

Section 3

The impact of the pandemic on UK wealth gaps

Our finding that the direct effect of the pandemic has led to increased savings and lower debts – together increasing total net wealth by around £134 billion in aggregate – is far from the whole story. Instead, it is crucial to recognise that much wealth accumulation is passive – resulting from changes in the prices of the assets that families own. In the same way as this recession has seen a surge in savings rather than the usual flatlining, asset prices have also behaved unusually. Following sharp falls at the start of the pandemic they have since increased sharply on the back of optimism about a vaccine-driven recovery and large-scale policy support in many countries. These increases, have for the most part, more than unwound the falls in asset prices seen at the start of the pandemic. Crucially, who benefits from this depends not on what people earn, but on what they already own. The combination of differential changes in asset prices and the composition of family wealth, therefore, together determine the distributional effect of asset price changes. Since UK house prices have risen more strongly than the prices of other assets, families in the middle of the wealth distribution have seen the biggest percentage increase in their wealth as they have a greater proportion of their wealth invested in property. However, the richest households have seen the largest wealth increases in absolute terms, reflecting their larger existing wealth holdings on entering the crisis.

Combining the effects of asset price appreciation with the direct effect on savings and debt, we estimate that total wealth has increased by around £890 billion during the pandemic. The majority of this results from changes in asset prices which have contributed £756 billion to this increase. Asset prices have clearly had a much larger impact on household wealth than the changes in saving and borrowing behaviour discussed in the previous section. Again, the good news should not be lost: for many households there have been considerable increases in wealth that will raise living standards (the typical middle-wealth family has seen wealth rise by £7,800 during the pandemic) and increase their financial resilience. And although these wealth increases have not pushed up relative wealth inequality, those who started the pandemic with little or no financial wealth have not benefited from asset price

changes, especially as very little of their wealth is held as property. Put simply, all this means that the crisis has widened wealth gaps, particularly between those at the bottom of the wealth distribution and everybody else.

While it is important to track changes in saving and borrowing behaviour, that is far from the end of the story when it comes to family finances. As shown in our previous work, the sharp increase in wealth in recent years reflects ‘passive’ holding gains driven by changes in asset prices, rather than ‘active’ increases in saving or reduced borrowing.²⁰ So, in order to understand the full impact of the pandemic on family finances, it is crucial to take changes in asset prices into account. In this section, we provide the first comprehensive analysis of wealth changes across the distribution during the pandemic. Bringing together both the impacts of indirect ‘passive’ changes in asset prices and direct ‘active’ changes in savings and debt, we shed light both on the relative magnitude of each and their impacts across the wealth distribution.

Unusually for a recession, the pandemic has led to increases in some key asset prices

Recessions tend to have a negative impact on asset prices. This reflects the impact of both a deterioration in underlying economic prospects and heightened uncertainty about the future. For example, house prices have fallen 22 per cent in real terms on average over calendar years in the past four recessions. And UK equity prices have fallen in all recessions in the past century bar those in the early 1990s and 1980s.

In past recessions equity and house prices have tended to fall sharply and take time to recover – but this time was different. Initially, the impact of the pandemic on equity prices was similar to that of past recessions: UK and world equity prices fell precipitously (Figure 17), the largest quarterly fall seen during recessions over the past century. Since then, both of these changes have reversed, and done so more rapidly than is normal given economic fundamentals: global equities are now around a fifth higher than at the onset of the pandemic – driven by an improving pandemic outlook and the strong stimulus measures, particularly in the US. The unusual sharpness of this recovery in equity prices reflects a number of factors, including: the vaccine-driven improvement in economic prospects; significant monetary and fiscal support measures; and reduced uncertainty as the prospect of recovery following the pandemic became clearer. For the purposes of understanding the UK wealth distribution it is important to note that there has been significant divergence in UK and world equities (which would normally have

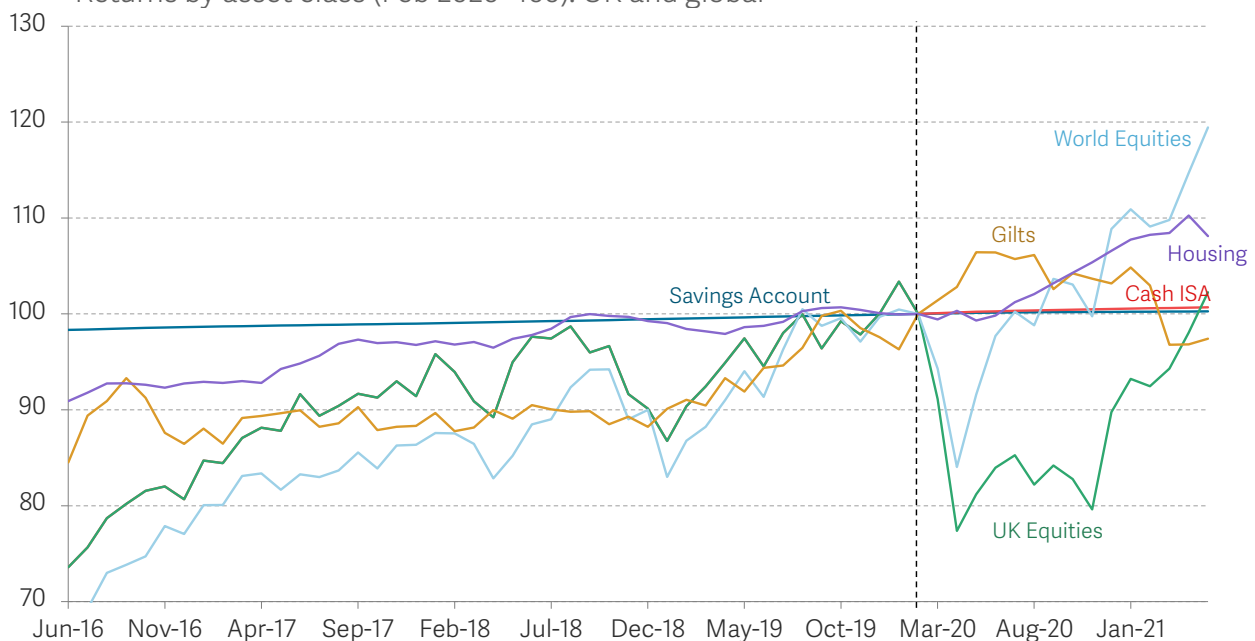
²⁰ G Bangham & J Leslie, *Rainy days: An audit of household wealth and the initial effects of the coronavirus crisis on saving and spending in Great Britain*, Resolution Foundation, June 2020.

