

SOCIAL MOBILITY – PAST, PRESENT AND FUTURE

The state of play in social mobility, on the 25th anniversary of the Sutton Trust

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June 2022



Centre for Economic Performance





About the Sutton Trust

The Sutton Trust is a foundation which improves social mobility in the UK through evidence-based programmes, research and policy advocacy.

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Foreword

The Sutton Trust's 25th anniversary is a good moment to take stock and reflect on how the social mobility picture has developed over the past two and a half decades. When I set up the Trust in 1997, I wanted to help kids from poorer backgrounds get access to the kind of educational opportunities I had benefitted from growing up in the fifties - opportunities which Britain no longer seemed to be providing so readily.

Our landmark report on social mobility in 2005, authored by Professors Jo Blanden, Paul Gregg and Stephen Machin, put social mobility on the map. It showed a decline in social mobility for the generation born in the seventies and that, together with the US, Britain was at the bottom of the social mobility league tables. Today's research shows how the picture has developed in more recent times. While we have seen some progress in narrowing education gaps, especially in access to university, the report shows how far opportunities are still determined by family background. Most worryingly, it predicts a fall in mobility for poorer young people driven by the impact of the pandemic. This is exacerbated by a cost of living crisis, and increasing divides in who can afford to buy their own home and those who can't. The authors warn that this risks a 'step change' down in mobility prospects for today's low income young people compared to other nations.

The Sutton Trust has worked tirelessly for 25 years to combat low social mobility. Today, we give over 8,000 young people every year a chance to change their lives. The Trust's programmes have directly impacted the futures of more than 50,000 students since we started, and hundreds of thousands more through state-funded versions of those programmes and by seed-corn funding other social mobility initiatives.

As well as directly helping young people, we also want to see systemic change. We have commissioned over 250 research studies, have substantially influenced government policy on more than 30 occasions, and can credit ourselves with driving the topic of social mobility into the national conversation. And those twin strengths – the power of our research and our ability to affect policy – have made the Trust a uniquely potent agent for change and a widely respected and trusted presence in British life.

Our 25th anniversary gives us the opportunity to reflect on these achievements, but also the impetus to redouble our efforts to bring about change. The pandemic has brought into sharp focus the gross inequalities in opportunities that young people face. It is more vital than ever we keep highlighting these issues, as well as fighting to solve them.

I'd like to thank the authors for this most vital research.

Sir Peter Lampl

Chairman and Founder, The Sutton Trust

Chairman, The Education Endowment Foundation

Executive summary

- Social mobility research has widely proliferated over the last 25 years. Bibliometric study of the research field shows a five-fold increase compared to publication rates previously. Mentions of social mobility in the UK print media meanwhile increased exponentially, especially after the Sutton Trust published its influential landmark study in 2005.
- The new wave of social mobility research has significantly moved on from where it stood 25 years ago, with some research building and further developing key literature (e.g. social class research in sociology, cross-sectional economic intergenerational mobility studies), and other research pushing out in new and innovative directions that had not been considered previously (e.g. highly influential geographical mobility work based on rich administrative data, and study of new areas of mobility research like the study of housing ownership and wealth).
- Increasingly researchers have turned to a range of measures, at different levels of aggregation (individual, family, community), to show how a multitude of economic and social outcomes are reproduced across generations.
- Several insights have emerged in the UK context. The country is associated with particular immobility among those on low and high incomes. The education system as a whole has failed to function as the great social leveller. Children's home environments have a significant impact on future outcomes. A recurring finding is that the workplace is at least as important as education in determining mobility prospects.
- We provide new and updated estimates of mobility patterns and future trends in the UK and find that on some measures relative social class and education mobility look to have improved slightly. Large gaps by background remain in the likelihood of climbing the income ladder, ending up in a higher social class, or securing a university degree. In terms of absolute social mobility, the evidence suggests that a former golden age of upward mobility has been replaced by a modern era of declining opportunities and more limited upward mobility.
- There is increasing intergenerational persistence in home ownership for recent generations. Between 2000 and 2017, the gap in home ownership rates between those who grew up in rented accommodation compared to owner occupied homes has doubled.
- A widening family divide has emerged for children growing up in the early 21st century. Children with non-graduate parents are significantly less likely to grow up in two parent homes and family-owned homes than children with graduate parents. Children of the richest households meanwhile

are twice as likely to have benefitted from private tutoring than children from the poorest households.

- These stark divides in home environments and parental investments do not bode well for future social mobility levels, particularly as the country braces itself for the cost of living crisis and potential economic recession in the wake of the Covid pandemic. Estimated learning losses during the pandemic in the UK appear to be high when compared with other nations.
- According to our calculations intergenerational income persistence is set to rise by somewhere between 4.8 percent and 11.9 percent due to the steep socioeconomic gradient in lost learning hours during the pandemic. This suggests a step change downwards in the UK's relative income mobility levels, unless something is done to reduce education inequalities.

Introduction

The Sutton Trust commissioned this research to coincide with its 25th anniversary. 2022 also marks the 20th anniversary of the start of research which culminated in a landmark report on intergenerational mobility in Europe and North America by the Centre for Economic Performance published by the Trust in April 2005 (Blanden, Gregg and Machin, 2005).

Social mobility tells us how likely we are to climb up (or fall down) the economic or social ladder of life. Most studies focus on intergenerational mobility, which describes movement in status during a person's own lifetime, from childhood to adulthood. Sociologists track the changing status of people in terms of social classes, based on the jobs people and their parents do; economists on the other hand traditionally assess mobility patterns by studying individual or family earnings and income. Social mobility can be measured in absolute or relative terms. In education debates, it is often used to describe efforts to close achievement gaps between disadvantaged children and their more privileged peers (although strictly these are intermediate outcomes so cannot tell us where children end up as adults). Low social mobility levels suggest some degree of inequality of opportunity in society, with adult outcomes too dependent on children's backgrounds (Swift, 2006 and Breen, 2010).

As we document later, the study of social mobility can be traced back to around 100 years. But up until the turn of the Millennium it remained largely an academic topic, studied by sociologists focused on intergenerational shifts in social class. While a few seminal papers on income mobility had been published in the 1990s, 2005 signalled a new wave of social mobility studies that have proliferated over the last two decades.

This new wave of social mobility research has significantly moved on from where it stood 25 years ago, with some research building and further developing key literature from then (e.g. social class research in sociology, cross-sectional economic intergenerational mobility studies), and other research pushing out in new and innovative directions that had not been considered back then (e.g. the highly influential geographical mobility work based on rich administrative data, and study of new areas of mobility research like the study of housing ownership and wealth).

