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# Why do wealthy parents have wealthy children?



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# Executive summary

Why do the children of wealthy parents accumulate more wealth than children from poorer backgrounds? Does parental wealth have a role in determining young people's earnings, saving choices, returns to wealth and access to homeownership? How much wealth do parents give directly to their children? What other channels are involved in the persistence of wealth from one generation to the next?

As wealth has grown compared with earnings, questions about the role of wealth in determining living standards and the transmission of wealth inequalities across generations have come to the fore. This report sheds light on why wealth inequalities persist across generations in the UK, using data that measure the wealth of parents and their adult children. We assess the role of education, earnings, saving decisions, portfolio decisions, access to homeownership and partners' earnings in transmitting inequalities in wealth across generations.

## Key findings

- 1 Those with wealthy parents tend to be wealthier themselves.** When they were in their 30s, those born in the 1970s and 1980s whose parents were in the wealthiest fifth of parents of the same age had average net wealth (excluding pension wealth) of £107,000, around six times more than the £18,000 held by those with parents in the poorest fifth.
- 2 The persistence of wealth across generations in the UK is comparable to that in the US but greater than that in Scandinavian countries.** 10% higher parental wealth is associated with 3.7% higher child wealth, a similar level of intergenerational persistence to that seen in the US and higher than that in Denmark, Norway and Sweden.

### 3 Why do wealthy parents have wealthy children?

- 3 **Having wealthy parents is particularly important for getting to the top of the wealth distribution.** Children of the wealthiest fifth of parents are eight times more likely to be in the wealthiest fifth themselves than are the children of the poorest fifth, but the children of the poorest fifth are less than three times more likely to be in the poorest fifth themselves than are the children of the wealthiest fifth.
- 4 **Young adults' wealth is more related to their parents' wealth than their earnings are related to their parents' earnings.** Parents ranked 10 percentiles higher in the wealth distribution (for their generation) have children on average 3.7 percentiles higher in the wealth distribution. Moving 10 percentiles up in parents' earnings distribution is associated with an increase of just 2.7 percentiles for children, on average.
- 5 **Around half of the persistence in wealth across generations can be accounted for by the intergenerational persistence of education and earnings.** This suggests an important role for the transmission of 'human capital', and other drivers of earnings, in transmitting wealth inequalities across generations, but that other factors such as saving rates or direct wealth transfers are significant too.
- 6 **Parents' wealth is associated with their children having higher levels of education and earnings.** Holding parents' earnings fixed, those with parents in the top fifth by wealth earned around £10,000 more per year than those with parents in the bottom fifth.
- 7 **Those with wealthier parents save larger portions of their earnings.** While the average saving rate was 3% of earnings for those with parents in the poorest fifth, it was 12% for those with parents in the wealthiest fifth. These differences are not explained by the differences in these children's earnings or education or by children's saving rates being related to their parents' saving rates. One possible explanation for this is that the children of wealthier parents receive more transfers and capital income, and save some of this.

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- 8 **Those with wealthy parents hold a larger share of their wealth as higher-return investments such as stocks and shares.** However, given the small amount of wealth held in this form, this cannot be a major driver of the intergenerational persistence of wealth.
- 9 **The children of wealthier parents are significantly more likely to be homeowners by age 30 and this is not entirely explained by their higher prior earnings.** For a given level of child's earnings, those with parents in the wealthiest third had a 17 percentage point higher homeownership rate than those with parents in the poorest third, at age 30.
- 10 **Housing capital gains were larger for those with wealthier parents,** with the real-terms annual capital gain on housing wealth averaging about £290 for those with the poorest fifth of parents and £2,250 for those with the wealthiest fifth of parents.
- 11 **However, capital gains were no higher as a share of net wealth for those with wealthier parents than for those with poorer parents.** This is because those with wealthier parents had smaller mortgages compared with the value of their home when they became a homeowner. This in turn suggests a greater role for their own savings, or financial assistance from parents, when buying a house.
- 12 **Those with wealthy and poor parents were equally likely to have a partner, but those with wealthier parents tend to have higher-earning partners.** However, this difference is largely accounted for by differences in child's own earnings, and does not appear to have an independent role in driving intergenerational persistence of wealth.

# 1. Introduction

Are the children of poor parents destined to remain poor themselves? Does having rich parents give children significant advantages in terms of their labour market opportunities and living standards, and if so, why? These are questions about the level of *intergenerational mobility* in earnings and wealth. The level of intergenerational mobility is the extent to which parents' economic position in their generation is reflected in their children's economic position in their generation. Understanding the extent of intergenerational mobility, and its determinants, helps to make clear which policies will do most to promote equality of opportunity among children of different backgrounds.

It has been widely documented that higher-earning parents tend to have higher-earning children, particularly in the UK (e.g. Corak, 2013; Belfield et al., 2017). Much of this appears to be due to differences in children's home environment early in life and their access to educational opportunities (Bolt et al., 2021). However, earnings are not all that matter for individuals' living standards, which also depend on transfers received, returns to savings and investments, and economic security. These may be better captured by *wealth* – the value of assets held at a given point in time – than earnings.<sup>1</sup> In recent decades, wealth has grown faster than incomes in many advanced economies (Advani, Bangham and Leslie, 2021). As a result, there has been growing awareness of the role of wealth in social mobility and the intergenerational transmission of inequality (Piketty, 2014).

The gap in wealth between those at older and younger ages has been growing over time in the UK (Gardiner et al., 2020). Even before the economic effects of the COVID-19 pandemic, working-age generations had seen relatively low growth in their incomes and wealth for more than a decade (Cribb, 2019). Younger generations had no higher wealth than their predecessors did at the same age, mainly because of slower accumulation of housing wealth. The combination of

<sup>1</sup> Wealth remains an imperfect measure as it can also reflect differences in savings rates, which can be seen as differences in choices about *when* to spend income rather than *how much* income someone has.

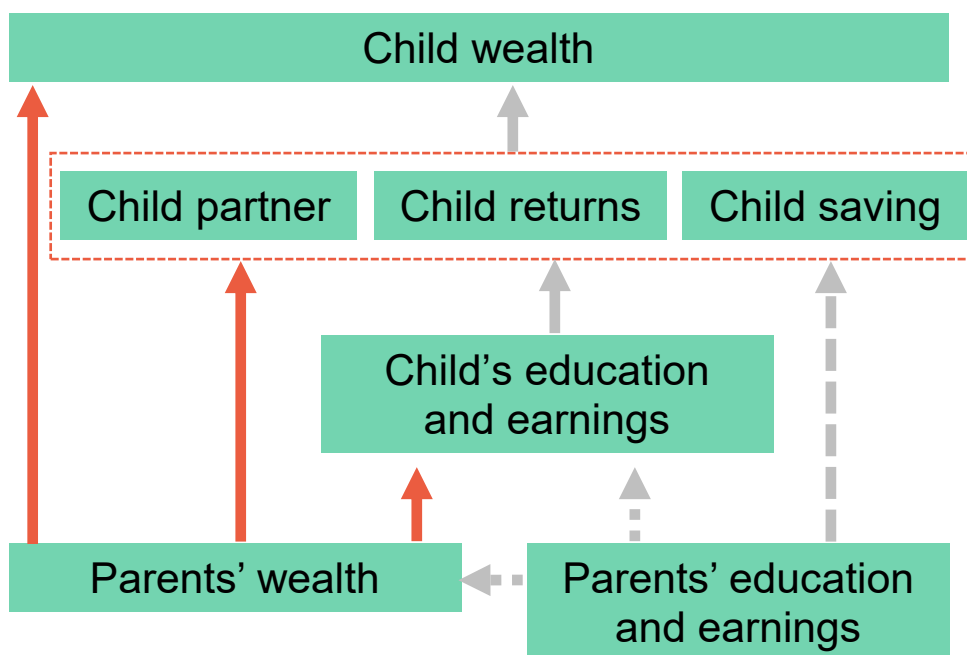
## 6 Why do wealthy parents have wealthy children?

these trends means that wealth is more important, both as a resource that parents might use to help their children and as a measure of the economic prosperity of younger generations.

In this report, we measure the persistence of wealth across generations using data that record the wealth of parents and their adult children. Wealth of parents is measured when they are on average in their mid 50s and wealth of children is measured when they are in their 30s.

We then turn to trying to understand the drivers of this persistence. Figure 1.1 sets out a schematic diagram of the main channels that we consider when looking at what drives the intergenerational persistence of wealth. The arrows represent possible relationships between the outcomes in the boxes. We show the main channels we will discuss, though others are possible. The orange arrows are the channels that we are trying to understand in this report. The grey arrows are other channels that could drive an association between parents' wealth and children's wealth. The solid grey lines are intermediate channels. The dotted grey lines represent channels that could drive an *indirect* association between parent and child wealth but which do not entail the former having a direct causal effect on the latter.

**Figure 1.1. Schematic of channels driving wealth persistence**



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In Section 4, we ask how much of the intergenerational persistence in wealth is accounted for by the intergenerational persistence in earnings and education. In Figure 1.1, earnings persistence is shown by the grey arrow between parents' and children's education and earnings. Is wealth persistence merely a by-product of the fact that parents with higher levels of education and earnings tend to have more highly educated and higher-earning children and that higher earners generally build up more wealth? Or are there other channels driving the persistence of wealth across generations?

We find that the persistence of earnings and education can account for only around half of the persistence in wealth. We therefore consider other channels that could drive intergenerational wealth persistence. In Section 5, we assess whether, among those whose parents have the same level of education and earnings, those with wealthier parents have higher levels of education and earnings (i.e. the rightmost orange arrow). We find evidence that this is the case. This finding could be consistent with parental wealth having a direct effect on children's education and earnings, perhaps because wealthier parents spend more on their child's education or can support them financially when they take risks in their career. But this finding could also be driven by some other factor driving both higher parental wealth and higher child earnings, such as parents' propensity to save being related to children's propensity to invest in education and training.

We then consider further possible channels that could drive wealth persistence by driving differences between children with similar earnings but different levels of parental wealth. We do this by assessing whether, comparing children with a given level of earnings, those with wealthier parents save more of their earnings (Section 6), hold assets that would yield higher returns (Section 7) and have higher-earning partners (Section 8), i.e. the middle orange arrow.

A key driver of the persistence of wealth is likely to be direct transfers of wealth from parents to children. Inheritances account for around 90% of the annual flow of intergenerational transfers in the UK (Nolan et al., 2020) and are likely to have a significant impact on measures of mobility (Bourquin, Joyce and Sturrock, 2021). In this report, we focus on children who are at ages where their parents are predominantly still alive and inheritances are yet to be received. While lifetime gifts are much smaller than inheritances, they may still have a substantive role in wealth



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persistence.<sup>2</sup> The data that we use do not record lifetime gifts and so we are unable to directly examine the role of these transfers (i.e. the leftmost orange arrow). However, we do find some evidence consistent with transfers around the time of home purchase being more significant for those with wealthier parents.