similar dynamics) demonstrating less market optimism about the long-term pace of the UK economic growth and also reflecting the higher proportion of financial services firms, which tend to be more volatile relative to other firms during a recession.²¹

UK house prices have also behaved atypically. Rather than declining, as in previous recessions, UK house prices are now close to 10 per cent higher than when the pandemic began. UK Government policies during the pandemic have had an important role in this, with the stamp duty holiday in the UK, in particular, helping to ensure house prices were well supported. Clearly other factors have also supported house price growth, including the shift in demand towards larger living spaces; geographic mismatches as people working from home move further from their office; and accumulated savings helping families move onto or up the property ladder.²²

FIGURE 17: **The pandemic caused large swings in asset prices**

Returns by asset class (Feb 2020=100): UK and global



NOTES: Asset classes are UK-based apart from global equities.

SOURCE: RF analysis of Bank of England, Effective interest rates; FTSE Russell, FTSE All-Share Index TR; MSCI, MSCI World Index TR; S&P Global, S&P UK Gilt Index; and ONS, UK House Price Index.

Changes in asset prices directly impact the value of households' wealth and this has profound distributional consequences due to variation in asset portfolio composition across families. Figure 18 shows the proportion of household wealth derived from three broad asset groups: pensions, net property and net financial wealth. Bottom wealth

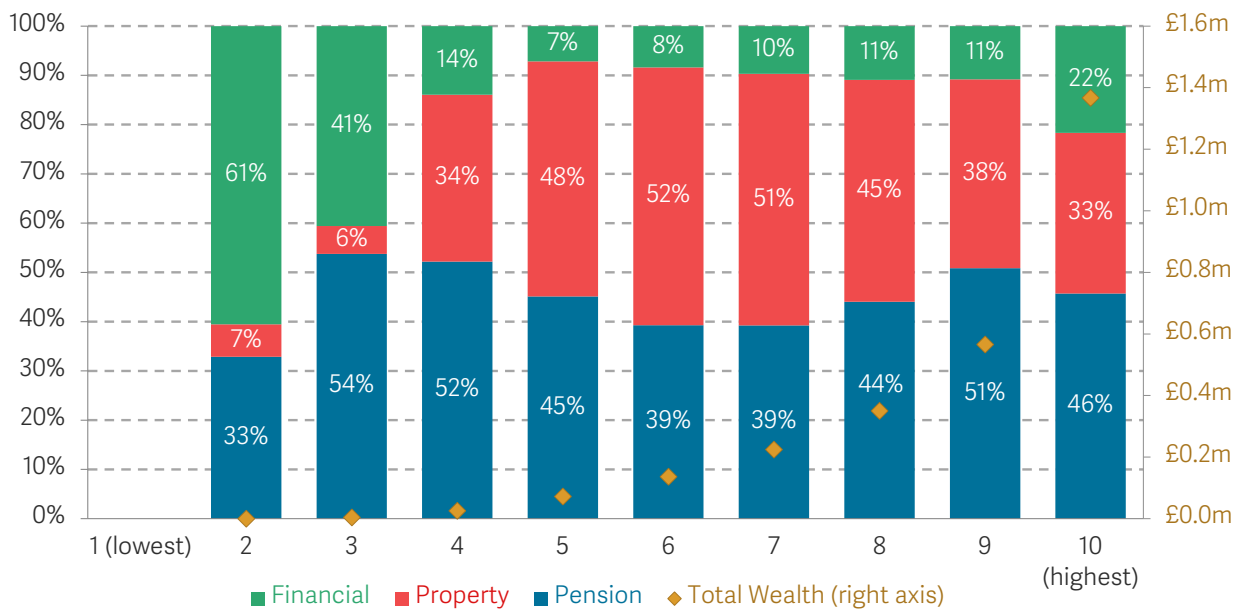
²¹ For more details on the macroeconomic recovery and the relationship to Government policy see: J Leslie, C McCurdy, C Pacitti & J Smith, [How to throw good money after good: Budget 2021 and the challenge of delivering a rapid recovery from Covid-19](#), Resolution Foundation, February 2021.

²² L Judge & C Pacitti, [Housing Outlook Q2 2021: The impact of Covid-19 on housing demand across the UK](#), Resolution Foundation, May 2021.

deciles hold very little wealth and what there is tends to be in asset classes which do not generate returns; this shows up as a high proportion of financial assets (which includes current accounts and cash). Wealth in the middle of the distribution derives much more from net property wealth while pensions become more important for wealth at the top of the distribution. Private holdings of financial assets like equities only become a material source of wealth at the very top of the distribution.²³

FIGURE 18: Property wealth is the most valuable asset for middle-wealth families

Average asset portfolio composition, by net wealth decile: GB, 2016-18



NOTES: Data exclude private business assets and physical wealth. The first decile is excluded because average net wealth is negative for that decile. Right axis shows mean net total wealth per adult within families for each decile.

SOURCE: RF analysis of ONS, Wealth and Assets Survey.