The 2005 landmark study also represented a milestone in being the first study to catapult the topic into the public domain in Britain. The rude awakening for the then Labour Government was that income mobility was found to be low in Britain by international standards. The study also concluded that income mobility was lower for the British generation born in 1970 compared with that born in 1958. These findings went against the received wisdom in the sociological literature, which had detected no change in relative social class mobility rates over time.

Countless public debates and policy developments can be tracked back to this one publication, alongside expanding efforts from Government and third sector organisations to improve social mobility prospects for young people. Commenting on the report four years later, one prominent writer claimed the analysis had had “more influence on public debate than any academic paper of the past 20 years” (Goodhart, 2009). Public and academic debates about Britain’s levels of social mobility continue to this day.

This research provides an updated picture of social mobility 20 years on. The aims are threefold: to document the growth in social mobility studies over the last 25 years; to assess what we now know from this rapidly expanding evidence base in economics and other disciplines; and to provide updated estimates on intergenerational persistence for a range of measures for the most recent cohorts for which we have data, and to assess prospects for future generations.

Social mobility research and impact

At the turn of the Millennium the study of social mobility was mainly confined to the sociological literature that had developed during the post War period, founded on the rich data that became available in nationally representative cohort surveys. Nico (2021) reports that there was not a single year during this period without publications on social mobility. The study of income mobility by economists was in its infancy, with the first papers setting out the initial estimates and models that would lay the foundations for future research.

In our bibliometric analysis, we use two data sources to document the growth in social mobility studies over the last 25 years. Firstly, we use the Web of Science core collection to search for academic publications¹ that cover the subject of social mobility. We perform a topic inquiry that searches over the title, abstract, author keywords, and cited reference titles² for the phrases “social mobility” and “intergenerational mobility”.

Each subject area measures mobility differently; for instance, sociologists are more likely to be concerned with occupation and class mobility as opposed to mobility in income. To avoid overstating the growth in social mobility related articles in economics relative to disciplines that use different mobility concepts, we also undertake a broad search using the following terms: social mobility, intergenerational mobility, occupational mobility, professional mobility, income mobility, wage mobility, meritocracy, educational mobility, class mobility, and social reproduction.

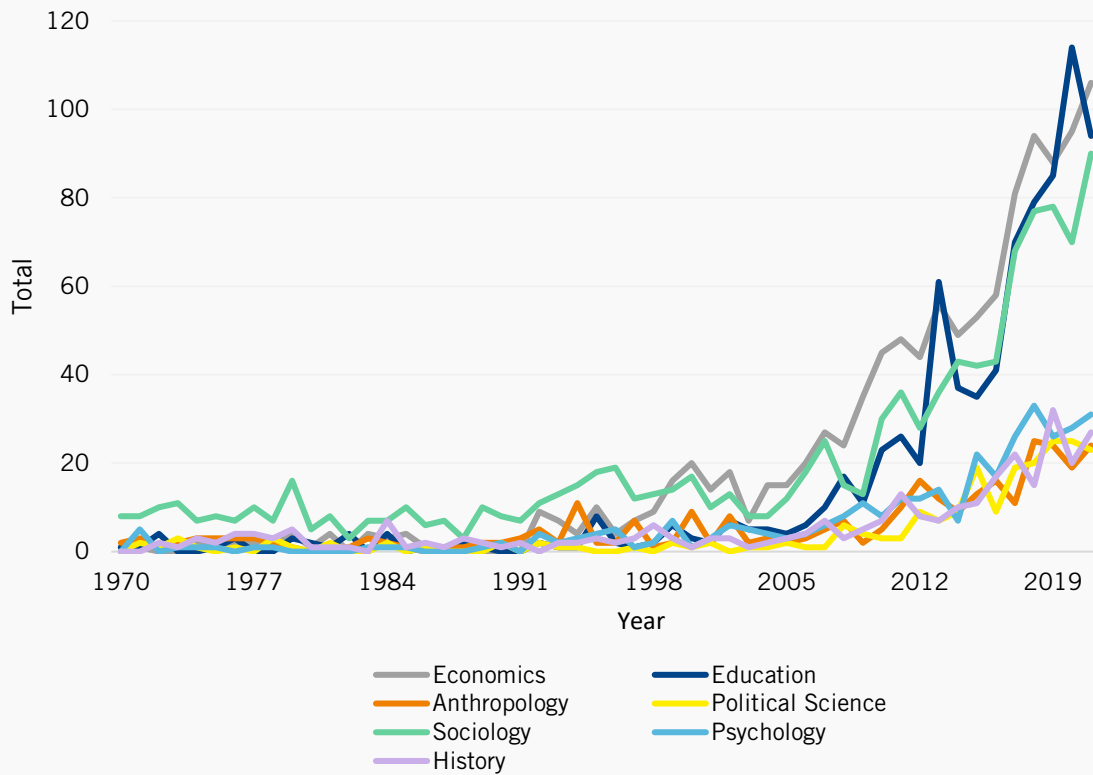
To quantify the trend in media mentions of social mobility, we use the Nexis UK database to search over UK print newspapers. The search captures any newspaper article containing the term “social mobility” in any of its text.

Figures 1 and 2 shows the result of the narrow and broad academic publication searches. As can be seen, social mobility research has proliferated over time. Irrespective of whether we do a narrow or broad search, sociologists tended to publish the most mobility related papers throughout the period leading to the late 1990s. At this point, mobility research increases rapidly with a plethora of papers being published not only in sociology, but also in economics and education related journals. This culminates in 106 articles in economics, 94 in education, and 90 in sociology in 2021 alone. There is also a more modest increase in research in fields such as psychology, anthropology, history, and political science.

¹ The search focuses on articles that are published rather than working papers and articles in press.

