased with the onset of the 2020 recession and rose to be 6% above the pre-recession level by the second quarter of 2021, while purchases of semi-durables (such as clothing, textiles and furnishings) fell initially before quickly rebounding to pre-recession levels. By contrast, purchases of non-durables remained steady following the 1990 recession and fell by around 5% of their pre-recession level four quarters into the 2008 recession (to a level where they remained up to 12 quarters after the recession began). Purchases of semi-durables remained stable immediately following the 2008 recession before increasing steadily, while following the 1990 recession they fell initially before recovering to pre-recession levels after three quarters.

Figure 2.5. Household saving rate over three recessions

Source: Office for National Statistics (2021), series DGD8.

The steep reductions in consumer spending led to an unprecedented increase in the saving rate (shown in Figure 2.5), which peaked at 23% in the second quarter of 2020. In the previous two recessions, savings increased in the first few quarters after the onset of the recession but not by nearly the same extent. The saving rate remained high in the second quarter of 2021 (at 18%).

3. Is there pent-up demand?

The large increases in the saving rate and the steep declines in consumption raise the following question: how quickly will consumers run down the savings they accumulated during lockdown? If a large fraction of the demand for goods and services was 'pent up' during the lockdown period, only to be released once restrictions were lifted, then spending might not only quickly recover to pre-recession levels but exceed them for a period.

To understand the extent of pent-up demand, it is important to understand which households accumulated wealth over the lockdown period and why. Economic theory suggests three motives for greater saving during the lockdown period.

- **Reduced spending opportunities:** Certain spending opportunities were constrained during the pandemic, effectively increasing the price of consumption (in the sense that a given level of spending would lead to less enjoyment than it otherwise would). This gave households an incentive to delay spending because the goods and services that were available during lockdown were only imperfect substitutes for those that were not. For example, a household might prefer to wait to have a more expensive foreign holiday in future rather than have had a UK-based holiday in 2020. The extent of this saving motive depends on the degree to which it is possible and/or desirable for consumers to postpone spending.
- **Uncertainty:** The pandemic was associated with an increase in economic uncertainty. For example, it was unclear how many workers would return to work in their previous jobs or at what salary. This might have led households to save for precautionary reasons, to provide a buffer against possible future income shocks.
- **Lower expected future incomes:** If consumers expected the pandemic to have a long-run impact on their incomes, they may have been induced to save more in order to finance future consumption.

Each of these motives has different implications for how quickly savings are likely to be spent down during a recovery. To the extent saving was high because of reduced spending opportunities, we would expect savings to be drawn down gradually as households smooth out the increase in consumption over time. If saving was mainly due to uncertainty, or lower expected future incomes, then savings could adjust down sharply as future expectations adjust – for example, to unforeseen good news about the strength of the recovery or the effectiveness of the vaccine or to people finding that their own job is more secure than they feared it might have been.

Delayed durable purchases are typically thought of as an important source of pent-up demand. As we saw, in previous recessions there were larger declines in durable purchases than there were for other components of spending. This is to be expected; these purchases are more sensitive to changes in economic uncertainty, because they are large one-off expenditures, and because they are often easy to delay (for example, by using an old car for longer rather than buying a new one). In addition, if consumers delay replacing their durables over the course of a recession (and are thus left holding an increasingly old stock of cars, for example), there could be a boom once the recession is over, driven by the desire to replace old items.

However, as we saw, this recession was not characterised by prolonged declines in durables spending but rather by a decline in spending on services. The declines in spending on durables that did occur in the first lockdown were quickly reversed. Thus, the key issue is how much pent-up demand there is for delayed purchases of services.

We would expect pent-up services demand to be different from pent-up durables demand for three reasons. The first is that purchases of services are not as 'lumpy' as purchases of durables. Consumers can more easily smooth an increase in purchases of services over a long period – for example, by eating out more over the course of several years – whereas a car is a one-off purchase. The second reason is that while spending on durables is easily *postponed*, spending on services is more likely to be *forgone* or substituted with other spending (for example, spending on meals at home replacing meals out).[1] Indeed, there is some evidence for this in the increase in non-durables spending during the lockdown period. Finally, the fact that the rapid decline in purchases of services was particular to this recession suggests that it was the result of spending restrictions rather than other factors and, as we have said, this would be expected to be associated with a slower drawdown of accumulated savings.