Higher asset prices have led to increased wealth with the impact proportionally greatest in the middle of the distribution

Figure 19 estimates the median change in wealth per adult as a result of changes in asset prices since the start of the pandemic, by pre-pandemic net wealth decile. So, for example, a typical family in the richest 10 per cent of families experienced an increase in the value of the wealth by £44,000 per adult.²⁴ This compares to an increase in wealth of

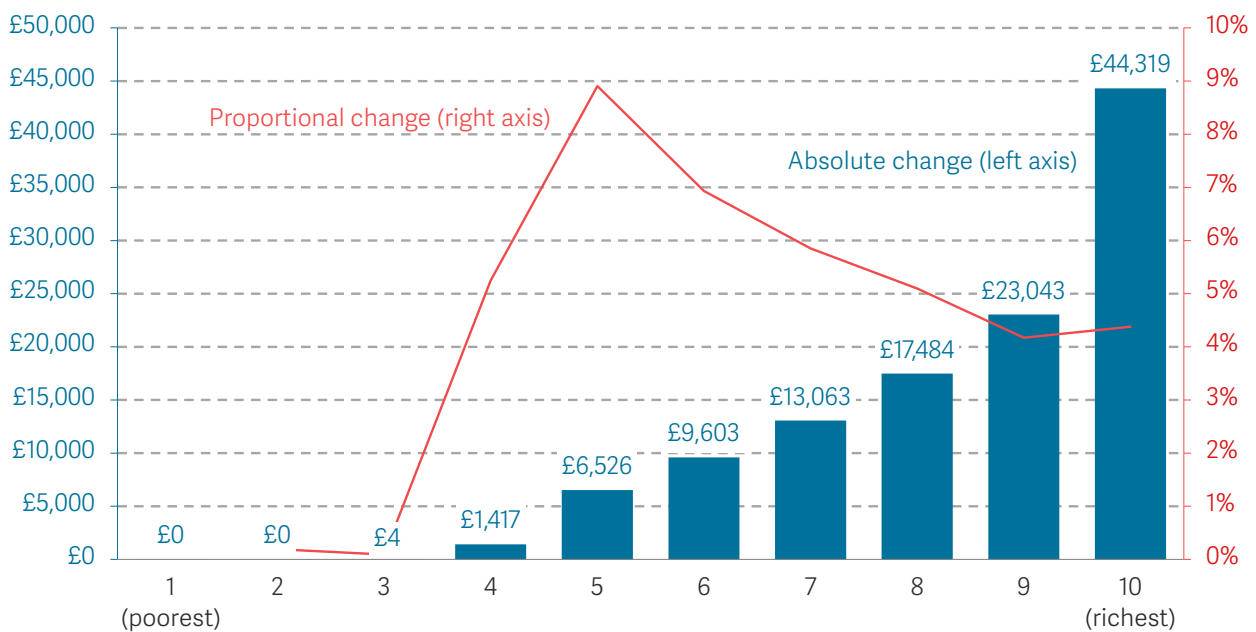
²³ We exclude physical wealth (e.g. cars and household possessions) and private business wealth from this analysis. We do this for a few reasons (i) the value of physical assets should have been relatively unaffected by the crisis; (ii) the measurement of physical wealth in the data is harder because it relies more on subjective valuation by respondents; (iii) coverage of private business assets is not complete; (iv) there is little good data on how the value of private companies have changed over the pandemic. For more discussion of some of these issues see: A Advani, G Bangham & J Leslie, *The UK's wealth distribution and characteristics of high-wealth households*, Wealth and Policy, Working Paper 101, October 2020.

²⁴ Rising wealth from increasing asset prices have been seen globally. For example, see Credit Suisse, *Global wealth report 2021*, June 2021.

just under £7,800 for the typical family. Naturally, richer households had the largest rise in wealth because their pre-pandemic holdings were largest and so were boosted materially by the unusual resilience of asset prices in this recession. But the largest proportional change was experienced by those in the fifth decile of the distribution. This is because middle-wealth families have more of their wealth in housing which experienced faster asset price growth than other asset types. Typical wealth for families in the bottom 30 per cent of the wealth distribution was unaffected because these families do not hold assets which depend on market asset prices.²⁵ For details on the methodological approach, see Box 2.

FIGURE 19: Asset price appreciation raised wealth in the middle of the distribution proportionally the most

Median change in family wealth per adult as a result of asset price changes since the onset of the pandemic, by net wealth decile: GB, February 2020 to May 2021



NOTES: The first decile is excluded for the proportional change because average net wealth is negative for that decile.

SOURCE: RF analysis of ONS; Wealth and Assets Survey; Bank of England, Effective interest rates; FTSE Russell, FTSE All-Share Index TR; MSCI, MSCI World Index TR; S&P Global, S&P UK Gilt Index; and ONS, UK House Price Index.

²⁵ Some families in these groups would have experienced an increase in wealth because, for example, they hold property assets. But this is not the experience of the median family within these groups.

BOX 2: Methodology for calculating distributional impact of asset price changes

The Wealth and Assets survey (WAS) provides comprehensive and granular details on household wealth holdings. But the latest data only covers the period 2016-18 and therefore we do not directly know how asset price changes have affected wealth levels. In order to estimate this we take observed wealth holdings in 2016-18 and roll forward the value of wealth until the pre-pandemic period using broad asset price growth. For example, for a family sampled in 2017 we apply changes in house prices, financial assets and interest returns for the three years between sample period and pre-pandemic. We then apply observed changes in asset prices during the pandemic to this updated wealth estimate. The gap between the pre- and post-pandemic total wealth is taken as the impact of the pandemic.