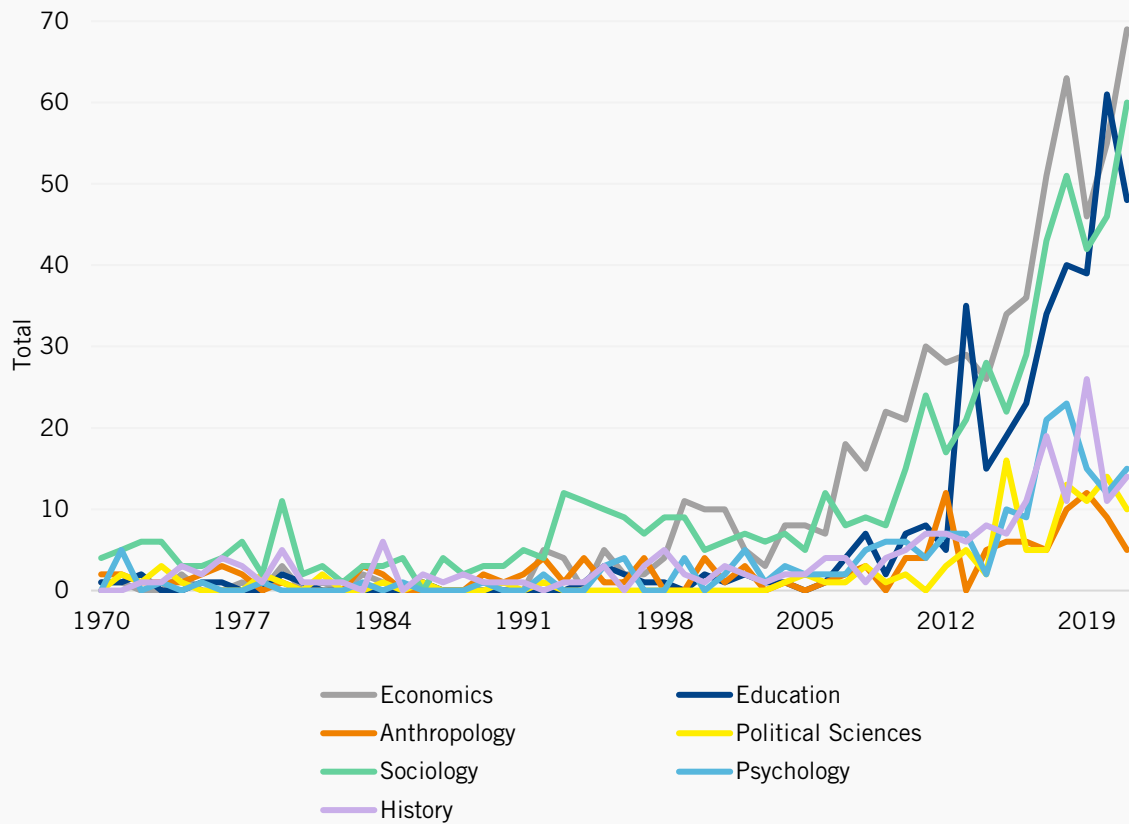
² This is done using the KeyWords Plus algorithm that has been available since 1991 in the Web of Science database. Articles are given the keyword “social mobility” if the authors state that the article is about this topic or if “social mobility” frequently appears in the titles of an article's references but does not appear in the title of the article itself.

Figure 1: Social mobility academic articles, broad topic search, by subject



Note: data are taken from the Web of Science Core Collection via a topic search for the terms social mobility, intergenerational mobility, occupational mobility, professional mobility, income mobility, wage mobility, meritocracy, educational mobility, class mobility, and social reproduction

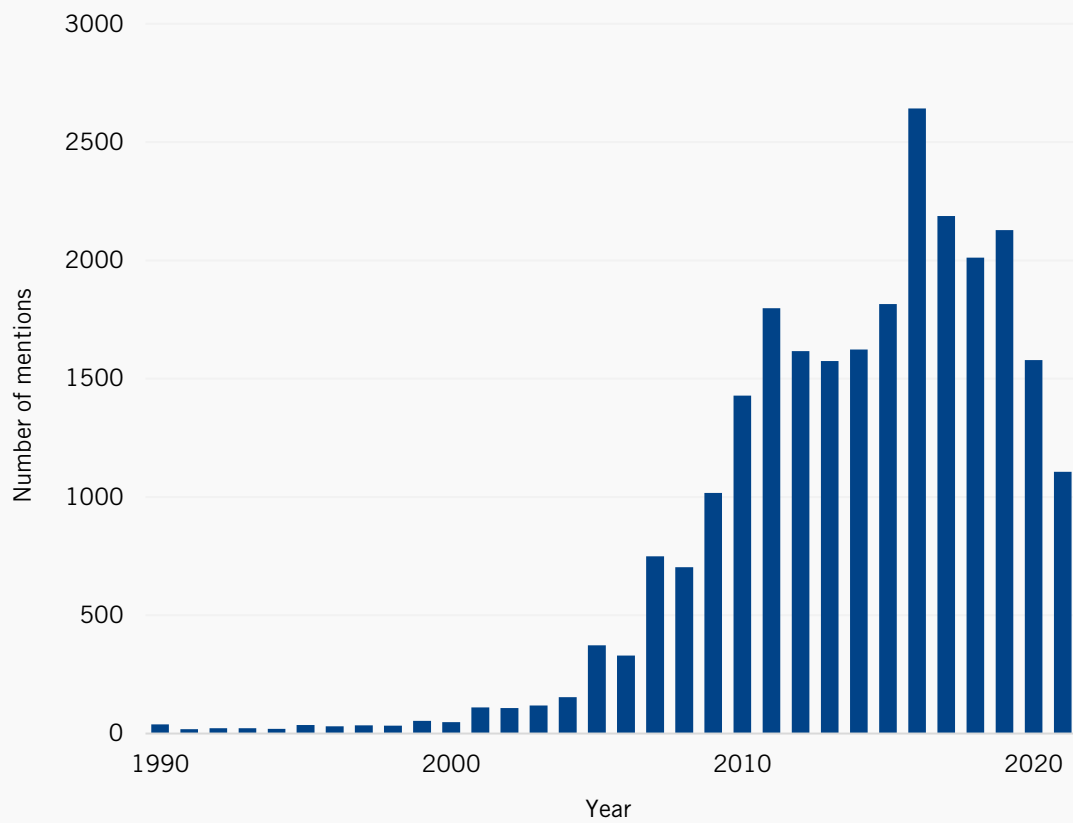
Figure 2: Social mobility academic articles, narrow topic search, by subject



Note: data are taken from the Web of Science Core Collection via a topic search for the terms “social mobility” or “intergenerational mobility”.

Figure 3 highlights how media interest has, by and large, tracked the increase in academic interest in social mobility. Looking at UK newspapers, few articles were published until 2005 when media mentions of mobility began to increase exponentially. Media interest peaks in 2016 but remains at a high level in 2021. The 1106 media mentions that we find in 2021 are 7 times the media mentions in 2004 – before mobility mentions really took off - and 23 times the number of mentions we find in 2000 where our sample begins.