Thus, the fact that this recession was distinguished by lower purchases of services suggests that excess savings are likely to be spent slowly rather than quickly. This effect may be compounded by the effects of supply constraints (such as staff shortages): by increasing prices or reducing the capacity of service providers, these would give households an incentive to further postpone increases in consumption spending.

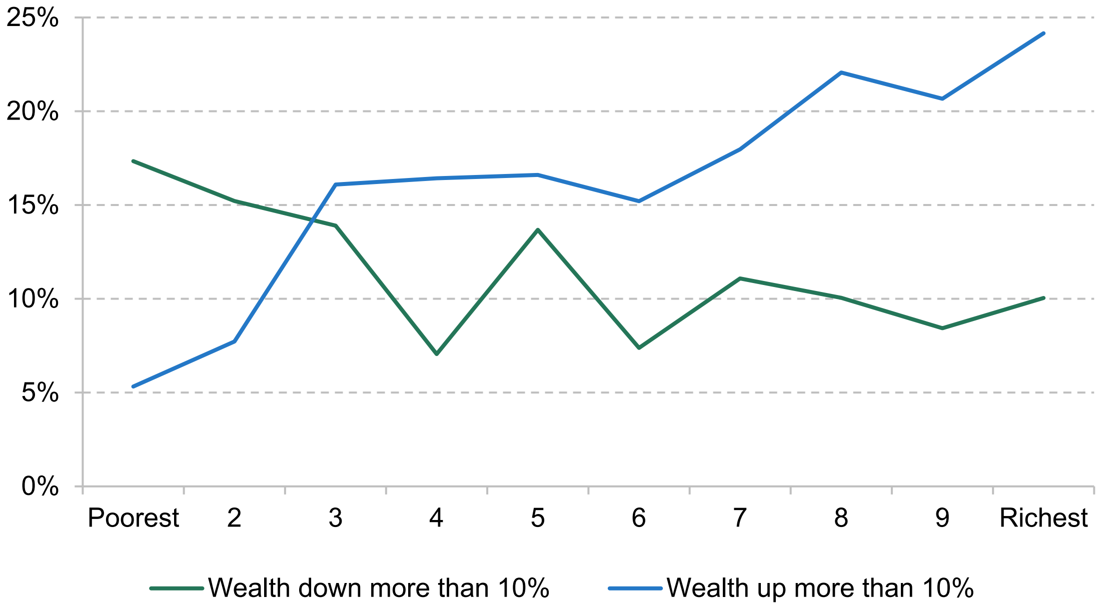
Household-level evidence

To separate out the role of different saving motives, it is also useful to consider which individuals accumulated more wealth as the pandemic went on. To do this, we can draw on the Understanding Society COVID-19 Study. Figure 3.1 shows the proportion of individuals who

[1] Beraja and Wolf (2021) present a more formal argument and evidence for this phenomenon.

reported that their net wealth had increased or decreased by 10% or more since January/February in 2020 when they were surveyed in March 2021, separated into long-run income deciles. Wealth could increase because of greater active saving or through greater asset returns (such as increasing house and share prices). While the increase in net wealth was broad across the long-run income distribution, it was larger for higher-income households. 24% of those in the top pre-pandemic income decile reported a 10% or greater increase in their net wealth, compared with 10% who reported a 10% or greater decline. By contrast, 5% of those in the bottom decile reported a 10% or greater increase in their net wealth compared with over 17% who reported a 10% or greater decline.

Figure 3.1. Change in total net wealth (January/February 2020 to March 2021), by long-run income decile



Note: Respondents were asked whether their household total net wealth had gone up or down by 10% or more, or stayed about the same, since January/February 2020. Income deciles are assigned on the basis of net household income averaged across up to three previous waves of the main Understanding Society survey.