While there have been many studies examining intergenerational mobility in earnings, there have been relatively few studies looking at intergenerational mobility in wealth. A small number of recent studies examine this in the UK.<sup>3</sup> Two initial studies focused on housing wealth, finding that homeownership rates have fallen more sharply in recent decades for those who do not have homeownership parents and that differences in homeownership between those whose parents have more or less housing wealth are not fully explained by the differences in earnings and education between these groups (Blanden and Machin, 2017; Clarke and Wood, 2018). Blanden, Eyles and Machin (2021) and Gregg and Kanabar (2021) estimate the intergenerational persistence of wealth in the UK using different data sets and find that it is high by international standards and getting stronger over time.

This report builds on these studies by shedding more light on which channels look to be important in driving wealth persistence. We also bring together the analysis of wealth persistence with examination of the intergenerational persistence of savings and portfolio choices, building on Brown and Taylor (2016). In both these aspects, we contribute to the body of research studying intergenerational wealth persistence and its drivers across a range of countries.

It is important to note that while we are able to set out the associations between key economic variables, we cannot say conclusively whether one has a causal effect on the other. This is because many of the outcomes we consider are interrelated, affecting each other through several channels, and because there are other variables not observed in our data that could be driving some of the relationships we see. However, the patterns uncovered are useful in indicating which factors are likely to be important and therefore where further research could focus.

<sup>2</sup> 11% of those aged 25–34 received a gift or loan above £500 over the two-year period July 2014 to June 2016; amongst receivers in this age group, the median gift or loan size was £2,500, making up 5% of recipients' net wealth (Bonville-Ginn, 2018).

<sup>3</sup> Clark and Cummins (2015) examine the persistence of estates in Great Britain but this study was not focused on generations alive today.

## 2. Data

We use data from Understanding Society (USoc) and its predecessor, the British Household Panel Survey (BHPS). The BHPS ran from 1991 to 2009 and tracked various socio-economic characteristics and outcomes for households and their members over time. Understanding Society began in 2009 and built on the BHPS by incorporating 8,000 of the 10,000 BHPS households as well as expanding the sample with 32,000 new households. We refer to these two surveys together as BHPS-USoc. When children who are members of a survey household leave the household, the survey continues to follow them and their new household.<sup>4</sup> This allows us to link people in adulthood to their parents, and therefore to track and compare the economic outcomes of multiple generations of the same family.

In each year, the survey elicits information about demographic variables such as age, ethnicity, family structure and education, as well as some economic variables such as individual earnings and employment status, and homeownership and property values. Additionally, in waves 5, 10, 15, 22 and 26, corresponding predominantly to 1995, 2000, 2005, 2012 and 2016, respectively, the survey asks respondents detailed questions about their wealth. In particular, it asks about savings and investment assets, mortgages and unsecured debts, alongside the house values recorded in all waves.

Using these data, we construct a detailed picture of the wealth of individuals and households in these years. In particular, we obtain measures of total wealth, gross and net housing wealth, financial wealth, and unsecured debts, and divide financial wealth into that held in riskier and safer assets. Full details of the construction of our wealth measures can be found in Supplementary Appendix A.

<sup>4</sup> Specifically, the survey continues to follow those who were either (a) present in a household when it was originally surveyed or (b) the child of someone present in a household when it was originally surveyed.

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We restrict our analysis to children who were born between 1974 and 1986 and observed in the survey at age 16 or below. These birth years are selected for two reasons. The first is that, because parents and children will only be linked by the survey if they are living in the same household when first surveyed, we restrict ourselves to those aged 16 or younger when first surveyed.<sup>5</sup> As the BHPS started in 1991, no one born before 1974 can be in our sample. The second reason is that, because we want to measure the children's wealth at age 30 or older and the most recent wealth module wave was in 2016, children cannot be born after 1986. Further restricting our sample to children who report a value (which may be zero) for their house, mortgage, savings and investments at age 30 or older, and for whom we observe their parents' wealth, leaves us with a sample size of 593 children.

Families change over time, meaning it is sometimes unclear who we should class as each child's parents. Where possible, we link children to their biological parents. In certain cases where data on biological parents are missing, we use data on step-parents present in the household. Further details of sample selection and the linking of children to their parents can be found in Supplementary Appendix B.

A large number of individuals are excluded from our sample, mainly because they drop out of the survey over time, but also due to incomplete wealth information. To address concerns that our sample will be unrepresentative (because certain characteristics are associated with continued survey response and response to questions about wealth), we weight the data. Further details of this weighting can be found in Supplementary Appendix C.

<sup>5</sup> While there are many children still living with their parents at ages older than 16, a non-negligible proportion of children have left home at these ages and so a sample based on birth cohorts only observed from older ages would not be representative of the population.

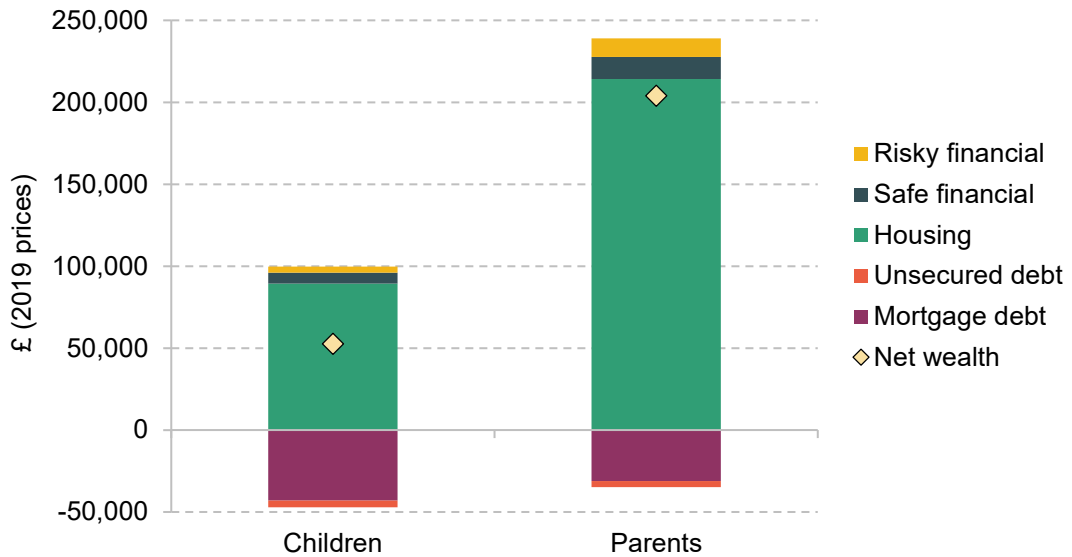
## 3. The intergenerational persistence of wealth

In this section, we set out our wealth measure and examine the overall relationship between the wealth of parents and their children. Figure 3.1 shows the average level of net wealth of the parents and children in our sample and the average level of each of the components of wealth.<sup>6</sup> The average level of child net wealth is around £50,000 and the average level of parental net wealth is around £200,000. The average wealth of parents is larger both because it is the wealth of a couple rather than a single individual in most cases and because wealth tends to increase with age up until retirement.

The composition of gross wealth is remarkably similar, on average, among parents and their children, though debts are a larger share of gross wealth for children. We see from Figure 3.1 that gross wealth is dominated by housing wealth, which is worth 89% of gross wealth for children and 90% for parents, with safe financial assets worth 7% of gross wealth for children and 6% for parents, and risky financial assets worth 4% of gross wealth for children and 5% for parents. Debts are overall worth 47% of gross assets for children, with 4 percentage points of this coming from unsecured debts. For parents, debts are worth 15% of gross assets, with 2 percentage points of this made up of unsecured debts.

<sup>6</sup> The measure of wealth for children is at the individual level. For parents, wealth is the sum of the wealth of both parents, if there are two. We use the most recent available observation of each child's wealth. The average age when their wealth is measured is 35. For parents, we take the average of their wealth measurements in 2000 and 2005. In 2005, mothers and fathers were on average aged 53 and 55, respectively. See Section 2 and Supplementary Appendix A for more details of the construction of our wealth measure.

Figure 3.1. Size and composition of wealth of parents and their children



Note: Child wealth is individual wealth taken from most recent observation when aged 30 or over (average age 35). Parent wealth is the average of 2000 and 2005 values of parents' wealth (average age 53 for mothers and 55 for fathers in 2005).

Source: BHPS-USoc, waves 10, 15, 22 and 26.

Figure 3.2. Average child wealth by parental wealth quintile



Note: Parental wealth quintiles are calculated using a weighted ranking within parental age category.

Source: BHPS-USoc, waves 10, 15, 22 and 26.

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Children's wealth varies substantially by their parents' position in the wealth distribution. Figure 3.2 shows the size and composition of wealth by parental wealth quintile. This shows that average net wealth is just under £18,000 for those with parents in the bottom fifth by wealth. This compares with average net wealth of £107,000 for those with parents in the top fifth by wealth, an amount roughly six times larger. One noticeable difference in wealth composition is that those with parents in the top wealth quintile hold substantially more of their wealth as risky financial assets.

One way to quantify the relationship between parents' and children's wealth is to look at how a child's position in the wealth distribution amongst those in the same birth cohort relates to their parents' position in the wealth distribution amongst their birth cohort.<sup>7</sup> We define the ranking so that the poorest parent or child in each group has a rank of 1 and the wealthiest has a rank of 100. We then examine how the average wealth rank of children varies by the wealth rank of their parents.

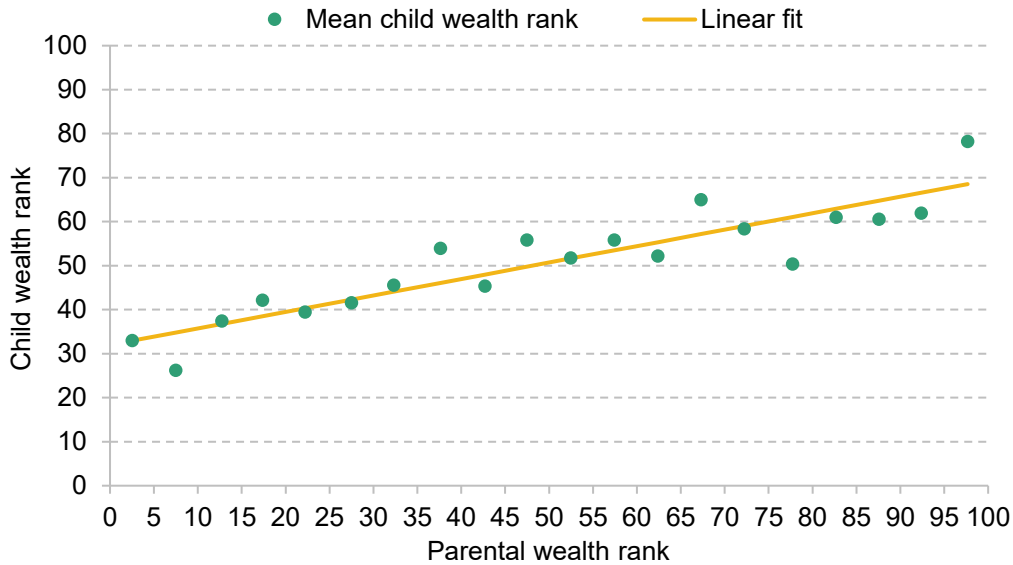
Figure 3.3 shows that the average wealth rank of children increases in a steady, linear way with the wealth rank of their parents. Specifically, if we run a regression of a child's wealth rank on the wealth rank of their parents, we find that moving up the parental wealth distribution by 10 rank points is associated with the child being 3.7 rank points higher up in their distribution. This 'rank–rank' relationship is shown by the yellow 'linear fit' line in Figure 3.3.