Figure 3: Media mentions of social mobility



Note: data are taken from the Nexis UK and cover English language articles in UK print newspapers.

Key findings from the new wave of social mobility research

Here we summarise some of the main findings of recent social mobility research. The focus of recent literature has been both on measurement (how shall we measure mobility? can we improve upon previous estimates?) and mechanisms (what drives persistence over time between generations?) These are organised into major themes highlighting the central challenges and questions for social mobility over the coming decades and beyond.

100 years of social mobility research

Academic publications specifically relating to social mobility first emerged in the 1920s (Nico, 2021). The sociologist Pitrim Sorokin's book *Social Mobility* (Sorokin, 1927) is acknowledged as the first major work clearly defining the concept of social mobility. According to Sorokin, social mobility was 'any transition of an individual, social object or value...from one social position to another'.

Sorokin sought to pursue a more objective, factual, and quantitative sociology, and rallied against the 'illustrative method' where theories might be backed up only by a few facts. Nico (2021) characterises the first 40 years of the discipline as the 'emergence of a scattered concept'. Against the backdrop of a society recovering from the great depression, the first few pioneering period of studies were characterised by small and limited datasets. Nonetheless these initial texts established themes that persist to this day: preoccupations included the measurement of social mobility, and education as a key driver for processes of upward social mobility.

In the post War period, social class mobility research flourished, founded on the rich data that became available in nationally representative cohort surveys.³ A major finding was that while absolute mobility had increased over successive generations, a 'trendless fluctuation' in social fluidity levels was observed (Erikson and Goldthorpe, 1992).

Foundational studies on income mobility meanwhile emerged in the 1990s. As members of the Panel study of Income Dynamics reached their 30s, two influential American studies exploited the longitudinal nature of this data to link the earnings of sons to that of their fathers (Solon, 1992; Zimmerman, 1992). Soon after, the first comparable estimates for the UK were produced by Dearden, Machin and Reed (1997).⁴ A century on the study of social mobility has developed into a global academic endeavour, with thousands of papers published. This evolving literature has been shaped both by external societal

³ Surveys included the 1946 Medical Research Council National Survey of Health and Development (NSHD), the 1958 National Child Development Study (NCDS), and the 1970 British Cohort Study (BCS). Tragically, no nationally representative datasets were commissioned for generations born in the 1980s and 1990s. In research terms these are the lost generations before the 2001 Millennium Cohort Study (MCS) was commissioned.

⁴ Early UK studies did measure intergenerational income mobility, but they tended to do so on non-representative samples. Atkinson (1980) and Atkinson et al (1983) provide estimates based on the Rowntree study – a survey of those resident in the City of York.

contexts and the increased availability of high-quality data linking the fortunes of individuals to that of their parents.

New wave social mobility studies

As we have shown above in our bibliometric analysis, the 2005 Sutton Trust publication (Blanden, Gregg and Machin, 2005) coincided with an exponential increase in published articles in the economics literature and other fields. This new wave of social mobility research has produced estimates of the intergenerational persistence for a range of characteristics, countries, places, and eras. Researchers have capitalised on new data sources from cohort studies to extensive administrative datasets to paint a richer picture of the process by which advantage is passed from one generation to the next. Earlier studies had previously had to rely on small samples and, often, individuals born in a single week, and self-reported earnings. While the earliest studies measured father/son correlations in earnings on samples numbering just over 300 individuals, the latest research measures the same processes using samples in the tens of millions. A particularly influential study by Chetty et al (2014a) links the outcomes of more than 40 million children to the tax records of their parents in the US.

Measures of mobility

Researchers have turned to different measures to show how characteristics are replicated across generations. It has become increasingly clear that traditional income or occupational social class measures can only provide a partial picture of social mobility.

Studies have for example assessed persistence of education from one generation to the next. Hertz et al (2007) look at the association between parents' education, measured as the average years of schooling of the father and mother, and children's completed schooling. The global average correlation between a parent's and child's schooling was 0.4. This estimate implies that 40 percent of the education inequality between parents is transmitted to children: a 10 percent difference in completed education between parents is associated with a 4 percent difference between their children on average.

But the correlations are at best indicative. The years of schooling measure hides substantial variation in the specific levels of education achieved by students (Hanushek and Woessmann 2020). This is likely to produce underestimates of the extent of education persistence across generations. Future studies would benefit from more detailed data on the specific educational outcomes associated with individuals.

Families also transmit significant advantage from one generation to the next through wealth. The lack of reliable data in the UK has meant a paucity studies. But the evidence from overseas suggests a large intergenerational persistence. Charles and Hurst (2003) used US data to estimate an intergenerational family wealth correlation of 0.5 – stronger than the link in incomes between generations. Piketty (2014)

argues that multi-generational persistence is a product of extreme inequalities of both wealth and income. We shall return to this topic when we consider new findings in the final section.

Mobility researchers must resort mostly to looking in the 'rear view mirror' when analysing trends across generations (Putnam, 2015; Bukodi and Goldthorpe, 2019). We only know the adult outcomes for children who grew up in the distant past. But researchers have investigated the changing family environments likely to be conducive for future upward mobility of children - to provide indications of possible forward-looking trends. This approach has been adopted in the US by Putnam (2015) and Murray (2012).

Putnam documents a growing divide in the likelihood of children growing up in stable family environments. In the US, 10 percent of children with college-educated parents live in single-parent families compared with 70 percent of those with lowly educated parents. Putnam argues that all the conditions for effective child rearing needed to produce upwardly mobile adults are increasingly absent in less educated homes. In the final section, we produce parallel estimates for the UK.

Other studies in the US point to an increasingly wide divide in extra-curricular parental investments. The richest families in the US spent seven times more on out of school enrichment (including for example museum visits) than the poorest families, a much bigger gap than 40 years previously (Duncan and Murnane, 2011).

Several studies have found that children with separated or divorced parents have a higher risk of experiencing instability in their own marriages or partnerships as adults (Kiernan and Cherlin, 2010). This is found not just in Britain, but also around the world. Sons of divorced couples are less socially mobile than their peers from intact families.

Geography

A new wave of studies meanwhile has uncovered spatial and local variation in social mobility. A landmark work in the era of big data is Chetty et al (2014a) who used declassified tax data linking 40 million children to their parents. This revealed a detailed map of upward income mobility levels for children born between 1980 and 1982 in different cities, counties and states across America. These comparisons are interesting as they can tease out the effects of different factors driving mobility i.e. if high mobility places systematically have better public schools it is suggestive that better schools foster greater rates of mobility (although not causal link it can guide researchers in finding mechanisms to explore). High mobility areas were found by Chetty et al to have (i) less residential segregation, (ii) less income inequality, (iii) better primary schools, (iv) greater social capital, and (v) greater family stability.