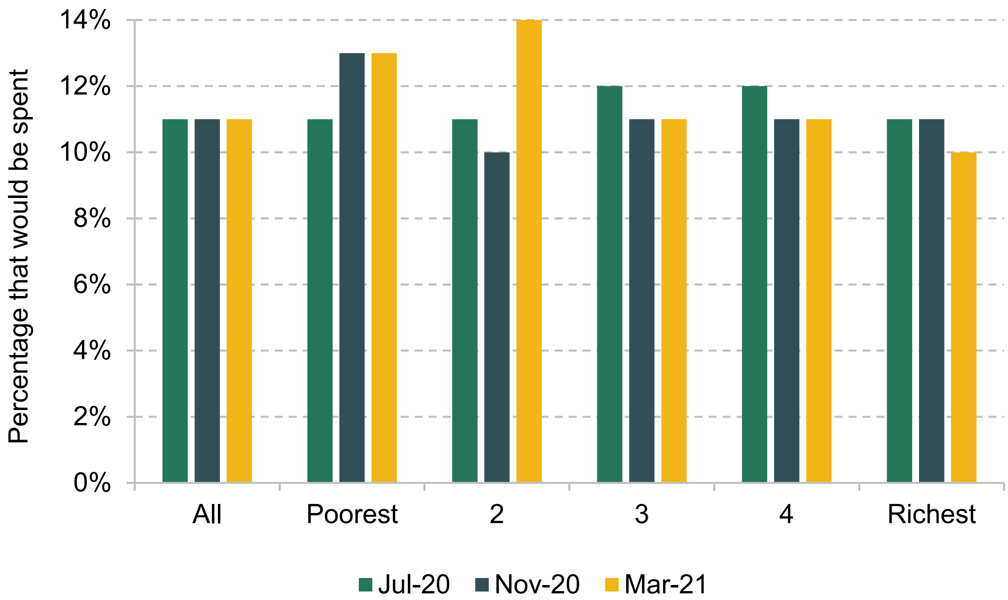
Source: Crossley et al. (2021a), using Understanding Society COVID-19 Study.

This is significant because these richer individuals were less likely to experience labour market shocks, with the accompanying economic uncertainty, over the course of the pandemic (Crossley et al., 2021a). They are therefore less likely to be saving for precautionary reasons and less likely to see high income growth as the labour market recovers. Again, this suggests that the drawdown in savings is likely to be slow.

We can also draw on questions asked repeatedly through the COVID-19 study on how people would respond if they received a one-time windfall of £500. Respondents were asked whether they would spend more, the same or less, and how big any change would be. If they said they would not spend the full amount, they were then asked whether they would use unspent funds to save more, reduce debt, give more in transfers to other households or receive fewer transfers from other households (they could give more than one of these responses).[2]

Figure 3.2 shows the percentage of the £500 payment that would be spent over the next three months in each of the months during the pandemic when this question was asked (July 2020, November 2020 and March 2021). Across all households, an average of 11% of this payment would be spent, a figure that is consistent across months. This suggests that willingness to spend out of income gains during the pandemic was low, even during July 2020 when many restrictions on spending had been lifted. Differences across income groups are not large, although there were important differences in how individuals reported they would use unspent funds, as we shall now see.