The 'rank–rank' slope coefficient of 0.37 that we estimate is one summary measure of the intergenerational persistence of wealth. Another summary measure is the so-called 'intergenerational elasticity of wealth'. This measures the average percentage increase in child wealth that is associated with a 1% increase in parents' wealth. We estimate the value of this elasticity to be 0.37, when controlling for the age category of parents and children and the wave of observation of the child.<sup>8</sup>

<sup>7</sup> To do this, we rank each child by their place in the wealth distribution for those in the same three-year age category and observed in the same wave of data as them. By ranking within age categories and waves of data, we ensure that the ranking of individuals is not affected by the fact that wealth tends to change with age (as older individuals have had more time to accumulate wealth) and over time (for example, as house prices change). As our sample of parents are all observed in waves 10 and 15 of the BHPS-USoc, we rank them according to the average value of their wealth across those two waves, within age groups. These age groups are 49 and below, 50–54, 55–59 and 60+.

<sup>8</sup> If we use the child's 'household' wealth (the sum of their wealth and the wealth of their partner and dependent children, if any) rather than their individual wealth, the rank–rank slope is 0.36 and the intergenerational elasticity is 0.39.

**Figure 3.3. Average child wealth percentile rank by parental wealth percentile rank**



Note: Wealth ranks are calculated using a weighted ranking within age group and wave. Mean child wealth ranks are calculated within ventiles of the parental wealth rank distribution and plotted against the mean parental rank within that ventile.

Source: BHPS-USoc, waves 10, 15, 22 and 26.

Our estimates are in line with two other recent estimates for the UK made by Gregg and Kanabar (2021) and Blanden, Eyles and Machin (2021), using different data sets from the one used here.<sup>9</sup> As will be discussed in later sections, these estimates of persistence are higher than most estimates for the persistence of earnings and income in the UK.

These estimates also imply that wealth persistence in the UK is high by international standards. Our elasticity estimate based on child household wealth is similar to those made for the United States and substantially higher than estimates made for Denmark, Norway and Sweden.<sup>10</sup> Therefore, wealth persistence in the UK

<sup>9</sup> Blanden, Eyles and Machin use the intergenerational correlation in homeownership and the relationship between homeownership and wealth rank to estimate a ‘rank–rank slope’ measure of the intergenerational association in household wealth of between 0.38 and 0.46, using a variety of data sets. Gregg and Kanabar use a two-stage estimator approach with data from the Wealth and Assets Survey and found a wealth elasticity of 0.4 for those in their 30s in recent years.

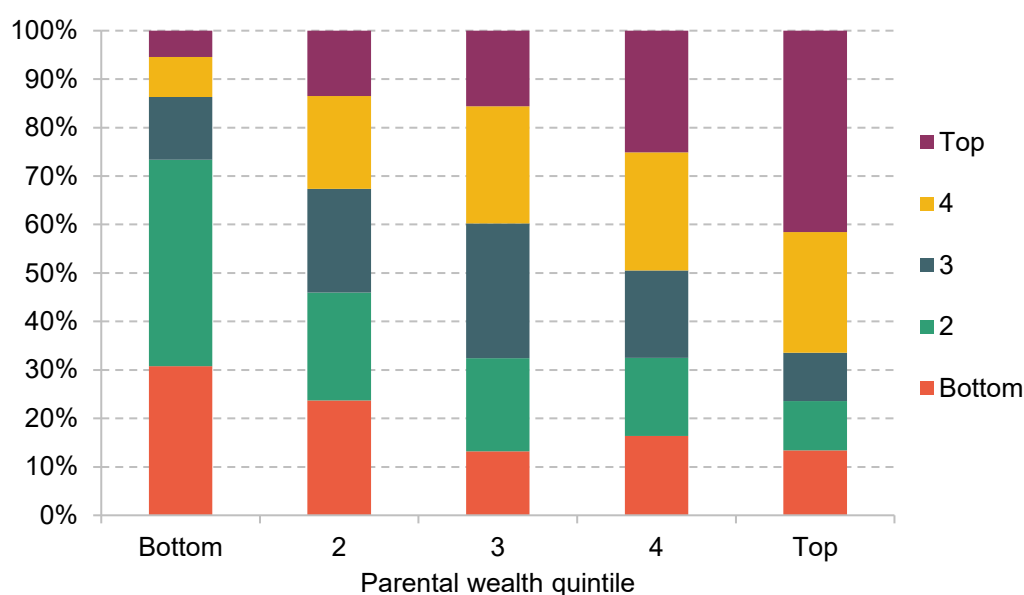
<sup>10</sup> Although our individual wealth rank–rank slope estimate is marginally lower than the 0.39 estimated for Sweden by Adermon, Lindahl and Waldenström (2018), our elasticity estimate using child’s individual wealth is higher than the estimate of 0.32 from that paper, and Black et al. (2020) estimate a rank–rank slope of 0.35 and elasticity of 0.25 for Sweden using a much larger sample.

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is amongst the highest for countries where it has been measured. Table A.1 in the appendix summarises a comparison of our estimates and other estimates from the UK as well as those from other countries.

We have so far considered *average* outcomes for children whose parents are at different points in the wealth distribution. Figure 3.4 shows the range of wealth outcomes for children whose parents are in each quintile of the wealth distribution. Specifically, for each quintile of the parental wealth distribution, it shows the percentage of children who are in each quintile of the wealth distribution amongst their age group. If the wealth outcome of a child was not related to their parental wealth, then in each parental wealth quintile, one fifth of children would be in each wealth quintile, a situation of ‘perfect mobility’.

**Figure 3.4. Percentage in each child wealth quintile, by parental wealth quintile**



Note: Wealth quintiles are calculated using a weighted ranking within age group and wave.

Source: BHPS-USoc, waves 10, 15, 22 and 26.

Figure 3.4 shows that while 5% of children whose parents are in the bottom fifth by wealth make it into the top fifth by wealth themselves, this figure is 16% of children whose parents are in the middle fifth and 42% for those whose parents are in the top fifth by wealth. In other words, those born to parents in the wealthiest fifth are eight times more likely to be in the wealthiest fifth themselves than are children born to



parents in the poorest fifth and almost three times more likely than those with parents of average wealth. At the other end of the spectrum, someone whose parents are in the least wealthy fifth is less than three times more likely to be in the poorest fifth themselves than is someone born to parents in the wealthiest fifth. Whether a child is in the top wealth quintile is therefore more related to their parental background than whether they are in the bottom quintile. One possible reason for this is that wealth in the top quintile is sufficiently high that it is difficult for most individuals to reach that point without significant financial transfers from their parents.

This persistence of wealth across generations could be down to many factors. Most directly, wealthier parents might transfer more wealth to their children than poorer parents.<sup>11</sup> Wealth might have other indirect effects. For example, wealthier parents might be able to lend a child money to help them ‘get on the housing ladder’ or support them financially while they search for a job, with knock-on consequences for the child’s earnings and wealth accumulation. But the relationship might also arise even without wealth itself having effects on a child’s prospects. For example, children of more educated parents tend to be more educated themselves (Bell, Blundell and Machin, 2019) and more educated people earn more and accumulate more wealth on average. Perhaps the intergenerational persistence in wealth is just another manifestation of the persistence across generations in education, ‘human capital’ and earnings. In the following sections, we try to shed light on what drives the persistence in wealth across generations by exploring some of these, and other, possible factors.

<sup>11</sup> Note that our data are from ages where parents are in almost all cases still alive when the child’s wealth is measured, so transfers that would feature in observed wealth would be gifts made during life rather than inheritances.

## 4. Is the persistence of wealth explained by the persistence of earnings?

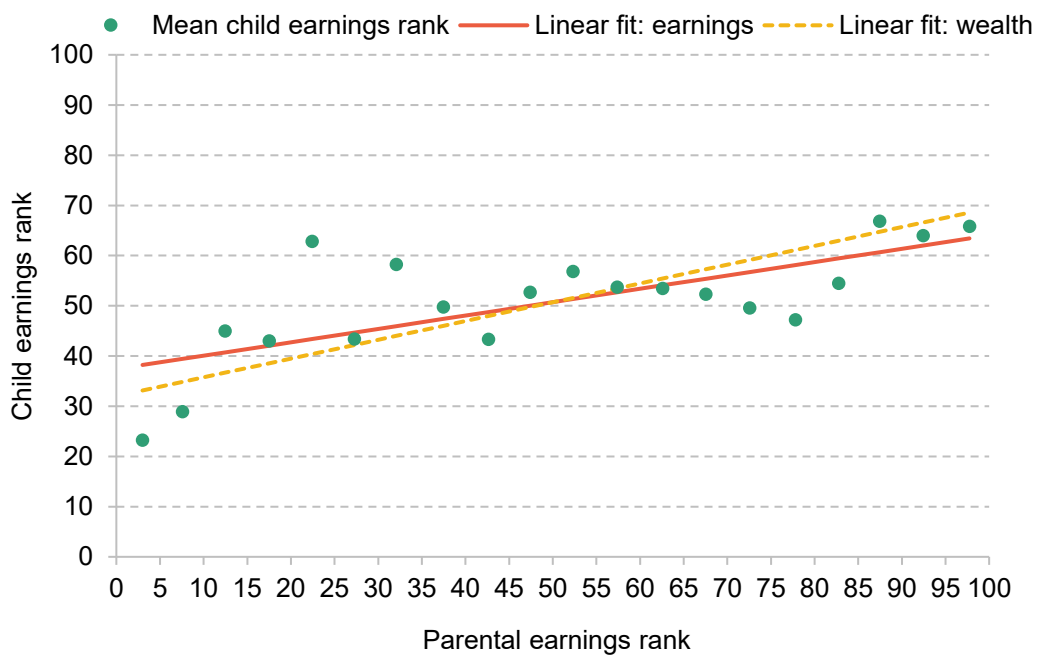
Studies across many countries, including the UK, consistently find that those with higher-earning parents tend to earn more themselves. A large body of research has sought to explain what drives this intergenerational persistence in earnings (Belfield et al., 2017; Gregg et al., 2017; Bolt et al., 2021).

The intergenerational persistence of earnings could drive wealth persistence. For example, suppose someone's wealth depended only on their own earnings, with those who earned more accumulating more wealth. The intergenerational persistence in wealth would then be nothing more than a by-product of earnings persistence. Here, we examine whether wealth persistence is explained by earnings persistence in this way, or whether there are other channels of intergenerational wealth transmission at play, such as parents' wealth directly affecting their child's earnings by allowing them to pay for better education, financial transfers, access to higher returns or a greater propensity to save out of given earnings.