Upward occupational mobility in England and Wales also varies significantly: it is higher for people born in London and the South-East than elsewhere in the country (Bell et al, 2019; see also Friedman et al, 2017). Areas of low upward occupational mobility coincide with areas of low education mobility. However, home ownership mobility exhibits a different pattern. Many parts of London for example are exceptional in their rate of upward occupational mobility. Yet children born to parents who did not own their own home are much less likely than elsewhere in the country to own a home themselves as adults. Area-level differences are complex: a single metric of social mobility does not always provide the complete picture. These are important considerations for the Government's current 'levelling up' agenda, and for questions of spatial inequalities more generally.

Non-linearities

Summary indicators of intergenerational persistence such as intergenerational elasticity (IGE) provide average measures of immobility between generations. They conceal significant variations in mobility patterns, or 'non-linearities', at different points of the distributions. Corak (2020) argues that more focus should be placed on these non-linearities as they highlight specific challenges that require distinct policy responses. We should be 'agnostic' in the choice of statistics used to measure mobility. This is because different types of inequality 'threaten' mobility in different ways.

Variations can be revealed by transition matrices that show movements between discrete child origins and adult destinations. Corak (2020) for example considers a five-by-five matrix splitting populations into five origin and destination income quintiles. He identifies three particularly relevant cells: those associated with rags-to-riches movement (transitions from bottom to top quintiles), intergenerational cycles of poverty (lack of movement out of the bottom quintile) and intergenerational cycles of privilege (stickiness in the top quintile).

Studying regional variations in income mobility across Canada and the United States, Corak finds the higher the chances of busting out of the bottom, the less likely the chances of moving from bottom to top. This suggests there may be competing policy priorities when considering which specific type of mobility Governments choose to promote.

Considering children born in the 1970 British Cohort Study, Elliot Major and Machin (2018) conclude there is particular immobility at the bottom and top of the income spectrum. Children born into the highest earning families are most likely themselves in later life to be among the highest earners, while children from the lowest earning families are likely to mirror their forebears as low earning adults. They find that 41 percent of children born into the richest top fifth of homes stayed among the richest homes as adults.

For earlier cohorts mobility from the lowest quintile was found to be much higher in the Scandinavian nations compared with the UK. Bratsberg et al. (2007) produce a series of transition matrices estimating earnings mobility for fathers and sons by quintile in Denmark, Finland, Norway, Sweden, the UK, and the US. In all countries, more mobility was found in the middle of the distribution compared with the tails.

Transition matrices also reveal big differences in the relative chances of mobility at the extremes of the class structure. Bukodi and Goldthorpe (2019) for example report that the chances of a child with a higher professional or managerial father ending up in a similar position rather than in a wage-earning working-class position are up to 20 times greater than these same chances for a child with a working-class father. Greater immobility at the top and bottom of the social class hierarchy is observed by Payne (2017) who highlights 'the social closure at the upper echelons of society and the isolation of those at the bottom'.

Influenced by the work of French sociologist Pierre Bourdieu, Savage et al (2013 and 2015) meanwhile adopt notions of economic, social and cultural capitals to create an alternative class structure. They find long-range mobility, rising from a precariat to small elite group, seldom happens. More common is short-range movement between middle class groupings, enabled by the social and cultural capital accumulated by going to university.

For Reeves (2017) it is 'opportunity hoarders' on the upper reaches of the income ladder - Americans in the top 20 percent of incomes - who are primarily responsible for 'reducing overall social mobility'. Torche (2011) meanwhile finds a U-shaped pattern in the importance of parental influence by education level in the US: associations between parents and offspring are higher among those with less than college qualifications and those with advanced degrees, compared with those in the middle of the education distribution.

The evidence demonstrates the need to be crystal clear about what specific aspect of social mobility you are interested in. Breaking intergenerational cycles of poverty is likely to involve improving basic literacy and numeracy skills for example, creating new technical jobs in left behind areas, or ensuring minimum pay and training in the workplace. Breaking intergenerational cycles of privilege on the other hand would require different policies. Elliot Major and Machin (2018) for example propose the use of lotteries alongside threshold criteria to widen access into highly selective universities that supply future elites. In his critique of modern meritocracy, Sandel (2020) proposes a similar approach. While in Britain lotteries might seem a contentious idea, in the US they are seen as self-evidently fair (Boyle, 2010).

Missing dimensions

There remains a lack of data and findings for women and ethnic minority groups. Most early research on income mobility tracked the status of fathers and their sons. This was because fewer women were working in the labour market, and their patterns of employment were less predictable than those for men. Representative samples used for studies meanwhile have often been too small to offer reliable estimates for ethnic minority groups that make up small proportions of the population.

Bratsberg et al (2007) estimate that the intergenerational persistence in incomes between fathers and daughters was similar to that for fathers and sons in the UK for those born in 1958 (in contrast to other countries where women enjoyed greater mobility than men). The unsettling experience of downward mobility has become increasingly common for women and men alike during the 20th century. In contrast with men, women have experienced increased social fluidity, with part time workers accepting downward transitions (Bukodi et al, 2017). Li and Heath (2016) find first-generation migrants in Britain experience a notable social decline, but second-generation offspring bounce back, exhibiting upward mobility.

US studies of relative income mobility suggest the experience for many black Americans is akin to being stuck on a treadmill rather than climbing a ladder. Hertz (2005) found that black people were much more likely than their white counterparts to stay in the bottom quintile of the income distribution. Chetty et al (2020) meanwhile find that black Americans have far lower rates of upward mobility and higher rates of downward mobility than white Americans. This is driven by differences in wages and employment rates between black and white men.

An important emerging research area is gauging intersectional impacts – assessing outcomes for people categorized by combinations of class, gender and ethnicity. Friedman and Laurison (2019) find that upwardly mobile women and members of some minority ethnic groups face a double earnings disadvantage in elite professions. This is an area where more research is needed.

Mechanisms

Education: equaliser or disequaliser?

For those who hold onto the hope that education can act on its own as the great social leveller, the evidence continues to disappoint. Elliot Major and Machin (2018) conclude that ‘in no developed country for which we have data is there evidence that early years centres, schools or colleges consistently reduce attainment gaps, and life prospects, between the rich and poor’. They argue that the education system at best acts as a counter-balance to the forces outside the school gates driving bigger socio-economic gaps in education achievement.