Figure 3.2. Share of hypothetical £500 windfall that would be spent

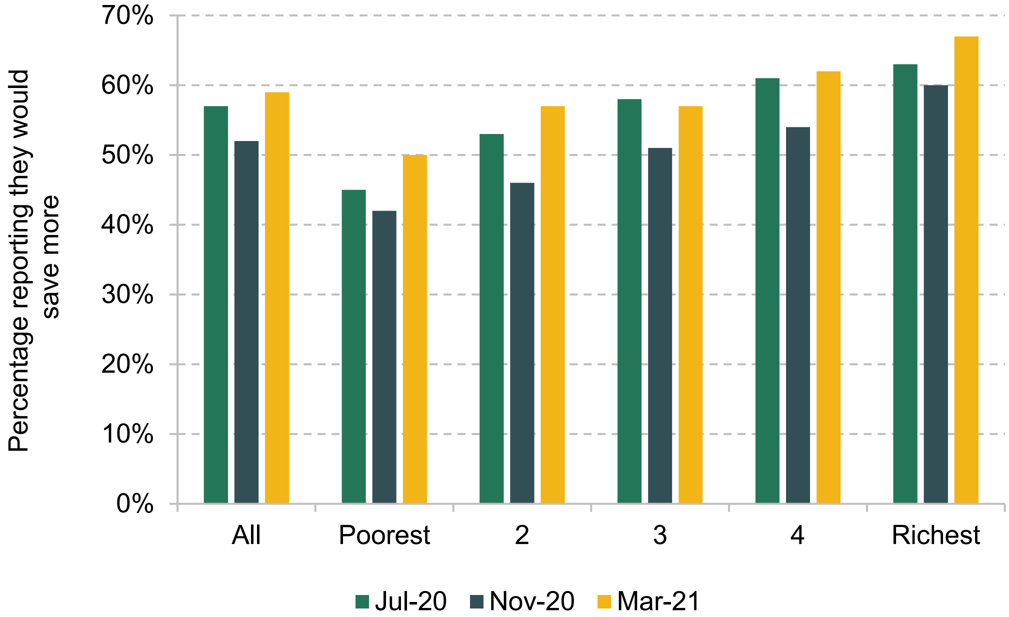


Note: Author's calculations from Understanding Society COVID-19 Study. Statistics are weighted for non-response. Marginal propensities to consume (MPCs) are calculated on the basis of questions asking whether spending would change upon receipt of £500 and by how much. MPCs are trimmed to be at least 0 and at most 1. Income quintiles are of household incomes that were collected in 2017–18 and are equivalised using the OECD modified scale. Respondents in November 2020 and March 2021 were randomly assigned different variants of the question. For consistency, the graph plots only responses by those asked the same question as was posed in July 2020.

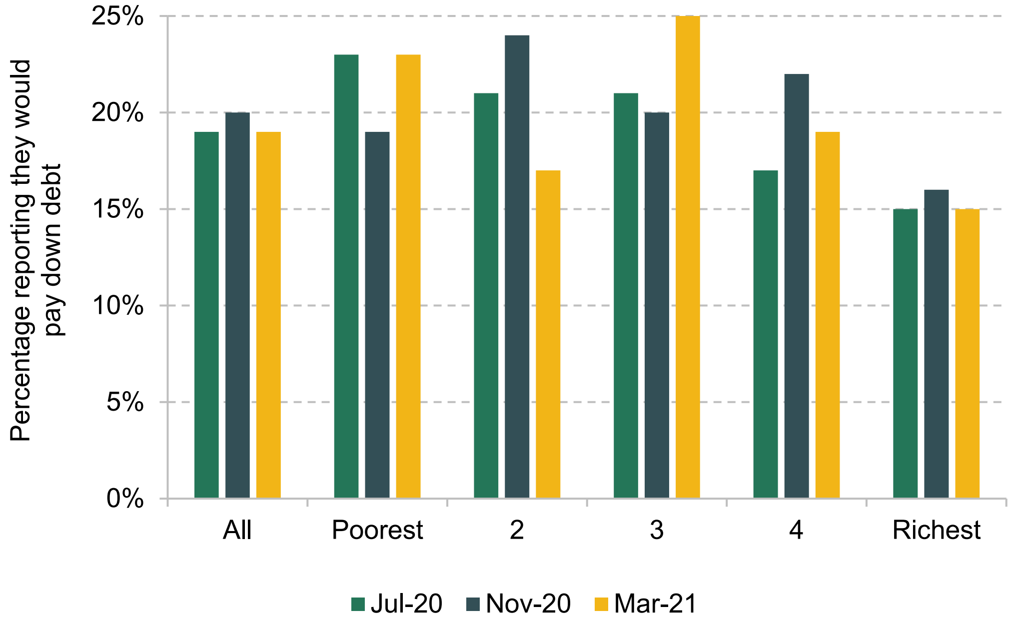
[2] See Crossley et al. (2021b) for a detailed analysis of responses to this question in the July data.