Figure 4.1 shows the relationship between parents' ranking in the distribution of parental earnings and the average earnings rank of their child in the distribution of children's earnings. This is the equivalent of Figure 3.3, shown now for earnings rather than wealth. We use a long-run average of earnings for both parents and children to ensure our measure is not affected by transitory ups and downs in

reported earnings.<sup>12</sup> The rank–rank slope estimate for earnings in our sample is 0.27, meaning that a parent who is 10 rank points higher in the earnings distribution has a child who is 2.7 rank points higher in their earnings distribution, on average.<sup>13</sup> This estimate is lower than the rank–rank slope for wealth. If individuals with higher earnings tended to save more (as evidence suggests) and there were no factors driving persistence in wealth across generations other than the persistence of earnings, then the persistence of earnings ranks and persistence of wealth ranks would be the same. The fact that position in the wealth distribution is more persistent across generations than position in the earnings distribution indicates that there are also other channels that drive the persistence of wealth.

**Figure 4.1. Average child earnings percentile rank by parental earnings percentile rank**



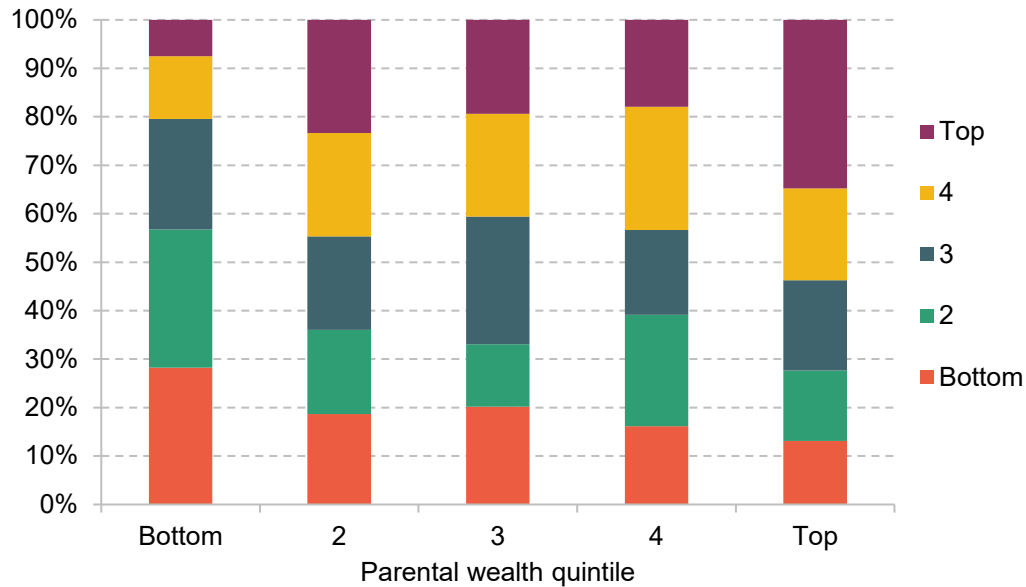
Note: Mean child earnings ranks are calculated within ventiles of the parental earnings rank distribution and plotted against the mean parental percentile within that ventile. Earnings ranks are calculated using multi-year averages.

Source: BHPS-USoc, up to 2016.

<sup>12</sup> We use an average of earnings over five years in the case of children and as many years as are available in the case of parents (estimated using a fixed effects regression after controlling for age and interview year). See Supplementary Appendix A for details.

<sup>13</sup> This estimate is in line with other studies for the UK. For example, using the BHPS, Rohenkohl (2019) finds a rank–rank slope for various measures of income of between 0.25 and 0.30.

**Figure 4.2. Percentage in each child wealth quintile by parental wealth quintile, after controlling for earnings differences**



Note: Quintiles are calculated using a weighted ranking within age group and wave. Rankings are based on the residual from an OLS regression of the inverse hyperbolic sine of wealth on the inverse hyperbolic sine of earnings and dummy variables for age category and, in the case of child's earnings, wave of observation. Earnings are multi-year averages for each individual.

Source: BHPS-USoc, up to 2016.

How much of intergenerational wealth persistence is explained by the persistence of earnings? To answer this, we examine the persistence of *residual* wealth – the component of wealth that is left over once we account for the role of individuals' earnings. Figure 4.2 shows the probability that a child is in different parts of the residual wealth distribution, given parents in each quintile of the residual wealth distribution. Persistence of the part of wealth that is not explained by earnings is lower than the persistence of total wealth shown in Figure 3.4, but it is still substantial. We can see in Figure 4.2 that there are particular differences between those with parents in the wealthiest and least-wealthy fifths, compared with those in the middle.

Wealth might be more persistent across generations than earnings for a number of reasons. Children with wealthier parents may earn more even after accounting for the fact that wealthier parents also tend to be higher earners. This might happen if, comparing parents with the same earnings, those with more wealth spend more on

the education of their children or can do more to help them find better jobs, for example. We examine this possibility in the next section.

A second set of channels would be those where the children of better-off parents build up more wealth, even for a given level of child earnings. This might happen if those with better-off parents save a higher proportion of a given amount of earnings, invest in assets with higher returns or receive larger wealth transfers, for example. These advantages could accrue to the children of higher-earning parents or might accrue particularly to those with wealthier parents, after accounting for parental earnings.

**Table 4.1. Regression analysis of relationship between child wealth and parental wealth**

Effect on child wealth	(1)	(2)	(3)	(4)
Parents' wealth	0.369*** <i>0.050</i>	0.223*** <i>0.054</i>	0.206*** <i>0.060</i>	0.181*** <i>0.058</i>
Child's earnings		0.893*** <i>0.164</i>	0.866*** <i>0.169</i>	0.790*** <i>0.177</i>
Parents' earnings			0.121 <i>0.191</i>	0.097 <i>0.196</i>
Parents' and child's education	No	No	No	Yes
Sample size	593	593	593	590

Note: Parents' and child wealth and earnings are transformed by taking the inverse hyperbolic sine of each. Education is a three-valued categorical variable. Parents' education is the highest level of education attained by either parent. Earnings are multi-year averages for each individual. \*, \*\* and \*\*\* denote coefficients that are statistically significantly different from zero at the 10%, 5% and 1% level, respectively. Standard errors, clustered at the family level, are shown in grey italics. All specifications control for parents' and child's age group and child's wave of observation.

Source: BHPS-USoc up to 2016.

## 21 Why do wealthy parents have wealthy children?

The first two specifications in Table 4.1 show that the intergenerational wealth elasticity declines from 0.37 to 0.22 when we strip out the effect of differences in children's earnings on their wealth. This is a fall of 40%. This indicates that the persistence of wealth is driven substantially, but not mostly, by the fact that wealthier parents have higher-earning children. This suggests there is a role for the second set of additional channels discussed above, whereby those with more advantaged parents accumulate more wealth for a given level of earnings.

Looking at specifications 3 and 4 in Table 4.1, we see the elasticity falls marginally to 0.21 when we add a control for parents' earnings, and falls to 0.18 once we control for parents' and children's education. These results mean that the intergenerational persistence of education and earnings together account for just over half of the persistence in wealth across generations.<sup>14</sup> The remaining association between parents' and children's wealth is consistent with a direct role for parents' wealth in increasing their child's wealth but could also be driven by some other factor, such as some parents having greater tendency to save and passing this tendency on to their children, that drives higher wealth in both generations.

In sum, while differences in education and earnings are likely very important in driving differences in wealth accumulation between those with rich and poor parents, almost half of the persistence in wealth is not associated with these channels. In the following sections, we therefore turn to examine other possible drivers of the intergenerational persistence in wealth.

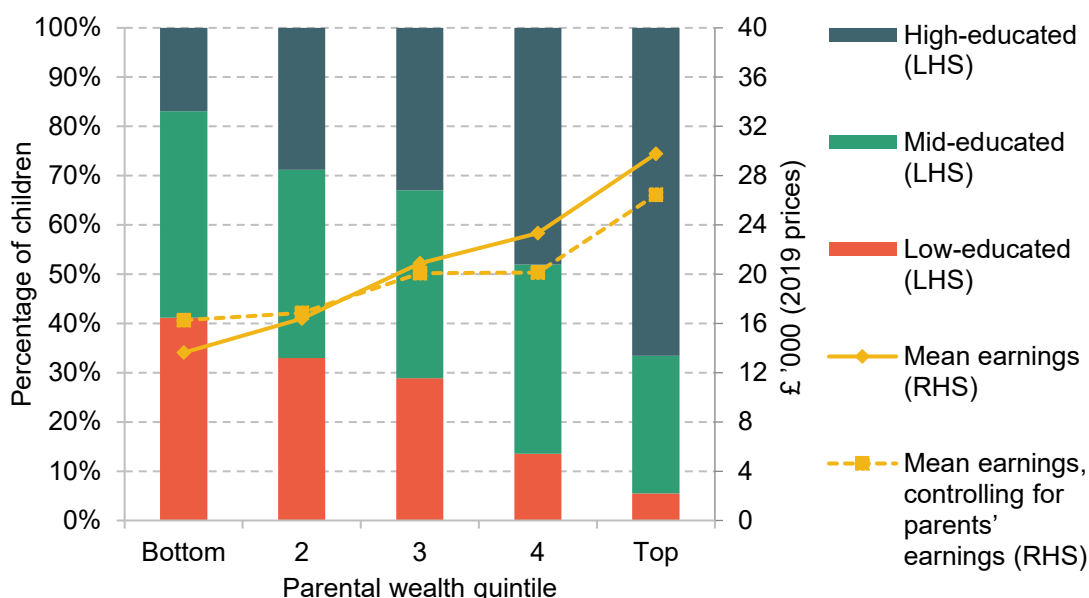
<sup>14</sup> This is in line with findings from other countries. Gayle and Hincapié (2016) find that slightly over 50% of the intergenerational persistence in wealth in the US is explained by the persistence of earnings and education. Adermon, Lindahl and Waldenström (2018) find that the equivalent figure for Sweden is just under 30%.

## 5. Do children with wealthier parents earn more?

In this section, we examine whether the children of wealthier parents earn more than the children of parents with similar levels of earnings and education but less wealth. It has been widely documented that the children of parents with higher socio-economic status (SES) tend to achieve higher levels of education and to earn more even for given levels of education. For example, those with higher-SES parents tend to attain higher grades and to attend degree institutions that are associated with higher earnings; even when comparing those with the same qualification from the same institution, there are significant differences in earnings between those from different family backgrounds (Belfield et al., 2018). Are any of these differences in education and earnings related to parental wealth, beyond other aspects of family background?

Figure 5.1 shows that average child earnings vary significantly by parental wealth quintile (as indicated by the solid yellow line) and that this holds true even once we strip out the differences in child earnings that are attributable to differences in parents' earnings (dashed yellow line). For example, those in the top fifth by parental wealth earn on average £6,000 more per year than those in the second-top fifth by parental wealth and £10,000 more than those in the bottom fifth by parental wealth, even once we have controlled for the differences in parental earnings between these groups. In part this is because those with the wealthiest parents were particularly likely to be very high earners. One in five of those with parents in the wealthiest fifth earned over £40,000, compared with one in ten of those in the second-wealthiest fifth, despite modest differences in parental earnings between the two groups.

**Figure 5.1. Average child earnings and percentage of children in each education group, by parental wealth quintile**



Note: Parental wealth quintiles are calculated using a weighted ranking within parental age category. An individual's earnings controlling for parents' earnings is the sum of the individual's residual from an OLS regression of earnings on parents' earnings rank and the predicted earnings given mean parents' earnings rank. Earnings are multi-year averages for each individual.