More specifically, we make a number of assumptions in order to calculate this change. We need to make assumptions because, while the granularity of the WAS is significant, we do not know the exact portfolio composition of assets. First, we assume that within the asset classes we have returns data for, all

assets change value at the same rate.²⁶ Second, we assume no changes in the composition of assets households held since the WAS sample period because we have no data to calibrate asset composition transitions. In practise, we know that some families have shifted asset allocation during the pandemic – for example those that became first time buyers. Third, the WAS does not provide detailed information of the composition of assets within defined contribution pension pots so we assume a 70:30 split between equities and bonds, which, 10 years prior to retirement age, rolls down linearly to 70 per cent bonds and cash.²⁷ And finally we do not model changes to the value of defined benefit pensions or pensions in payment. This is because there has been relatively little change in the inputs to calculating the value of these assets and, unlike with other asset classes, changes in the measured value of the assets does not have a direct impact on potential consumption or welfare.²⁸

²⁶ This is a necessary simplification but introduce bias into our results. We cannot observe family-level asset returns in our data but research on household wealth in Norway indicates that higher-wealth families achieve higher asset returns within asset classes. This means our estimates could underestimate wealth gains at the top of the distribution but overestimate them at the bottom. For more see: A Fagereng, L Guiso, D Malacrino & L Pistaferri, *Heterogeneity and Persistence in Returns to Wealth*, IMF working paper 18/171, July 2018.

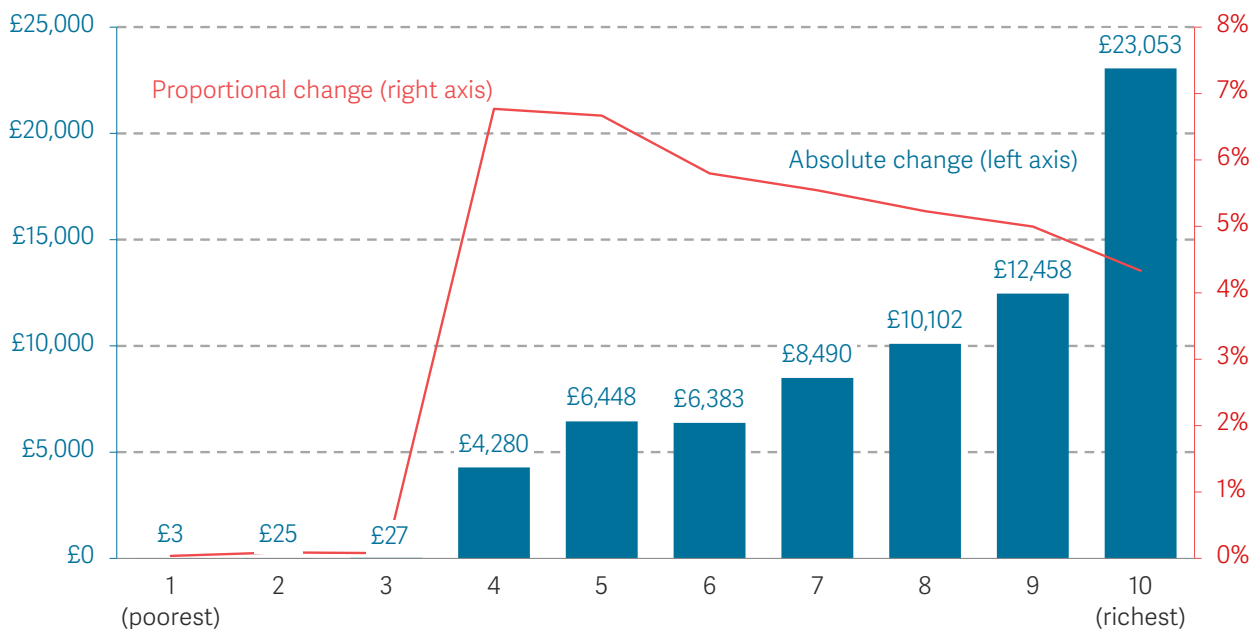
²⁷ For more details on defined contribution pension scheme asset holdings see: Pension Policy Institute, *The DC Future Book: In association with Columbia Threadneedle Investments*, September 2020. We additionally assume a 4:3 UK to world equity ratio.

²⁸ Defined benefit pensions and pensions in payment are measured by assessing the market value of the income streams they will or do provide. This is done by assessing the expected cost of purchasing an equivalent annuity and depends on long-term gilt rates (which are currently close to pre-pandemic levels) and life expectancy (also close to pre-pandemic levels).

The wealthiest families have on average experienced the largest absolute increases in wealth, and that is also true for the highest income families (although just half the amount of the top wealth decile). Figure 20 presents the same estimates but as median changes within income deciles. The picture is very similar, with the highest absolute changes for those at the top of the income distribution and very little change for low-income families. One difference is that the relative increase in wealth (in the red line) is more even across the distribution. This results from a lower concentration of property wealth in the middle of the distribution. The results in Figure 19 and Figure 20 are close because households' positions in the wealth and income distribution are highly correlated. This is partly because wealth provides additional income (investment income rises across the wealth distribution both in levels and shares) but also because of structural factors such as age.²⁹ Therefore, these absolute increases in wealth are important when considering the distributional impact of the pandemic as they can mean those already enjoying high levels of income and wealth accrue further benefits conferred by wealth: these include an increased access to credit (if wealth is used as collateral for loans), increased ability to take economic risks, and an increased ability to smooth consumption in the face of income shocks.

FIGURE 20: High income families increased wealth most

Median change in family wealth per adult as a result of asset price changes since the onset of the pandemic, by income decile: GB, February 2020 to May 2021



SOURCE: RF analysis of ONS; Wealth and Assets Survey; Bank of England, Effective interest rates; FTSE Russell, FTSE All-Share Index TR; MSCI, MSCI World Index TR; S&P Global, S&P UK Gilt Index; and ONS, UK House Price Index.