Figure 3.3. Share who reported they would use unspent funds to …

(a) Save more



(b) Pay down debt



Note: Author's calculations from Understanding Society COVID-19 Study. Statistics are weighted for non-response. Marginal propensities to consume (MPCs) are trimmed to be at least 0 and at most 1. Income quintiles are of household incomes that were collected in 2017–18 and are equivalised using the OECD modified scale. Respondents in November 2020 and March 2021 were randomly assigned different variants of the question. For consistency, the graph plots only responses by those asked the same question as was posed in July 2020.

Figure 3.3 shows the percentage of individuals in different long-run income groups who reported they would use unspent funds to save more (panel a) or to reduce debt (panel b). In March 2021, 59% of individuals reported they would save more. Across months, this figure was greater for higher-income individuals. For example, in March 2021, 50% of individuals in the bottom long-run income quintile reported they would save more, compared with 67% in the richest income quintile. By contrast, lower-income individuals were much more likely to report they would use unspent funds to pay down their debts. In March 2021, 23% of those in the bottom long-run income quintile reported they would do this, compared with 15% in the richest income quintile. Across the population, 19–20% of individuals reported this proposed use.

These figures reveal that even at the end of the first quarter of 2021, individuals were much more likely to add to their savings or pay down debt than to spend any additional funds. This also suggests low appetite for higher spending in the short term, even as the labour market recovers.[3]

[3] Evidence from other surveys also suggests that accumulated savings are unlikely to be spent quickly. According o the Bank of England's NMG survey, 27% of households who had saved more than usual because of the pandemic reported intending to spend some of their accumulated savings in March 2021 (Bank of England, 2021).

4. Conclusions

Several lines of evidence suggest households are likely to draw down excess savings gradually rather than suddenly. Falls in purchases during the recession were driven by reduced services demand, which is less likely to have been 'pent up' to be released immediately in the post-recession period. In addition, net wealth gains associated with the pandemic were more common among higher-income households, who are less likely to be seeing rapid income growth during the recovery. Finally, survey evidence does not suggest high willingness to spend out of income gains among any income group.

Consumption spending and output appear to be recovering rapidly from the pandemic and this has been accompanied by an increase in inflation, as various shortages, bottlenecks and other constraints have prevented supply keeping pace with demand in some sectors. However, this is what we would expect even if households just returned to pre-pandemic rates of saving and spending. However, the fact that consumers are unlikely to draw down their excess savings quickly limits the degree to which household spending will drive both the recovery and inflation in the coming months.

References

Bank of England (2021), 'How have households' spending expectations changed since last year?', https://www.bankofengland.co.uk/bank-overground/2021/how-have-households-spending-expectations-changed-since-last-year.

Beraja, M. and Wolf, C. (2021), 'Demand composition and the strength of recoveries', National Bureau of Economic Research (NBER), Working Paper 29304, https://www.nber.org/papers/w29304.

Crossley, T., Fisher, P., Levell, P. and Low, H. (2021a), 'A year of COVID: the evolution of labour market and financial inequalities through the crisis', Institute for Fiscal Studies (IFS), Working Paper W21/39, https://ifs.org.uk/publications/15816.

Crossley, T., Fisher, P., Levell, P. and Low, H. (2021b), 'MPCs in an economic crisis: spending, saving and private transfers', *Journal of Public Economics Plus*, 2, 100005, https://doi.org/10.1016/j.pubecp.2021.100005.

Crossley, T., Low, H. and O'Dea C. (2013), 'Household consumption through recent recessions', *Fiscal Studies*, 34, 203–29, https://doi.org/10.1111/j.1475-5890.2013.12003.x.

Office for Budget Responsibility (2021), 'Economic and fiscal outlook – October 2021', https://obr.uk/efo/economic-and-fiscal-outlook-october-2021/.

Office for National Statistics (2021), 'United Kingdom Economic Accounts', https://www.ons.gov.uk/economy/grossdomesticproductgdp/datasets/unitedkingdomeconomicaccounts.