Source: BHPS-USoc, waves 10, 15, 22 and 26.

Some of these differences in child earnings between those with wealthier and poorer parents could be due to the children of wealthier parents being more highly educated, even for a given level of parents' earnings and education. We split individuals into three groups according to the highest educational qualification they obtain: 'low-educated' includes those with GCSE-level qualifications or lower, 'mid-educated' includes those with A-level or equivalent qualifications, and 'high-educated' includes those with university-degree-level qualifications.<sup>15</sup> Figure 5.1 shows that there are stark differences in the education level of children, depending on their parental wealth background. Those with parents in the wealthiest fifth are four times as likely to have a high level of education as those with parents in the poorest fifth.

<sup>15</sup> 'Mid-educated' includes some vocational qualifications including a diploma in higher education or a nursing qualification. 'High-educated' includes university degrees, foundation degrees, PGCE and membership of a professional qualification.



**Table 5.1. Regression analysis of relationship between child earnings and parental wealth**

Effect on child earnings	(1)	(2)	(3)
Parents' wealth	0.163*** <i>0.024</i>	0.095*** <i>0.027</i>	0.080*** <i>0.026</i>
Parents' earnings		0.360*** <i>0.074</i>	0.342** <i>0.070</i>
Parents' education	No	Yes	Yes
Child's education	No	No	Yes
Sample size	593	590	590

Note: Child and parental earnings and parental wealth are transformed by taking the inverse hyperbolic sine of each. Education is a three-valued categorical variable. Parents' education is the highest level of education attained by either parent. Earnings are multi-year averages for each individual. \*, \*\* and \*\*\* denote coefficients that are statistically significantly different from zero at the 10%, 5% and 1% level, respectively. Standard errors, clustered at the family level, are shown in grey italics. All specifications control for parents' and child's age group and child's wave of observation.

Source: BHPS-USoc up to 2016.

While this is not shown in the figure, a regression analysis finds that a significant relationship remains between parental wealth and child's education even after controlling for parents' earnings and education. This would be consistent with wealth itself being important for children's educational progression. It could also be that wealth is a proxy for some other factor (perhaps parents with a greater desire to invest for the future) that is important for children's education and that wealth itself does not have a causal impact on the education of children.

Table 5.1 shows the results of a regression analysis of the relationship between child earnings and parental wealth. The first column shows that we find that a 1% increase in parental wealth is associated with 0.16% higher child earnings, on average. The second column shows that, holding parents' earnings and education fixed, a 1% increase in parental wealth is associated with a 0.095% rise in average child earnings. In other words, holding parental earnings and education constant, just under 60% of the relationship between parental wealth and child earnings is

still present. Table 5.1 also shows that once we control for child's education, the relationship falls by about a further sixth. This suggests that about a sixth of the relationship between higher parents' wealth and higher child earnings is due to wealthier parents having more educated children (though imprecision in estimates means the role of education could be somewhat greater or less than this).

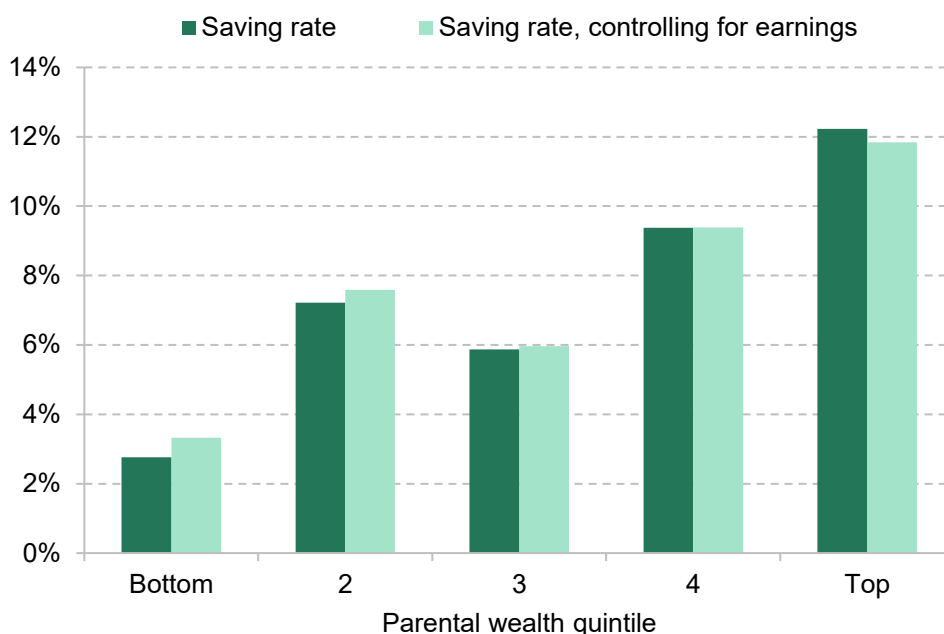
These results suggest that it is possible that parental wealth drives differences in earnings even amongst those who are similarly educated. Perhaps wealthier parents are able to lend or gift money to their children to enable them to start a business or to provide for them while they search for a higher-paying job. However, these results do not necessarily mean wealth has a causal role in this way. It could also be the case that parental wealth is a proxy for some other aspect of parental background that is advantageous to a child's earnings but not driven only by their parents' human capital and earnings, such as parents with connections that allow them to help their child to find a good job and progress in their career. It is also possible that finer measures of child education than we have available would explain some of the differences in earnings that are associated with parental wealth. Establishing whether this association represents a causal role for parents' wealth in determining children's earnings is a key question for future research.

## 6. Do children with wealthier parents save more?

Differences in wealth by parental wealth background could arise if those with wealthier parents save larger amounts. It is well documented that those with higher lifetime incomes save a larger share of their income (Dynan, Skinner and Zeldes, 2004; Bozio et al., 2017). However, in order to explain the persistence in wealth by parental background that is not explained by earnings, we want to know whether those with *wealthier parents* save more, for a given level of earnings.

The BHPS-USoc asks questions about whether an individual actively saves by putting money away in a bank or savings account. For those who do save, it also asks how much the individual saves on average each month. We use this information to look at individuals' average saving rates. To calculate their average saving rate, we take the average of their reported levels of saving over the five waves up to and including the wave their wealth was observed in and divide this by the average of their earnings over those same waves. This is not a perfect measure of saving. There are other things that individuals might do which might be considered saving – in the sense that they use income to increase their stock of wealth – such as spending on home improvements or building up unspent cash in a bank account, and which are unlikely to be captured by this measure.

Figure 6.1 shows the average of the children's saving rates, by parental wealth quintile. Those with wealthier parents save a larger share of their earnings. The average saving rate rises from 3% for those with parents in the poorest fifth to 12% for those with parents in the wealthiest fifth.

**Figure 6.1. Average saving rate, by parental wealth quintile**

Note: Parental wealth quintiles are calculated using a weighted ranking within age group. The average saving rate is constructed as the mean saving amount from the five waves up to and including the most recent wealth observation, divided by mean earnings over those same waves. Saving rates are Winsorised at the 99<sup>th</sup> percentile. An individual's saving rate controlling for earnings is the sum of the individual's residual from an OLS regression of saving rate on earnings and the predicted saving rate given mean earnings. Earnings are multi-year averages for each individual.

Source: BHPS-USoc, up to 2016.

As an illustration of the magnitude of this difference in saving rate, if someone earned the average amount for our sample of around £20,000 per year and saved 12% of their earnings each year rather than 3%, then after 15 years and with a real return of 3%, they would have accumulated £33,000 more wealth.

Figure 6.1 also shows the average saving rate once we have stripped out the differences in saving that are associated with differences in children's earnings. When we control for earnings differences in this way, we see that the relationship between parental wealth and saving becomes slightly weaker, but only a small amount of the differences in saving rate across parental wealth quintiles is associated with differences in earnings.

Why might it be that those with wealthier parents tend to save a larger share of their earnings, even amongst those with the same level of earnings? One possibility is

that those with wealthier parents receive larger transfers from them and save some of these transfers. Another possible explanation is that wealthier parents are people who tended to save a lot themselves and they pass on this tendency to save, either by explicitly discussing, and giving advice about, saving with their children or by their children observing their parents' choices and picking up their habits or preferences about saving that way. To explore this second possibility, and to examine quantitatively the relationship between parental wealth and saving, Table 6.1 shows the results of a regression analysis of the association between parental wealth, child earnings and the child's saving rate. The child's saving rate runs from 0% to 100%. Wealth and earnings are the rank (ranging from 1 to 100) of these variables (within age group and wave). The effects of wealth and earnings can be interpreted as the effect of moving up 1 rank point in these variables on the child's saving rate.

**Table 6.1. Regression analysis of saving rate**

Effect on child's saving rate	(1)	(2)	(3)
Parents' wealth	0.095*** <i>0.031</i>	0.096*** <i>0.033</i>	0.098*** <i>0.039</i>
Child's earnings	0.024 <i>0.021</i>	0.025 <i>0.022</i>	0.023 <i>0.023</i>
Parents' saving rate		0.003 <i>0.013</i>	-0.001 <i>0.017</i>
Controls	No	No	Yes
Sample size	593	593	590

Note: Wealth and earnings variables are the rank (within age group and wave) of these variables. Earnings are multi-year averages for each individual. 'Controls' include parents' earnings and child's and parents' education. Education is a three-valued categorical variable. Parents' education is the highest level of education attained by either parent. \*, \*\* and \*\*\* denote coefficients that are statistically significantly different from zero at the 10%, 5% and 1% level, respectively. Standard errors, clustered at the family level, are shown in grey italics.

Source: BHPS-USoc, up to 2016.

The first column of Table 6.1 shows that moving up 1 rank point in parents' wealth is associated with a 0.095 percentage point increase in the child's saving rate, even once we have controlled for the child's earnings. Another way of putting this is that children with parents at the 90<sup>th</sup> percentile of the wealth distribution have a saving rate that is 7.6 percentage points higher than those with parents at the 10<sup>th</sup> percentile of the wealth distribution, even holding the child's earnings constant. This is a substantial difference in saving rate by parental wealth. The second column adds a control for the parents' saving rate and finds that this does not have a statistically significant association with the child's saving rate, when also controlling for parents' wealth and child's earnings. Further, adding this control does not change the strength of association between parents' wealth and child's saving rate. Thus, we do not find evidence that the relationship between parents' wealth and child's saving is driven by learning from, or imitation of, parents' saving behaviour. The third column shows that these findings do not change if we also control for parents' earnings, and parents' and child's level of education.

These findings are in line with those of Brown and Taylor (2016), who find no association between the saving behaviour of parents and their children, using the BHPS-USoc. By contrast, using Swedish data, Black et al. (2020) find a negative relationship between the wealth of parents and the saving rate of their adoptive children. Our findings suggest that the higher saving rate of those with wealthy parents may contribute to the intergenerational persistence of wealth.

## 7. Do children with wealthier parents get higher returns to their wealth?

A key determinant of how fast individuals' wealth grows is the return that they get on their wealth. Returns can come in the form of dividends from shares, interest income on savings, rental income on property, and capital gains to all assets. Interest paid on debts is also a contributor to the overall return on net wealth. Different assets can attract different average returns,<sup>16</sup> and so if there were systematic differences in the form in which the children of wealthy and poor parents hold their wealth, this could be a potential driver of the persistence of wealth across generations.