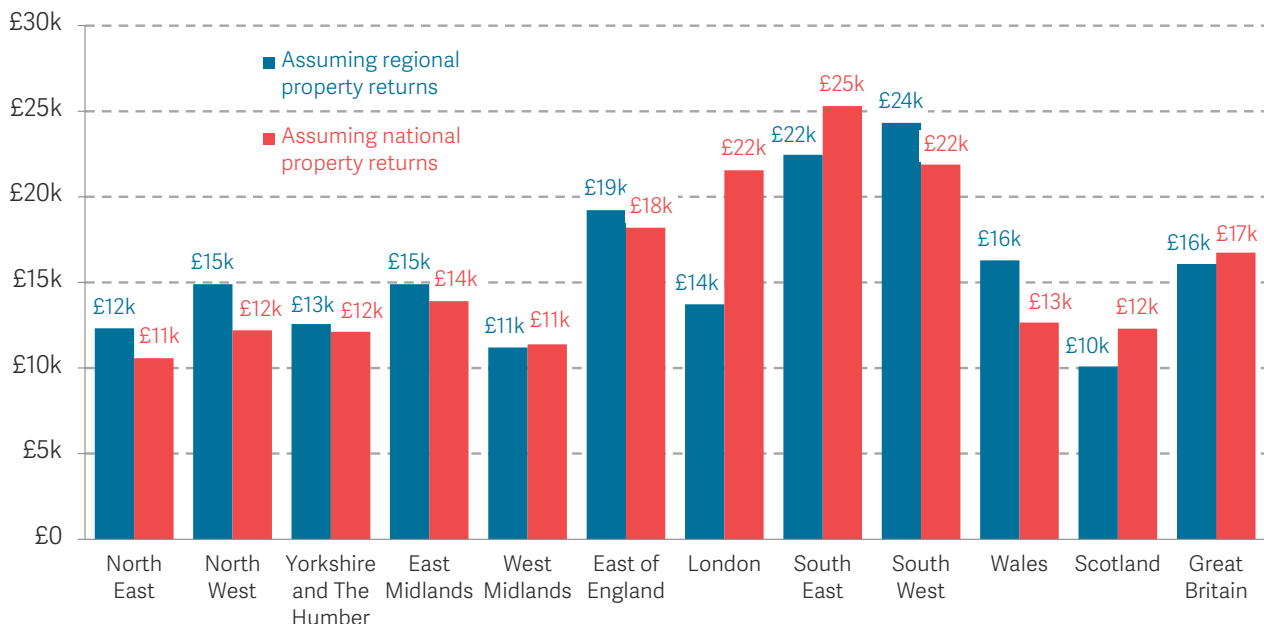
²⁹ For a more in depth discussion of the correlation between wealth and income see: G Bangham & J Leslie, *Rainy days: An audit of household wealth and the initial effects of the coronavirus crisis on saving and spending in Great Britain*, Resolution Foundation, June 2020.

Changes in asset prices have, on average, pushed up wealth more in the South and East of England than in Northern England or Scotland

Changes in asset prices give rise to significant regional variation with the average family in the South West of England experiencing almost two and a half times bigger increase in wealth than Scotland (Figure 21). Our approach allows us to look at regional variation in wealth changes. Part of this is driven by differences in house prices across regions. For example, London experienced the slowest house price growth and has lower than average increases in household wealth. Figure 21 shows the differences in returns across regions depending on whether property wealth is assumed to have increased by local or national rates. It shows that families in London faced absolute returns £6,000 lower on average than would be expected if house prices in the city had grown at the national average. But asset composition is also important with households in London tending to have a higher proportion of their wealth in financial assets such as savings accounts which have generated low returns over the period.

FIGURE 21: **Asset price appreciation boosted wealth in the South of England more than Scotland**

Mean change in family wealth per adult as a result of asset price changes since the onset of the pandemic assuming regional and national house price returns, by region/country: GB, February 2020 to May 2021



SOURCE: RF analysis of ONS; Wealth and Assets Survey; Bank of England, Effective interest rates; FTSE Russell, FTSE All-Share Index TR; MSCI, MSCI World Index TR; S&P Global, S&P UK Gilt Index; and ONS, UK House Price Index.

The final driver of differences across regions is the pre-existing level of wealth – all else equal higher pre-pandemic wealth would imply higher returns to rising asset prices. Changes in wealth levels as a proportion of pre-existing wealth are broadly in line with the pattern seen in levels: Scotland had the lowest proportional change, experiencing a mean increase of 4.2 per cent, and the South West had the highest (7.2 per cent).

Active changes in savings and debt benefited the highest income families the most

To fully understand the impact of the pandemic on household wealth, we need to combine the impact of rising asset prices with the active saving and debt changes outlined in Section 2.³⁰ This is a significant challenge because it is not feasible to estimate the wealth distribution from our YouGov survey.³¹ And, of course, we do not have data in the WAS on how people adjusted their savings and debt during the crisis. So, to understand the impact of the pandemic across the distribution, we use the WAS data as a base, and model the likelihood that individual families changed savings and debt during the crisis. After calculating the likelihood of savings and debt changes we scale our results to match the aggregate changes discussed in Section 2. Box 3 provides a more in-depth discussion of our methodology. Because the results are based on models rather than observed changes, there is inherently more uncertain. For this reason, we have undertaken a number of robustness checks. These show that the qualitative conclusions discussed below remain intact even if we change our modelling approach.

BOX 3: Methodology for estimating complete distributional effects of the pandemic on household wealth

In order to build a complete picture of the impact of the pandemic on the wealth distribution we must combine our results from the YouGov survey on changes to saving and borrowing with data from the Wealth and Assets survey on asset holdings. As discussed

in Section 2, our survey provides us with a good understanding of the type of people who have changed levels of saving and debt. But we do not know their granular pre-crisis wealth holdings so are unable to assess the impact of asset price changes. And

³⁰ The living standards impact of the two effects may not be identical, increasing saving clearly provides access to liquid assets which can readily be used for consumption while increasing housing wealth is less easy to take advantage of. But, over the long-term, the impact on living standards should be similar.

³¹ We were limited in the number of questions that can be reliably answered in online surveys, the sample size is only 8,030, and lacks the detailed collection process which is used in the WAS.

while we have granular asset holdings in the WAS we do not know how the pandemic affected them. So our approach is to combine asset price changes with modelling of the direct effects discussed in Section 2. In particular, we model the likelihood that each observation family within the WAS would have experienced a change in savings and debt during the pandemic based on the results of our survey. This can then be combined with aggregate data to ensure that the modelled changes in debt and borrowing match aggregate data on these variables since the start of the pandemic.