This is one of the most consistent conclusions stretching back to the earliest days of mobility research. Sorokin described schools as a ‘machinery’ for the stratification of society, not for its levelling (Bukodi and Goldthorpe, 2022). Sociologists have observed a constant or even strengthening association between class origins and education outcomes – dashing hopes that an expanded education system might weaken this link (Breen and Müller, 2020).

There are exceptions to this rule. Reforms in Finland during the 1970s, raising the age of academic streaming from 10 to 16 (alongside other changes) were associated with a 20 percent increase in the country’s income mobility levels (the intergenerational elasticity (IGE) falling from 0.3 to 0.23) (Pekkarinen et al, 2009). Holmlund (2008) finds a reduction in the IGE arising from similar school reforms in Sweden. Delaying academic selection appears to be a mobility-enhancing policy. Although as we note later, this may not have a permanent impact: intergenerational persistence can strengthen again in the decades following reforms.

These societies were also characterised by low levels of income inequality. Landersø and Heckman (2017) suggest that it is the compressed earnings distributions (and lower wage returns to education) that underpin the low IGE in Denmark (and other Scandinavian nations) rather than widely admired comprehensive policies for childcare and education. Danish parents are just as effective as Americans in passing on education from one generation to the next; it is just that high earning Danes are taxed more on their incomes.

Big data has enabled more accurate cross-country comparisons across multiple time periods painting a richer picture of mobility and also cautioning researchers as to what conclusions can be drawn from observations made at a single point in time. Earlier studies looking at Denmark and the US for example compared education mobility at a time when the US was already a highly educated society but when education was expanding rapidly in Denmark (it was transitioning to a highly educated society). This made Denmark seem much more mobile as college expansion initially brought in less affluent pupils. Subsequent rounds of expansion had the opposite effect reducing education mobility for more recent cohorts. This point is also made by Nybom and Stuhler (2013) who find that Swedish school reforms reduced the transmission of inequalities in one generation but increased their persistence in the next.

Nonetheless there is evidence that specific well-targeted education programmes and approaches can transform children’s lives. City academies in the early 2000s showed some success in turning around poorer areas under the Blair Labour government (Eyles and Machin, 2019). One-to-one or small group tutoring is one of the surest approaches to raise achievement (Elliot Major and Higgins, 2019). But as the work of the Education Endowment Foundation in England has demonstrated, scaling up promising approaches across whole education systems has proved elusive. Randomised trials of education approaches have so far largely produced small effect sizes (Lortie-Forgues and Inglis, 2019).

Dobbie and Fryer (2013) identified five practices that explained almost half the variation in school effectiveness in charter schools in New York: 'frequent teacher feedback, the use of data to guide instruction, high-dosage tutoring, increased instructional time, and high expectations'. Holmlund, McNally and Viarengo (2010) found that enhanced spending per pupil improved children's test scores in England, with larger effects found for disadvantaged pupils. As well as channelling support to poorer pupils in particular, an obvious target is to reduce the variation of teaching effectiveness within schools. In the US, it has been shown that students taught by highly effective teachers are more likely to attend college and earn higher salaries (Chetty et al, 2014b).

Opportunity hoarding

The problem is that education has become the primary vehicle through which 'opportunity hoarders' avoid downward mobility. Elliot Major and Machin (2018) describe an 'ever-escalating educational arms race' in which the poorest children are hopelessly ill-equipped to fight.

Parents see education in relative terms – what is important is whether it is more superior compared with others they are competing with (Bukodi and Goldthorpe, 2019). Retaining advantage is manifested in many ways: buying houses near high-performing state schools, paying private school fees, helping to manage student debts, supporting entry into postgraduate courses, funding children's second chances, and (in the US at least) outright cheating (Golden and Burke, 2019).

The Sutton Trust has documented an explosion in private tutoring outside normal schooling hours (Kirby, 2016). This phenomenon is observed across the globe (Elliot Major and Weiner, 2020). Any attempts to level the playing field in education (particularly in an era of overall declining opportunities) is likely to elicit an immediate response from the sharp-elbowed parents who stand to lose out in the negative sum game.

Wyness and Murphy (2020) meanwhile find that disadvantaged students are more likely to apply for and enter degree courses that are lower 'quality' than their grades would predict. This undermatching is not good for future earnings and social mobility prospects. Well-designed information interventions can be effective in reducing undermatch by encouraging disadvantaged, academically able students to apply to, and enrol in, selective universities.

Importance of families

Studies published in the last two decades suggest that who you are born to and where you grow up matters even more than first estimated.

'Dynastic' or 'distant-kin' approaches linking child education outcomes with the backgrounds of parents' siblings and cousins (and their siblings and spouses) suggest that extended family effects are more important than simple parent-child correlations (Blanden et al, 2022). Assortative mating, the tendency for people to marry those from similar backgrounds, meanwhile is a likely factor behind a rising marriage gap, with graduates increasingly more likely to marry each other when compared with non-graduates.

The wisdom first espoused by Becker and Tomes (1986) that 'almost all the earnings advantages or disadvantages of ancestors are wiped out in three generations' no longer holds sway. A review by Solon (2018) concluded that distant family predecessors can have significant effects on life prospects. Multigenerational mobility matters. Blanden et al (2022) point out that social mobility rates over multiple generations are lower than what a simple extrapolation of single-generation rates would predict.

Long and Ferrie (2013) find that for generations born in Britain and the US between 1850 and 1910 a grandfather's occupation 'significantly influenced' the occupation of the grandson. Assessing more recent cohorts, Chan and Boliver (2013) find that the odds of grandchildren becoming professionals rather than unskilled manual workers are at least two and a half times better if the grandparents were themselves professionals. Grandparents are likely to contribute in many ways: paying for expensive school fees or handing down housing wealth; stepping into help with child rearing duties; providing job contacts; transmitting high expectations and values.

Yet we still know little about the exact causal mechanisms through which parents, and the extended family, exert their influence. Investments in children's skills are productive, but there is a paucity of experimental evidence on what specific parenting activities are most effective, and indeed what programmes might encourage such behaviours.

Parents' class, occupational status and education backgrounds have independent effects on children's school results find Bukodi and Goldthorpe (2019). The positive effects of parents' higher education qualifications on the achievements of children may derive from having higher incomes as well as a greater focus on child-enhancing activities (Black and Devereux, 2011). Studies using adoptees and different sibling types suggest that both nature and nurture are important for outcomes.