We saw in Section 3 that those with wealthier parents hold a larger share of their wealth as risky financial assets, which on average attract higher returns. There is also considerable discussion of the idea that wealthy parents are able to help their children to 'get on the housing ladder' and thereby access an asset with higher average returns (and one in which the returns are often leveraged, as part of the purchase is typically financed by a mortgage). Though evidence on these issues is relatively thin, one study from Norway found that there was a modest intergenerational persistence of returns to wealth (Fagereng, Mogstad and Rønning, 2020). Importantly, it found that the returns to wealth were persistent across generations, even when controlling for the wealth levels of parents and children. Black et al. (2020) found that those with wealthier parents held more of their wealth

<sup>16</sup> See Jordà et al. (2019) for discussion of this.

in the form of risky financial assets and housing and received a higher return on their wealth.

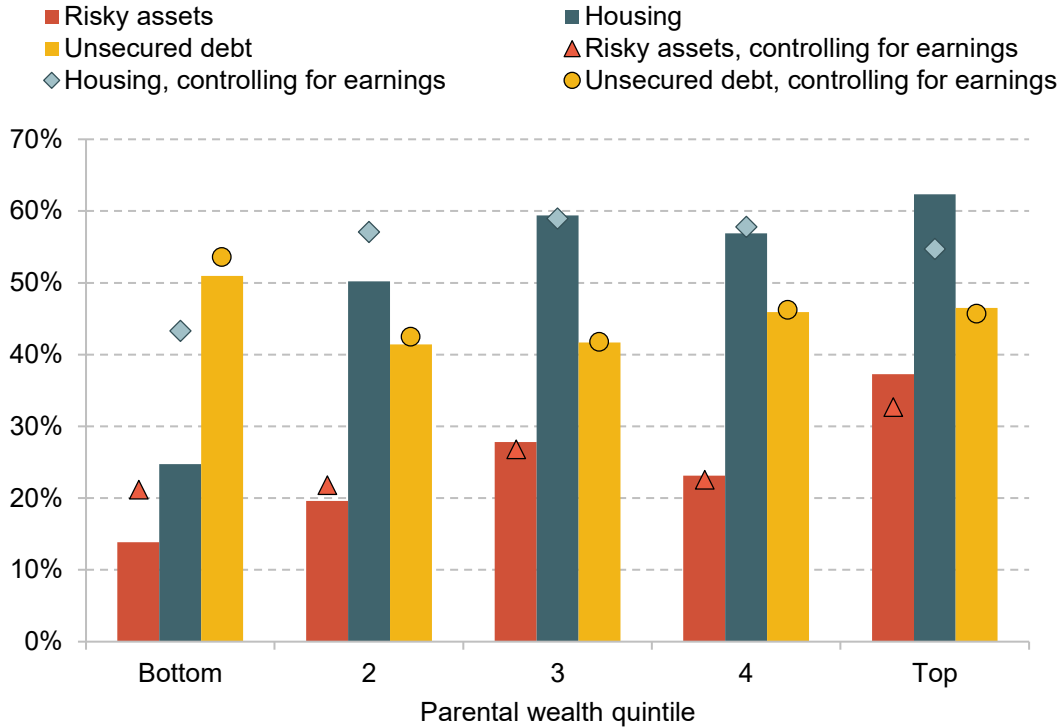
The BHPS-USoc does not contain direct measures of all returns to wealth. While it does contain some information on investment and interest income, it is unclear (and perhaps unlikely) that this would include all returns, such as those reinvested automatically within an ISA, and it does not cover capital gains on financial assets. There is no measurement of interest paid on unsecured debts. As there is measurement of housing wealth in each wave, we can examine changes in the reported value of a house. Of course, this is not a perfect measure of housing capital gains, both because self-reported values may be subject to bias and because changes in value could come about due to house renovations, which, from a financial perspective, are akin to a form of additional saving. However, it seems plausible that much of the variation in the returns to wealth across different people will be driven by the composition of their wealth and the capital gain they receive on housing. We therefore examine ownership of different asset types, and the share of wealth held in different assets, as well as capital gains on housing.

The relationship between asset allocation and wealth is complex. As well as asset allocation being a contributing factor to the returns that an individual gets on their wealth, it is also likely that the level of wealth that an individual has will influence their choices over asset allocation. For example, those with a higher initial level of wealth might be more willing and able to invest in riskier assets. As we cannot fully disentangle which of these possibilities is driving any association between wealth and asset allocation, our analysis here can only be suggestive of whether asset allocation has a role in driving the intergenerational persistence of wealth.

Figure 7.1 shows the percentage of children in our sample who have risky assets, housing wealth and unsecured debts. While 14% of those with parents in the bottom wealth quintile own some risky assets, this rises to 37% of those with parents in the top wealth quintile. While 25% of those with parents in the bottom wealth quintile are homeowners, this doubles to 50% of those in the second-bottom quintile and is around 60% for those with parents in each of the top three quintiles. Prevalence of unsecured debt is slightly higher for those with the poorest parents than in other quintiles, but the difference is not great.



**Figure 7.1. Percentage of children with risky assets, housing wealth and unsecured debt, by parental wealth quintile**



Note: Ownership of an asset is defined as having non-zero wealth in that asset class as set out in Supplementary Appendix A. Parental wealth quintiles are calculated using a weighted ranking within age group and wave. The earnings we control for are multi-year averages for each individual.

Source: BHPS-USoc, up to 2016.

Figure 7.1 also shows the effect of stripping out differences in asset ownership that are accounted for by differences in earnings across these groups. Doing that, we find that much, though not all, of the difference in risky asset ownership can be accounted for by the fact that those with wealthier parents are higher earners and higher earners are more likely to hold risky assets. While much of the lower homeownership rate of those with the poorest parents is accounted for by the lower earnings of that group, there is still a 14 percentage point gap in homeownership rates between the bottom and second-bottom parental wealth quintile that is not accounted for by differences in earnings. Differences in earnings do not account for the modest differences in unsecured debt holding across parental wealth quintiles.

Table 7.1. Regression analysis of risky assets

Outcome:	Owns (1)	Owns (2)	Owns (3)	Wealth share (4)	Wealth share (5)	Wealth share (6)
Parents' wealth	0.181*** <i>0.068</i>	0.175** <i>0.081</i>	0.020 <i>0.083</i>	0.044 <i>0.031</i>	0.048 <i>0.033</i>	0.001 <i>0.032</i>
Child's earnings	0.240*** <i>0.071</i>	0.218*** <i>0.074</i>	0.084 <i>0.078</i>	-0.043 <i>0.034</i>	-0.045 <i>0.035</i>	-0.070* <i>0.040</i>
Parents' risky assets		0.019 <i>0.049</i>	-0.001 <i>0.049</i>		-0.005 <i>0.018</i>	-0.005 <i>0.018</i>
Child's wealth			0.350*** <i>0.080</i>			0.027 <i>0.031</i>
Controls	No	No	Yes	No	No	Yes
Sample size	593	574	571	593	575	572

Note: Wealth and earnings are the rank (within age group and wave) of these variables. Earnings are multi-year averages for each individual. 'Parents' risky assets' is an indicator for parents' risky asset ownership in the ownership regressions and is the parents' share of risky assets in the wealth share regressions. 'Controls' include parents' earnings and child's and parents' education. Education is a three-valued categorical variable. Parents' education is the highest level of education attained by either parent. \*, \*\* and \*\*\* denote coefficients that are statistically significantly different from zero at the 10%, 5% and 1% level, respectively. Standard errors, clustered at the family level, are shown in grey italics. All specifications control for parents' and child's age group.

Source: BHPS-USoc, up to 2016.

It is important to examine not just whether individuals hold certain types of assets but the share of their wealth held in different forms. As we saw in Section 3, there are some differences in the share of child wealth held in different assets across parental wealth groups. In particular, there was a higher fraction of wealth held as risky financial assets amongst those with the wealthiest parents.

In Table 7.1, we show an analysis of holdings of risky financial assets. We examine both whether an individual holds any risky financial assets (in columns 1–3) and the

share of their gross wealth held as risky financial assets (columns 4–6). The first column quantifies what was suggested by Figure 7.1: even after controlling for earnings, a 1 rank point increase in parental wealth is associated with a 0.18 percentage point increase in the probability of holding some risky financial assets. However, we see from the fourth column that while a 1 rank point increase in parental wealth is associated with a 0.04 percentage point increase in the share of wealth held as risky financial assets, this is not statistically significantly different from zero. Column 2 adds in a control for whether the parents own any risky financial assets. We do not find a significant relationship between the parents' risky asset ownership and their child's risky asset ownership. Finally, we add in controls for the child's current level of wealth. This effectively asks whether those with wealthier parents are more likely to hold risky assets (and to hold more of their wealth as risky assets) for a given level of wealth. We find that for a given level of wealth, those with wealthier parents are not significantly more likely to hold risky assets and do not hold a greater share of their wealth as risky assets.

Table 7.2 shows a similar analysis for housing wealth. We find that whether an individual owns a house and the share of their wealth that is held as housing wealth are strongly related to their parents' wealth level, even after controlling for the child's earnings. Columns 1 and 4 tell us that if we take two children with the same earnings but with parents who are 10 rank points apart in the wealth distribution, then the child with wealthier parents is 2.4 percentage points more likely to be a homeowner and on average holds 2 percentage points more of their wealth as housing wealth. Columns 2 and 5 show that findings are similar if we add a range of controls, including the parents' region, which is likely associated both with parents' wealth and children's region and homeownership rates. Finally, once we control for the level of the child's wealth, having wealthier parents is not associated with a higher probability of homeownership or a greater portfolio share in housing.

For brevity, we do not tabulate the results for unsecured debt and safe assets. They show that those with wealthier parents hold a smaller share of their wealth as debts, after controlling for earnings, but that there is not a significant relationship between parental wealth and debt holding once we control for the child's wealth. There is no statistically significant relationship between parental wealth and the share of assets held as safe assets.

Table 7.2. Regression analysis of housing wealth

Outcome:	Owns (1)	Owns (2)	Owns (3)	Wealth share (4)	Wealth share (5)	Wealth share (6)
Parents' wealth	0.244*** <i>0.070</i>	0.234*** <i>0.084</i>	-0.047 <i>0.067</i>	0.202*** <i>0.066</i>	0.184** <i>0.080</i>	-0.071 <i>0.068</i>
Child's earnings	0.734*** <i>0.079</i>	0.699*** <i>0.081</i>	0.411*** <i>0.064</i>	0.666*** <i>0.076</i>	0.634*** <i>0.077</i>	0.373*** <i>0.063</i>
Child's wealth			1.081*** <i>0.061</i>			0.978*** <i>0.064</i>
Controls	No	Yes	Yes	No	Yes	Yes
Sample size	593	590	590	593	590	590

Note: Wealth and earnings are the rank (within age group and wave) of these variables. Earnings are multi-year averages for each individual. 'Controls' include parents' earnings, child's and parents' education, and dummy variables for parents' region. Education is a three-valued categorical variable. Parents' education is the highest level of education attained by either parent. \*, \*\* and \*\*\* denote coefficients that are statistically significantly different from zero at the 10%, 5% and 1% level, respectively. Standard errors, clustered at the family level, are shown in grey italics. All specifications control for parents' and child's age group.