We estimate a probit model which estimates the likelihood families will change their saving and borrowing behaviour based on their household characteristics.³² To maintain a large sample, we estimate the probabilities for three outcomes each for savings and debt: increase, unchanged and decrease. Because the true underlying data represents a continuous series, we use an ordered probit which accounts for, as an example, the fact that if someone is more likely to increase savings than leave them unchanged then they are even less likely to reduce them. As savings and debt outcomes are separate, we model them in separate regressions. However, there is obviously a joint probability that someone increasing saving is less likely to also increase debt. As a result, we

use a nested model approach where we estimate the probabilities of the savings outcomes and then estimate the conditional probability of debt changes given a particular savings outcome. This means we estimate one ordered probit for savings and then three ordered probits for debt changes for each subsample of people who increased, left unchanged or decreased saving.

The possible household characteristics we use to estimate savings and debt outcomes were limited by characteristics we can observe in both datasets. These include marital status, number of children, house value (for owner occupiers) and region. By estimating a number of alternative models, age was found to be a particularly important driver but we also found that the best available fit for our models also included housing tenure and pre-pandemic labour market status.

The results of this process give us a probability of each family in the WAS experiencing each combination of saving and debt outcomes. We make one alteration to these probabilities, which is to fix the proportions of people in each net income quintile in the WAS who experience a given saving/debt outcome to the same proportion as we find in the YouGov survey. This ensures that the distributional results from the modelled saving and debt behaviours have the appropriate split across the

³² Probit models are a particular form of statistical model which are used to estimate the probability that an observation will fit into a finite set of outcomes based on particular characteristics.

income distribution.³³ To ensure we have consistent final estimates, and to take account of estimation uncertainty, we simulate changes in savings and debt 1,000 times and average our results across each run of the simulation.

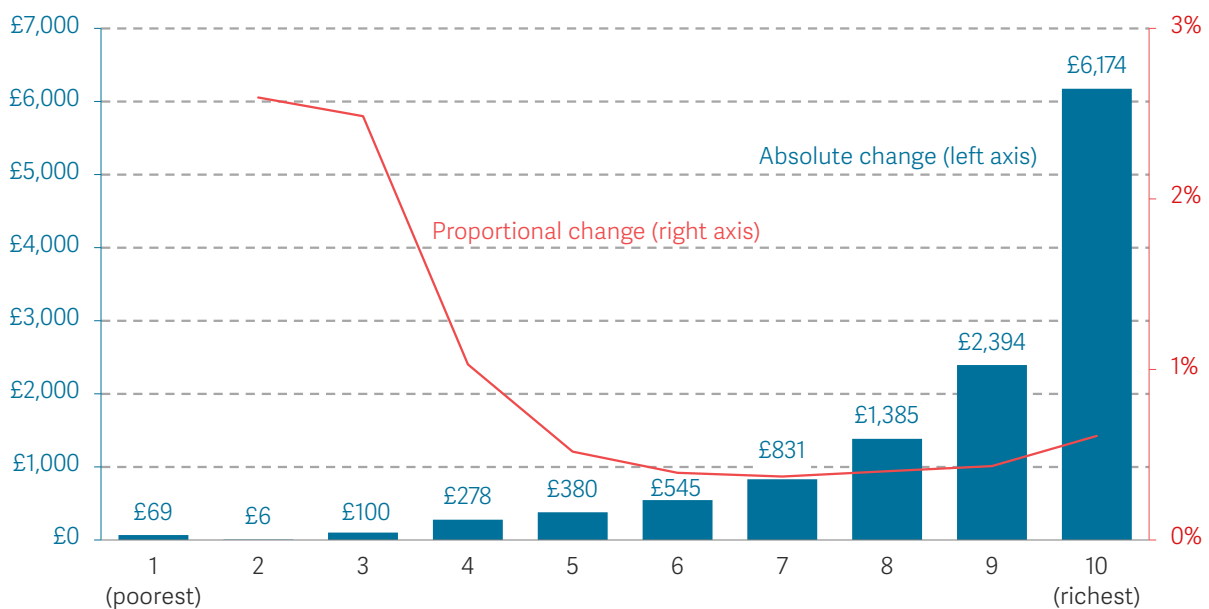
Finally, to ensure that our results are consistent with the aggregate changes in savings and debt we scale the

changes in debt and saving, for those families who are predicted to have changed their savings/debt holdings, to match the aggregates. Together this means that changes in savings and debt reported in this chapter are consistent with the survey evidence on the distribution of changes and the administrative data evidence on the level of changes.

On average, the very good news is that families have experienced an increase in savings and a fall in debt. And as Figure 7 and Figure 8 showed, families across the income distribution have experienced that – albeit with better-off families more likely to have improved balance sheets.

FIGURE 22: Savings and debt changes boosted high-wealth levels more but proportional changes were largest at the bottom

Median change in family wealth per adult as a result of active saving and debt changes since the onset of the pandemic, by net wealth decile: GB, February 2020 to May 2021



NOTES: Results rely on modelling partially based on YouGov survey results. Base of analysis is all adults who responded with valid information about saving and debt changes (n=4,606). These figures have been analysed independently by the Resolution Foundation. The first decile is excluded for the proportional change because average net wealth is negative for that decile.
 SOURCE: RF analysis of ONS; Wealth and Assets Survey; YouGov, adults age 18+ and the Coronavirus (COVID-19), June 2021 wave.