Heckman and Mosso (2014) review an extensive literature to demonstrate the benefits of high-quality pre-school investments. These can develop cognitive and non-cognitive skills, reducing the need for costly catch-up programmes later in life. The evidence comes from two randomised control studies

assessing intensive programmes in the US deploying qualified teachers with small classes and weekly home visits or offering extensive childcare and family support. The challenge for more recent large scale early years programmes like Sure Start centres in the UK is ensuring quality and consistency of implementation. Evidence on what makes early investments effective is not settled (Blanden and Rabe 2021). Evaluations of the Government's current programme of family hubs would be a welcome addition to the evidence base.

What appears incontrovertible is that all children should be equipped with the basic skills for surviving and prospering in future life. Recent initial trials in France and the United States have produced promising results in motivating parents to read with younger children (Barone et al, 2020; Mayer et al, 2019). An information barrier faced by many low-income parents is that they fail to realise how activities at home have huge consequences for achievement at school.

School led community hubs are also being developed in the UK, inspired by the cradle to career approach piloted by the Harlem Children's Zone in New York (Dobbie and Fryer, 2011; Dyson et al, 2013). One policy question raised by the evidence on family effects is whether extra Pupil Premium funds for poorer pupils should be targeted at children lacking extended and multi-generational family support.

Workplace divides

A recurring finding in the recent literature is that the workplace is as at least as important as the classroom or lecture theatre in determining mobility prospects.

In their review of the literature, Black and Devereux (2011) conclude that income mobility differences between countries are partly due to differences in skill inequalities, 'but that at least as much or even more is due to how labour markets reward skills and redistribute incomes'. Analysing the variation in relative income mobility levels by place in the US, Rothstein (2019) meanwhile concludes that factors like higher minimum wages, the presence of unions, and clear local career pathways are likely to play a bigger role in boosting mobility levels than improving schools.

Britain's decline in opportunity is not just a case of shrinking 'room at the top' but also a squeeze at the bottom. Elliot Major and Machin (2020) review evidence demonstrating a 'fissuring' in the workplace, with a widening divide between the employment haves and have nots. Britain's gig economy has created millions of workers lacking security, progression or rights. Technological advances are making many middle tier jobs redundant – the so-called hollowing out of the labour market.

The social class literature also points to significant factors outside education that shape mobility patterns. Bukodi and Goldthorpe (2022) report that the association between education outcomes and class destinations tended if anything, to weaken in advanced societies during the later 20th century.

Even if we could do more to reduce class-linked inequalities in attainment, this wouldn't translate into more equal class mobility prospects.

Bernardi and Ballarino (2016) meanwhile find that the direct association between class origins and destinations has strengthened in many countries. British men with no, or only sub-secondary qualifications from advantaged social origins are more likely than their less advantaged counterparts to access salaried jobs, and far less likely to end up in the wage-earning working class (Gugushvili, Bukodi and Goldthorpe, 2017).

Inequality

A critical debate is whether current inequalities in earnings impair or encourage social mobility, in both absolute and relative terms. If the gaps between the rungs of the economic ladder are too small, it removes an invaluable spur to economic activity and wealth creation; if the gaps are too big, society is ossified into lower and higher earners. Those at the top have so much to lose from a downward fall, they do all they can to ensure that their families cling onto the upper rungs. The evidence suggests a tipping point has been reached; the gaps between the rungs of the ladder are so large that it's an impossibly steep climb for most at the bottom.

The debate about inequality and mobility has centred on the Great Gatsby Curve, named after the F Scott Fitzgerald novel. It reveals a linear relationship between income inequality and income mobility for a range of countries. (Corak 2013, Blanden 2013, Elliot Major and Machin, 2020). But this remains a contested finding given the many assumptions made for estimates of income mobility used (Mogstad and Torsvik 2022).

The core question prompted is whether the Great Gatsby Curve highlights a causal relationship or a simple correlation. Elliot Major and Machin (2020) argue that the direction of causation plausibly flows from more inequality to less mobility. Extreme inequality of earnings or incomes, when children are younger, leads to greater inequality of opportunity. Other evidence suggests that economic growth needs to be shared across the income distribution for absolute mobility to come about (at least in the US) (Chetty et al, 2017). Katz and Krueger (2017) find that 'faster growth is necessary but not sufficient to restore higher intergenerational mobility'.

A defining characteristic of the workplace in the UK (and the US) is large (and increasing) variation in the wage returns after completion of high-status schooling or university degrees. Pay premiums from studying at private school have increased. In 1991, privately educated 33-34 years olds were earning on average 25 percent more than their otherwise similar state educated counterparts. In 2004, the pay premium had increased to 41 percent. The advantage is particularly large for women. (Green *et al*, 2011)

Britton et al (2016) find large wage premiums for graduates of elite universities. More than 10 percent of male graduates from the London School of Economics, Oxford and Cambridge were already earning more than £100,000 in the tax year 2012/13. But the median graduate earnings at some universities were less than those for non-graduates. Graduates from richer family backgrounds were found to earn 10 percent more after graduation than their poorer counterparts even though they had completed the same university degrees. British graduates on average earn nearly 60 percent more than non-graduates – double the equivalent gap in Canada or Australia (Elliot Major and Machin, 2018). More recent analysis supported by the Sutton Trust found that while low-income students are as likely to attend the least selective universities as their wealthier peers, they are far less likely to attend the most selective institutions, which often have the best record of labour market success for students (Britton et al, 2021).

Elite recruitment

Britain has a particular access problem at the top. The Sutton Trust has produced a series of reports highlighting the privileged backgrounds of leaders across a range of professions. Privately educated elites have been remarkably persistent, making up around 50 percent of leading people for at least half a century. Private schools are attended by the 7 percent of children whose families can afford their fees. The Trust has also exposed unpaid and unadvertised internships (Cullinane and Montacute, 2018). Working for free is only fine if you are rich enough to cover the costs. Internships (and exclusive postgraduate courses) have become the gateways to starting a professional career across a range of industries.

Friedman and Laurison (2019) meanwhile find that supposedly objective measures of merit in elite occupations are often tacit middle-class codes excluding those from the wrong sorts of backgrounds. This likely goes some way to explain the systematic pay gap between employees of working class and middle class backgrounds – which cannot be explained away by educational qualifications and a range of other personal and job characteristics. (Laurison and Friedman, 2016).