Source: BHPS-USoc, up to 2016.

In summary, those with wealthier parents are more invested in risky financial assets and housing – two types of assets with historically higher risk and returns than safe financial assets – than their peers with similar earnings, but not more so than their peers with similar wealth. We do not find evidence of children learning from, or imitating, their parents' choice to invest in risky financial assets. One possibility consistent with these results is that at younger ages, those with wealthier parents allocated more of their wealth to riskier assets and they gained higher returns and this in part explains the persistence of wealth across generations. Another possibility is that children's portfolio allocation decisions are determined by their level of wealth and that the children of wealthy parents became wealthier than those with poorer parents for some other reason, such as saving more or receiving greater transfers from their parents, and their greater holdings of risky assets are merely a

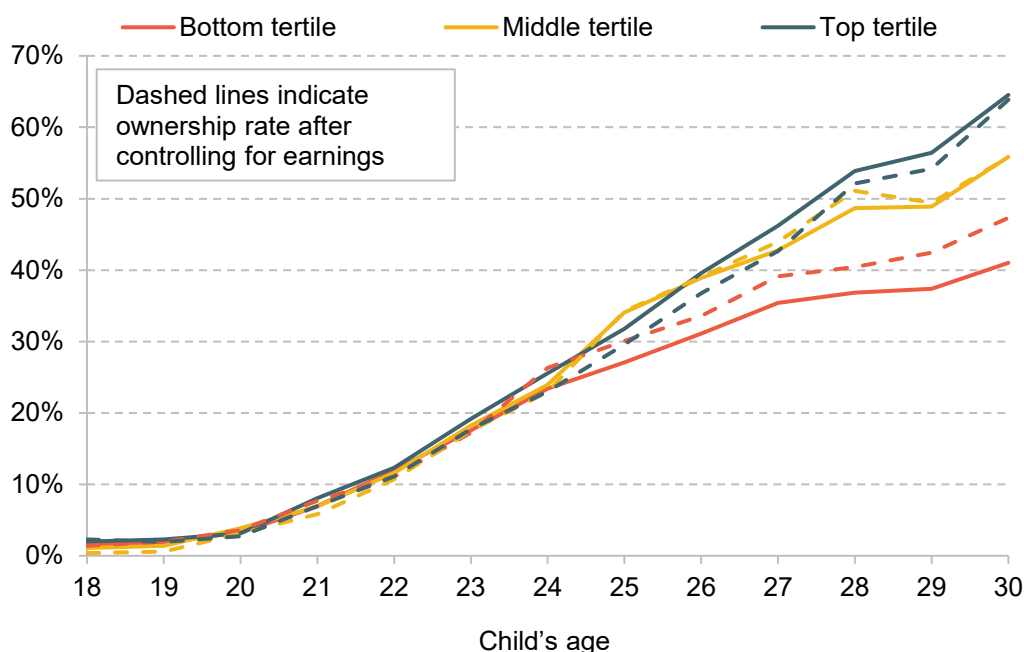
consequence of these other factors increasing their wealth. Even in this latter case, differences in asset allocation would still have a role in compounding gaps in wealth by parental background, if holding more risky assets increased average returns. One might imagine that reality lies between these polar cases, but this is an area where further investigation would be valuable.

The magnitudes of wealth held as risky financial assets are quite small and so this is unlikely to explain a large amount of the differences in wealth by parental background. For example, assume in an extreme case that risky financial assets earned a 6% real annual return and that the alternative allocation of that wealth earned a 0% real annual return. The share of gross wealth held as risky financial assets for those with parents in the top wealth quintile is 7.4%, compared with 2.4%, on average, across the other quintiles. Over a 15-year period, the total difference in gross wealth accumulation that would result from allocating 7.4% rather than 2.4% of gross wealth to risky financial assets would be around 4 percentage points. This is non-negligible, and could of course be more consequential if it interacts with other factors that affect wealth accumulation, but is not likely to be a major contributor to differences in wealth by parental background. By contrast, housing wealth is a much larger share of total wealth and so now we turn to examine the patterns in holding of housing wealth in some more detail.

## The role of housing

We have found that homeownership is associated with parental wealth, even after controlling for earnings. Figure 7.2 shows graphically the emergence of these differential homeownership rates by parental wealth. It plots the percentage of children who are homeowners, by age, split by whether their parents are in the bottom, middle or top third of the wealth distribution. We see that from the age of 25, the homeownership rates of those with parents in the middle and top tertiles pull away from those for people with parents in the bottom tertile. Crucially, when we strip out differences explained by differences in the children's earnings between these three groups, there are still substantial differences in homeownership rates by age 30.

**Figure 7.2. Percentage of children who are homeowners, by child age and parental wealth tertile**

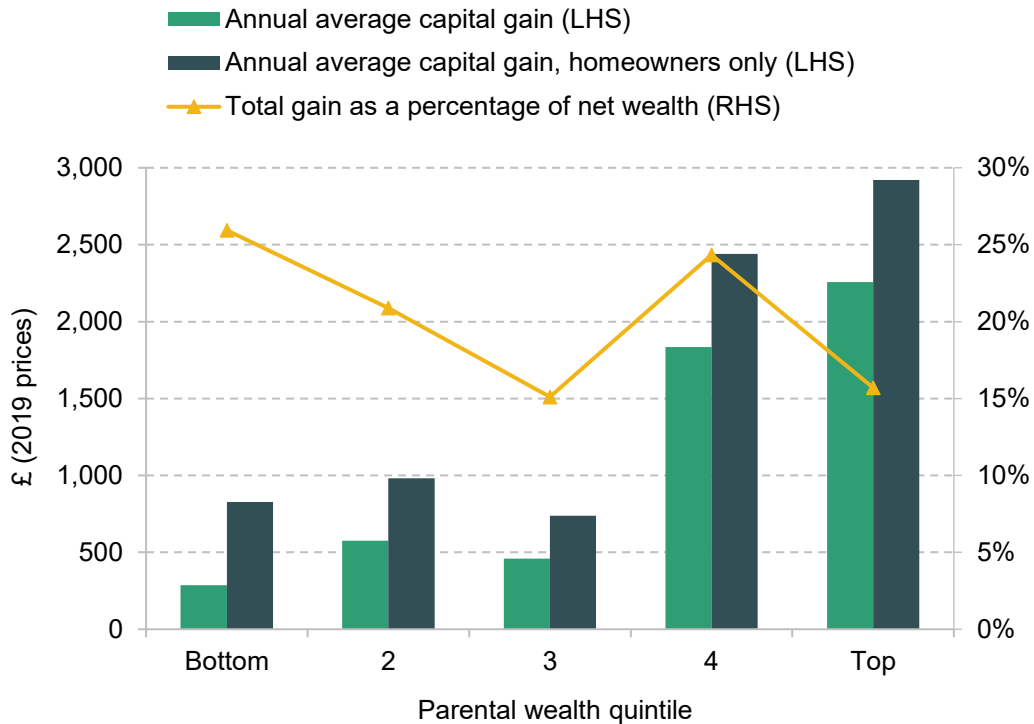


Note: Parental wealth tertiles are calculated using a weighted ranking within parental age category. The earnings we control for are multi-year averages for each individual.

Source: BHPS-USoc, up to 2016.

What are the consequences of divergence in homeownership rates for returns to wealth? Figure 7.3 shows the average annual capital gain from rising house prices in real terms, by parental wealth quintile. We see that the annual capital gain on housing wealth averages about £290 for those with the poorest fifth of parents, increasing to about £2,250 for those with the wealthiest fifth of parents. Some of this is because of differences in homeownership rates, but even amongst homeowners only there are still large differences in capital gains, particularly between the top two parental wealth quintiles and the rest. However, when we express the total capital gain in each parental wealth group as a percentage of the net wealth of that group, we find that there is no obvious relationship between parental wealth quintile and the share of children's wealth that is made up of capital gains from housing.

Figure 7.3. Real capital gain from housing, by parental wealth quintile



Note: Parental wealth quintiles are calculated using a weighted ranking within parental age category. Capital gains are calculated by taking the average real-terms increase in reported gross housing wealth, excluding years where individuals move home.

Source: BHPS-USoc, up to 2016.

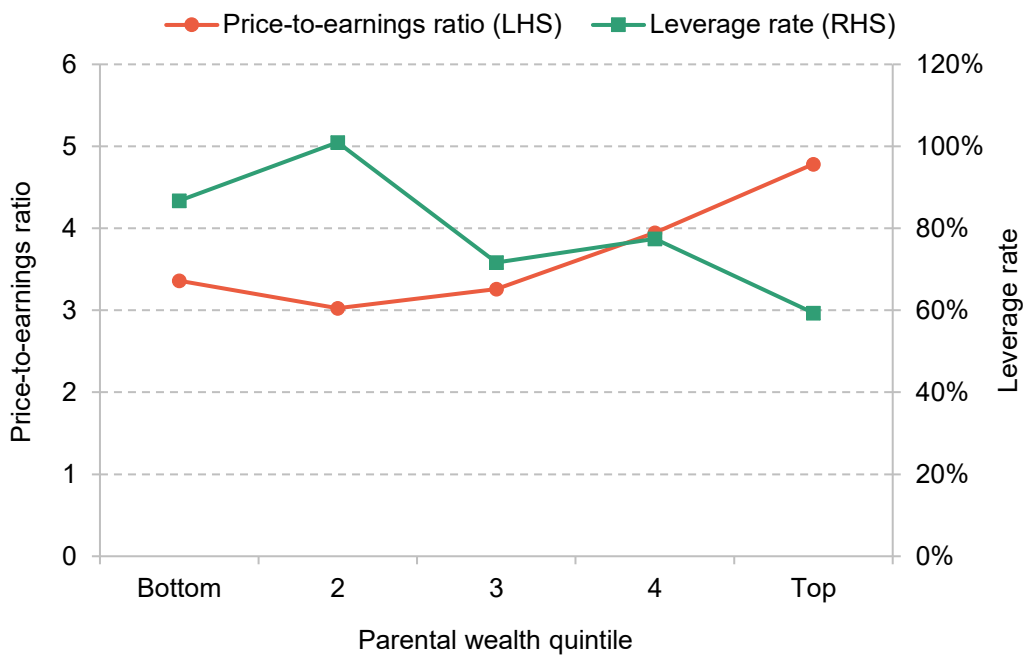
How is it that capital gains from housing are as large a proportion of wealth for those with the poorest parents as for those with the wealthiest parents despite the strong relationship between homeownership and parental wealth? Figure 7.4 shows the average leverage rate (loan-to-value ratio) – defined as the value of mortgage debt divided by home value when purchased – was lower for those with higher levels of parental wealth, implying that more of the house value was paid for up front. The higher leverage rate at the time of home purchase for those with lower parental wealth means that a given percentage increase in home values would translate into a larger percentage increase in *net* wealth for this group.<sup>17</sup> This may explain how, despite their lower homeownership rate, capital gains are as important a share of wealth for those with poor parents as they are for those with wealthier

<sup>17</sup> If house price growth is greater than the interest rate on mortgage debt then a higher leverage rate means higher returns to net housing wealth and vice versa.

parents: the minority with poorer parents who are homeowners have a more leveraged, and therefore (given the prevailing rate of house price growth) higher, return to net housing wealth. This suggests that differences in homeownership are not driving differences in returns across those with wealthy and less wealthy parents.