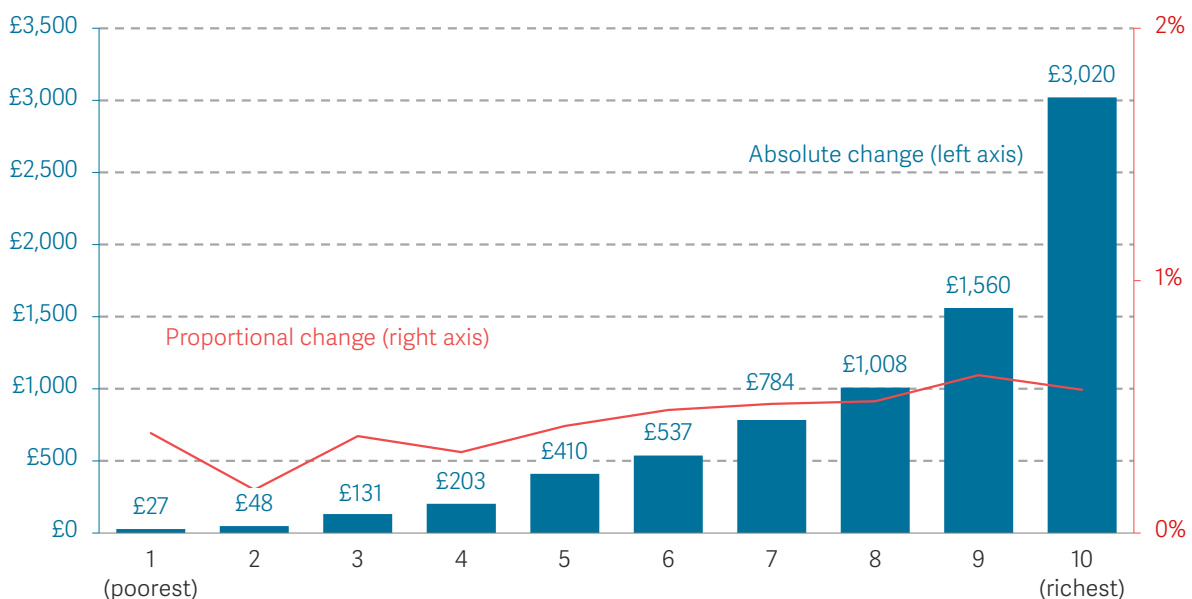
³³ We did not include income within the probit models because, due to lower survey response rates, the sample size would have been constricted.

Figure 22 shows what the net result of savings and debt changes are on average for each decile of the wealth distribution. It shows the largest increases were at the top of the distribution where average wealth increased by just over £6,000 – obviously reflecting the higher proportion of households increasing saving. But the proportional increases were larger at the bottom – this naturally reflects the fact that wealth levels are very low at the bottom (so any change in savings/debt makes a big difference) but also that debt falls were an important contributor to improving balance sheets. The overall improvement in family finances is very welcome and should be associated with higher living standards and improved financial resilience in future.

Looking across the income distribution, the clear trend in higher income families improving their net wealth relative to lower income families via increased savings and reduced debt levels, matches the results from Section 2. Figure 23 shows the estimated average wealth changes for each net income decile. The striking difference to the change seen previously across the wealth distribution is that not only are wealth increases at the top of the income distribution larger in levels terms, they are also larger proportionally: the highest income families increased wealth levels by around 0.5 per cent due to increased saving and reduced debt while the typical lowest-income families only improved by about half that.

FIGURE 23: High income families gained the most wealth in levels terms and as a proportion of pre-pandemic wealth

Median change in family wealth per adult as a result of active saving and debt changes since the onset of the pandemic, by income decile: GB, February 2020 to May 2021



NOTES: Results rely on modelling partially based on YouGov survey results. Base of analysis is all adults who responded with valid information about saving and debt changes (n=4,606). These figures have been analysed independently by the Resolution Foundation.

SOURCE: RF analysis of ONS; Wealth and Assets Survey; YouGov, adults age 18+ and the Coronavirus (COVID-19), June 2021 wave

Together, higher asset prices and active changes in savings and debt have stretched wealth gaps between the poorest and everyone else

Overall, then, our analysis points to a significant and widespread increases in wealth, with a total increase of £890 billion. However, this increase has been very uneven across the income distribution, as shown in Figure 24 (which combines the active debt and savings changes with the impact of asset prices). Families in the middle of the distribution have gained the most in relative terms, largely as a result of passive returns, and in particular due to increases in house prices. While, families at the top of the distribution have gained the most in absolute terms. Total wealth per adult is estimated to have increased for a typical family in the top 10 per cent of the income distribution by £27,000 (equating to almost 5 per cent of pre-pandemic wealth).

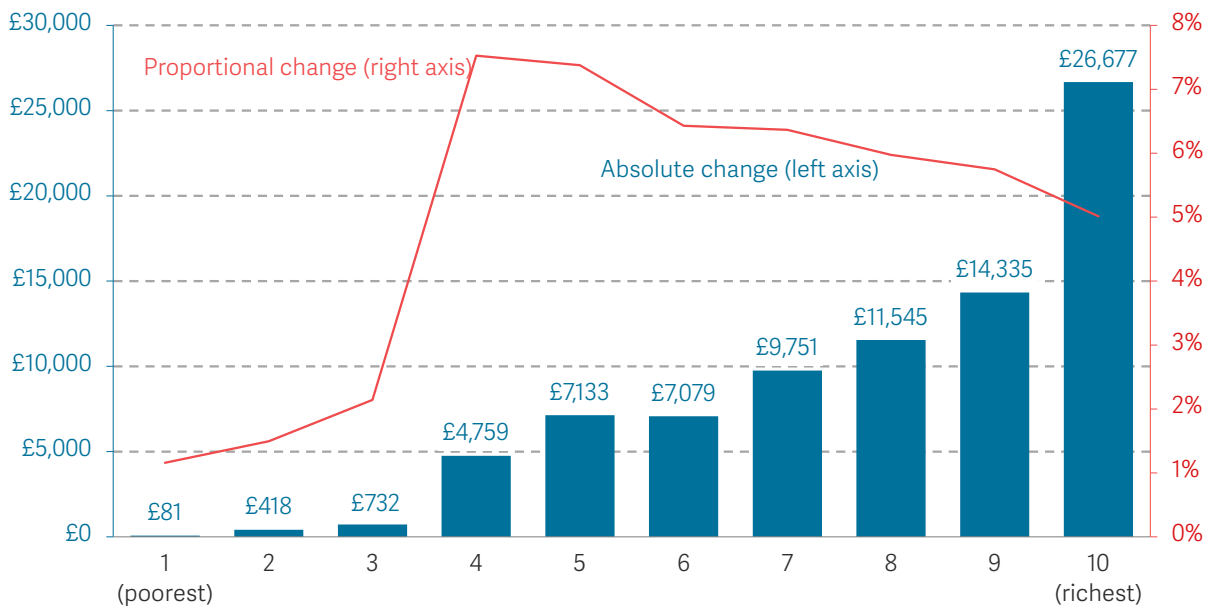
It is important to recognise these results are based on modelled changes to savings and debt rather than observed pandemic impacts. But because our results are based on direct post-pandemic survey data, we can be confident in the broad conclusion that wealth levels have risen significantly. We can also say with a relatively high degree of certainty that, for those in the top half of the wealth distribution, the vast majority of the increases in wealth result from changes in asset prices rather than saving or debt (Figure 25). While wealth changes are smaller at the bottom of the distribution, average wealth has increased and this was driven by active changes in saving and debt rather than asset price changes