Figure 7.4 also shows the average price relative to earnings of the houses purchased by those with parents of different wealth levels. This shows that those with parents in the top two parental quintiles purchased houses whose value was larger compared with their earnings than those in the bottom three parental wealth quintiles.

**Figure 7.4. Average price-to-earnings ratio and leverage rate at time of first home purchase, amongst homeowners**



Note: Parental wealth quintiles are calculated using a weighted ranking within parental age category. Price-to-earnings ratio is house value in the wave in which the child first became a homeowner divided by child's household earnings in that wave. Leverage rate is mortgage debt as a percentage of house value in the wave in which the child first became a homeowner.

Source: BHPS-USoc, waves 1–19 and 22–26. Waves 20 and 21 contain no information on mortgage values.



A second implication of Figure 7.4 is that those with wealthier parents pay for a larger share of their property up front when purchasing it. This is presumably what makes it possible for them to buy relatively high-valued properties, compared with their earnings. Greater ability or willingness to finance a deposit could also explain the gap in homeownership rates between those with wealthy and poor parents that persists after controlling for earnings.

These findings in turn imply either that those with wealthier parents are more able or willing to use their own savings to purchase a home or that they receive greater amounts of financial assistance from their parents or other people when purchasing a home. Both of these possibilities are plausible. We saw in Section 6 that those with wealthier parents saved a larger share of their earnings. Evidence from other sources suggests that transfers from parents ahead of home purchase are common. For example, Legal and General reported that in 2020 more than half of those under the age of 35 in the UK received a financial gift when buying their first home.<sup>18</sup> Future work could examine the role of financial transfers and own savings in funding home purchases using a data set (such as the Wealth and Assets Survey) that records these alongside household wealth.

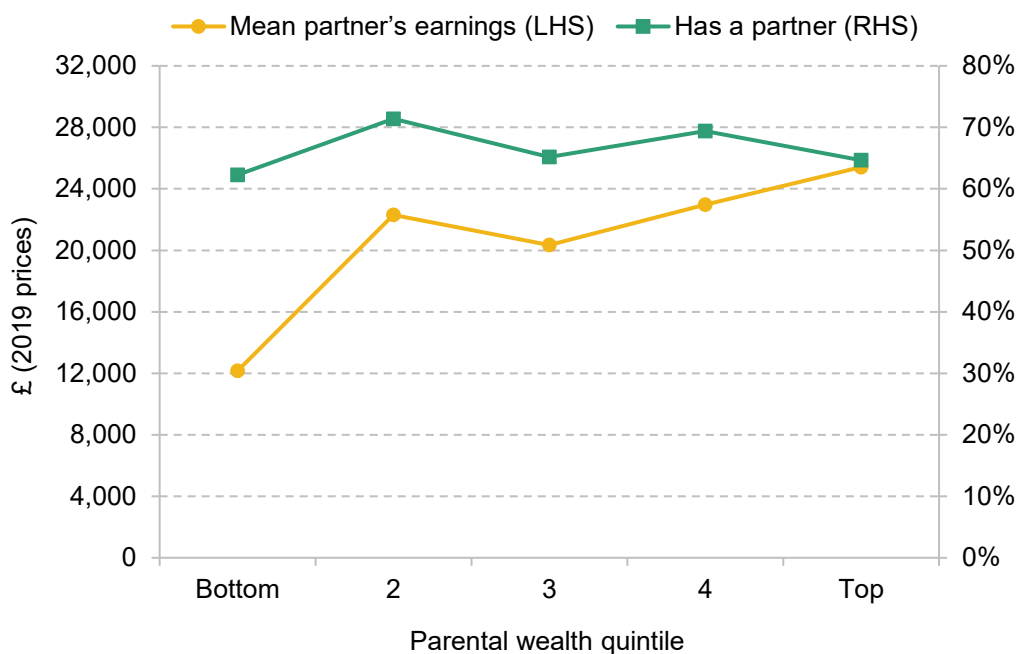
<sup>18</sup> <https://www.legalandgeneralgroup.com/media-centre/press-releases/bank-of-mum-and-dad-funds-one-in-two-house-purchases-among-under-35s-legal-general-research-reveals/>.

## 8. Do children with wealthier parents have higher-earning partners?

It is well established that more highly educated people are more likely to have more highly educated partners, and that this contributes to household income inequality (Greenwood et al., 2014; Eika, Mogstad and Zafar, 2019). Could ‘assortative mating’, as this is called, also contribute to differences in wealth by parental background? Having a partner, and a partner with higher earnings, could matter for an individual’s wealth because the partner’s earnings might fund shared assets. Living as a couple tends to mean that some expenses are shared and so a certain standard of living can be achieved with lower expenditure, and this might enable those in couples to save more, too.

Figure 8.1 shows the percentage of children who have a partner and the average earnings of their partner, if they have one, by parental wealth quintile. We see that the probability of having a partner does not seem to vary substantially by parental wealth level, being between around 60% and 70% of each group. Average earnings of partners do, however, vary by parental wealth level. The biggest difference is between those with parents in the bottom fifth by parental wealth and the rest. Average partner earnings for those with parents in quintiles 2–5 are between £20,000 and around £25,000, compared with around £12,000 for those with parents in the bottom quintile.

**Figure 8.1. Percentage of children with a partner and average of child's partner's earnings (among those with a partner), by parental wealth quintile**



Note: Parental wealth quintiles are calculated using a weighted ranking within parental age category. Earnings are multi-year averages for each individual.

Source: BHPS-USoc, up to 2016.

Table 8.1 presents a regression analysis of the relationship between partner's earnings and parents' wealth. We find that there is a significant relationship between parent wealth and partner earnings, with 1% higher parental wealth associated with 0.06% higher partner earnings. However, this relationship is almost all accounted for by the fact that children with higher earnings tend to have higher-earning partners and wealthier parents; once we control for the child's earnings, there is no significant relationship between parents' wealth and the child's partner's earnings (column 2).

In other words, those with wealthier parents are more likely to have higher-earning partners, but this is only because those with wealthier parents tend to earn more and have higher education.

**Table 8.1. Regression analysis of relationship between child's partner's earnings and parental wealth**

Effect on child's partner's earnings	(1)	(2)	(3)	(4)
Parents' wealth	0.063*** <i>0.021</i>	0.009 <i>0.022</i>	-0.026 <i>0.022</i>	-0.029 <i>0.022</i>
Child's earnings		0.331*** <i>0.071</i>	0.276*** <i>0.076</i>	0.261*** <i>0.075</i>
Parents' earnings			0.245*** <i>0.076</i>	0.251*** <i>0.078</i>
Parents' and child's education	No	No	No	Yes
Sample size	593	591	591	590

Note: Partner's earnings are measured as the average of the five most recent earnings observations. For those without a partner, this is recorded as zero. Parent and child earnings are multi-year averages for each individual. Partner, child and parental earnings and parental wealth are transformed by taking the inverse hyperbolic sine of each. Education is a three-valued categorical variable. Parents' education is the highest level of education attained by either parent. \*, \*\* and \*\*\* denote coefficients that are statistically significantly different from zero at the 10%, 5% and 1% level, respectively. Standard errors, clustered at the family level, are shown in grey italics. All specifications control for parents' and child's age group and child's wave of observation.

Source: BHPS-USoc up to 2016.

Consistent with this finding, when we add a control variable for partner's earnings to our estimation of the intergenerational wealth elasticity, we find that a child's partner's earnings are strongly positively related to the child's own wealth but do not explain the relationship between parents' and their children's wealth, once the child's earnings are controlled for.

## 9. Conclusion

This report has sought to shed light on the persistence of wealth across generations, in the UK, and its drivers. Given the scale of wealth compared with incomes in the UK today, and growing inequality in wealth between age groups, understanding this dimension of social mobility is increasingly important.

Much of the analysis of social mobility to date has focused on differences in education and earnings outcomes and their relationship to differences in the education and earnings levels of parents. While education and earnings channels are very important in driving wealth persistence, they only account for around half of the intergenerational persistence in wealth. Notably, this persistence in wealth across generations emerges even in a period of life when parents are still alive and before inheritances from parents play any role.

There are a number of channels that look likely to contribute to the persistence of wealth, beyond that explained by the persistence of education and earnings. We found that parental wealth, over-and-above parents' education and earnings, had a strong relationship with children's earnings. Further, even among those with a given education level, those with wealthier parents earned more. We also found substantial differences in saving rates and homeownership between those with wealthier and poorer parents that are not explained by the education level and earnings of children or their parents. These gaps in homeownership seem to be a manifestation of other differences, such as higher saving rates or transfers received, rather than a factor that would drive differences in returns by parental wealth level.

One implication of these findings is that policies that seek to improve educational progression and labour market outcomes for those with low-education and low-income parents could, if designed and implemented well, be important for wealth mobility but would not equalise wealth outcomes between those with wealthier and poorer parents. A significant amount of the inequalities in wealth by parental background appear to be due to other channels through which parents transmit advantages to their children.

Our research raises further questions that could be examined by more detailed investigation of certain channels associated with wealth persistence and by research that could identify causal relationships. For example, it would be valuable to know whether parental wealth has a causal impact on children's earnings progression or is a proxy for some other factor. If parental wealth is important for earnings, it would be valuable to understand whether this is because it influences the career choices of children or for some other reason. Another key area for investigation is the role of children's own savings and receipt of financial transfers at the time when they become homeowners. Are transfers made at the time of home purchase an important cause of the differences in homeownership that we uncovered? New data that cover both financial transfers and parents' and children's wealth would be required to make a comprehensive assessment of the contribution of transfers to intergenerational wealth persistence.

Answers to these questions would shed further light on the extent to which wealth persistence relates to inherited traits and learned behaviours and to what extent it is due to financial transfers and the security provided by possible parental support. This will in turn inform which policies would be most effective at promoting social mobility.

## Appendix. Comparison of estimates of intergenerational wealth persistence

Table A.1. Comparison of estimates of intergenerational wealth persistence

Study	Country	Child's individual wealth		Child's household wealth	
		Rank–rank	Elasticity	Rank–rank	Elasticity
This report	UK	0.37	0.37	0.36	0.39
Blanden et al., 2021	UK	-	-	0.38 to 0.46	-
Gregg and Kanabar, 2021	UK	0.32 to 0.41	0.44 to 0.56	-	-
Charles and Hurst, 2003	US	-	-	-	0.37
Gayle and Hincapié, 2016	US	-	-	0.30	0.38
Fagereng et al., 2021	Norway	-	-	-	0.23
Boserup et al., 2017	Denmark	-	-	0.27	0.24
Black et al., 2020	Sweden	0.35	0.25	-	-
Adermon et al., 2018	Sweden	0.39	0.32	-	-

Note: Studies are separated into those that use the child's individual wealth as the outcome variable and those that use the child's household wealth as the outcome variable. All studies use parents' household wealth as the explanatory variable.

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