It is also important to be clear that these forms of wealth are different in nature: while savings are more liquid and can be more easily spent than asset wealth, over the long-run asset wealth can confer benefits such as additional income through dividends or rent, and are important for determining living standards.³⁴

³⁴ Evidence on the extent to which increases in asset prices impact the real economy suggests there are some effects in the short run. Work using data in the US finds that households have a marginal propensity to consume 3 cents from every dollar of increase in the stock valuations. See G Chodorow-Reich, P Nenov & A Simsek, Stock Market Wealth and the Real Economy: A Local Labour Market Approach, American Economic Review, 2021.

FIGURE 24: The pandemic caused wealth to rise materially across the income distribution

Median change in family wealth per adult since the onset of the pandemic, by income decile: GB. February 2020 to May 2021

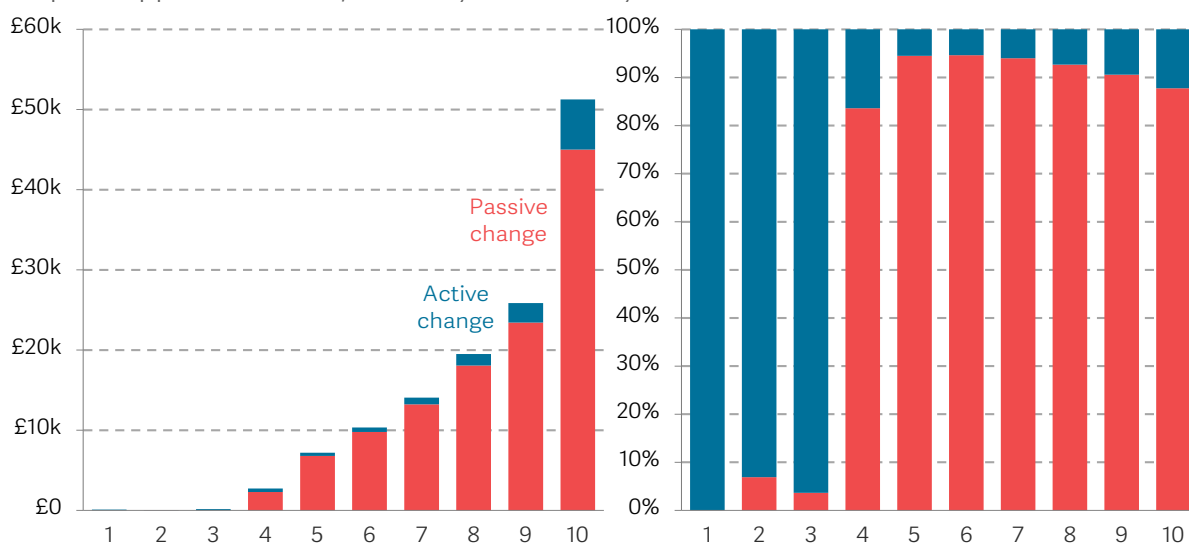


NOTES: Results rely on modelling partially based on YouGov survey results. Base of analysis is all adults who responded with valid information about saving and debt changes (n=4606). These figures have been analysed independently by the Resolution Foundation.

SOURCE: RF analysis of ONS; Wealth and Assets Survey; Bank of England, Effective interest rates; FTSE Russell, FTSE All-Share Index TR; MSCI, MSCI World Index TR; S&P Global, S&P UK Gilt Index; and ONS, UK House Price Index; YouGov, adults age 18+ and the Coronavirus (COVID-19), June 2021 wave.

FIGURE 25: Asset price changes are much more important in driving wealth changes

Median change in family wealth per adult since the onset of the pandemic, by wealth decile (left panel) and share of changes from active saving and debt or passive asset price appreciation: GB, February 2020 to May 2021



NOTES: Results rely on modelling partially based on YouGov survey results. Base of analysis is all adults who responded with valid information about saving and debt changes (n=4606). These figures have been analysed independently by the Resolution Foundation.

SOURCE: RF analysis of ONS; Wealth and Assets Survey; Bank of England, Effective interest rates; FTSE Russell, FTSE All-Share Index TR; MSCI, MSCI World Index TR; S&P Global, S&P UK Gilt Index; and ONS, UK House Price Index; YouGov, adults age 18+ and the Coronavirus (COVID-19), June 2021 wave.

Taking these results together, it is clear that policy makers need to recognise both that overall wealth has increased significantly and also that this wealth increase has been uneven across the distribution. Asset price appreciation has been the most important factor in driving wealth changes and these gains have naturally flowed to those already holding wealth.