Black and Devereux (2011) argue that labour market policies need to balance the need to reduce the intergenerational correlation while not harming incentives to reward skilled workers in a vibrant economy. Crude policies that compel employers to favour less qualified applicants may not be desirable. On the other hand, 'the use of connections to get jobs by the children of the wealthy when other candidates are better qualified is inefficient, while nepotism would be considered by most to best be eradicated'.

The message for policy makers seeking to improve social mobility is to turn their attention to the workplace, and to resist the temptation to focus solely on education.

Declining opportunity

Absolute social mobility rates reveal the percentage of people whose income or class destinations improve or worsen compared to their families' income or class origins. These are usually measured in mid-life (mid-30s) and during adolescence (ages 14-16). This is the mobility experienced by individuals. An example of upward absolute intergenerational mobility would be earning more in real terms than your parents, or securing a professional job for the first time in the family. Relative measures of mobility in contrast either compare mobility rates for people from different class origins or assess intergenerational movements in terms of the relative rank of peoples' incomes.

Absolute social mobility rates are important as they set the context for all other trends. What is clear from both sociological and economic perspectives is that a former golden age of upward mobility, fuelled by a boom in professional jobs of the new post-war economy, has been replaced by an era of more limited upward mobility.

During the 20th century, significant structural shifts in society created 'more room at the top' (Bukodi and Goldthorpe, 2019): in 1951, the managerial and professional classes made up just 11 percent of the working male population, by 1971, 25 percent of the population, and by 1991, 35 percent of the population; by 2018 they made up 44 percent of the entire working population. A high proportion of postwar generations enjoyed upward mobility, filling the expanding jobs in hospitals, universities and central and local government created by the new welfare state.

But stalling growth in recent years has flipped this trend. Britain is on the verge of becoming a country where individuals' chances of moving down the class structure are greater than their chances of moving up (Bukodi and Goldthorpe, 2019). 'The emerging situation is one for which there is little historical precedent and that carries potentially far-reaching political and wider social implications' (Bukodi et al, 2015). The UK is not alone in this. Similar structural trends are observed in other European nations (Breen and Müller, 2020, Bukodi and Goldthorpe, 2022).

A tipping point in the modern era is observed also by economists. 'For much of history, economic growth ensured that each subsequent generation did better than the last. But this is no longer true', conclude Blanden, Machin and Rahman (2020). In 2006, 64 percent of 30- and 40-year-olds exceeded or equalled their fathers' earnings in real terms at the same ages. But by 2019, this fell dramatically to 44 percent. (Elliot Major and Machin, 2020). For generations growing up in the early 21st century the dream of just doing better in life, let alone climbing the income ladder, is disappearing.

A review by Nybom (2018) concludes that absolute and relative mobility levels 'seem to go hand in hand'. Ideally, we would like to live in societies characterised by both increasing absolute and relative mobility. But the opposite situation could now apply. This is particularly troubling for those who want to improve equality of opportunity in society, linked more closely to relative mobility levels. The absolute decline could also be exacerbated by the looming cost of living crisis in the post-pandemic era. It raises questions as to whether modern capitalist economies can create fair, inclusive societies, providing a decent standard of living for all.

Latest estimates of social mobility

In this section we provide estimates of current mobility patterns and possible future trends in the UK. Some of these measures update previous estimates of mobility, while some are new measures used to assess current and future trends.

The evidence review above suggests that while the study of social mobility has proliferated, our understanding of mobility is still in its infancy. Putnam (2015) likens social mobility researchers to astronomers – stars may explode at any given time, but astronomers cannot know this instantaneously. Social scientists face a similar problem. Policies and economic conditions today will impact upon the current generations' chances of doing better than their parents or climbing the income or social ladder. But researchers will not know social mobility patterns for sure until the eventual outcomes of the child generation are observed. For many of the traditional measures such as income, a sensible prediction can only be obtained when the child generation reaches middle age. Haider and Solon (2006) provide an in-depth analysis of the biases created by looking at earnings correlations too 'early' in the life-cycle.

Our evidence review also highlights that no one metric is suitable for understanding the full picture of mobility. In recognition of this we produce a number of estimates. We first look at how income correlations have changed for the 1970 British Cohort Study (BCS) members and the 1958 National Child Development Study (NCDS) members as they have aged.⁵ We also consider social class measures. In addition, we document how educational mobility has changed by contrasting educational outcomes of the 1989 birth cohort with those of the 1958 and 1970 cohorts.

While we update previous measures, we also document several worrying trends in mobility. The price of housing is a persistent problem in the UK and we document how home ownership (and indirectly wealth) has become more stratified by family background. These measurements are made for those in their early 40s, but they do not tell us about mobility prospects for those who are about to enter the labour market. To do this, we assess trends in family structure and, in particular, how families have become more fragmented for less advantaged children born at the turn of the millennium. A bulk of research highlights the role that the family plays in enabling human development (Heckman and Mosso; 2014), and greater fragmentation of family structure acts as a leading indicator for lower levels of social mobility.

⁵ For these analyses we are grateful to access national datasets including: the 1970 British Cohort Study (BCS) which follows the lives of 17,000 people born in England, Scotland and Wales in a single week of 1970; the 1958 National Child Development Study (NCDS); the 2001 Millennium Cohort Study (MCS). We also use the longitudinal household panel study Understanding Society and its predecessor study, the British Household Panel Survey (BHPS).

Income Mobility

Table 1 sets out intergenerational elasticities in income for three cohorts. In each case, the household income of individuals in their 40s is correlated with household income, in the house they grew up in, when they were aged 16.

Table 1: Intergenerational Income Elasticities (IGE)

	NCDS (1)	BCS (2)
IGE	0.280 (0.035)	0.377 (0.029)
Birth Cohort	1958	1970
Child Age	42	42
Observation Year	2000	2012
Sample Size	4342	3400

Note: Estimates come from univariate regressions of the log of income (at age 42) on parental income measured when the participant was age 16.

The higher the intergenerational elasticity (IGE) the lower the income mobility across generations. An intergenerational elasticity of 1 corresponds to complete immobility, and 0 to complete mobility. As can be seen, there is a large jump in the persistence of income between the generations of children born in 1958 and 1970, echoing the findings of the Trust's 2005 study when cohort members were aged 33. A ten percent increase in parental income is associated with a 2.8 percent increase in age 42 income for the former cohort and a 3.8 percent increase for the latter cohort. This constitutes a 36 percent increase in persistence between two cohorts born only 12 years apart.⁶

Occupational class mobility

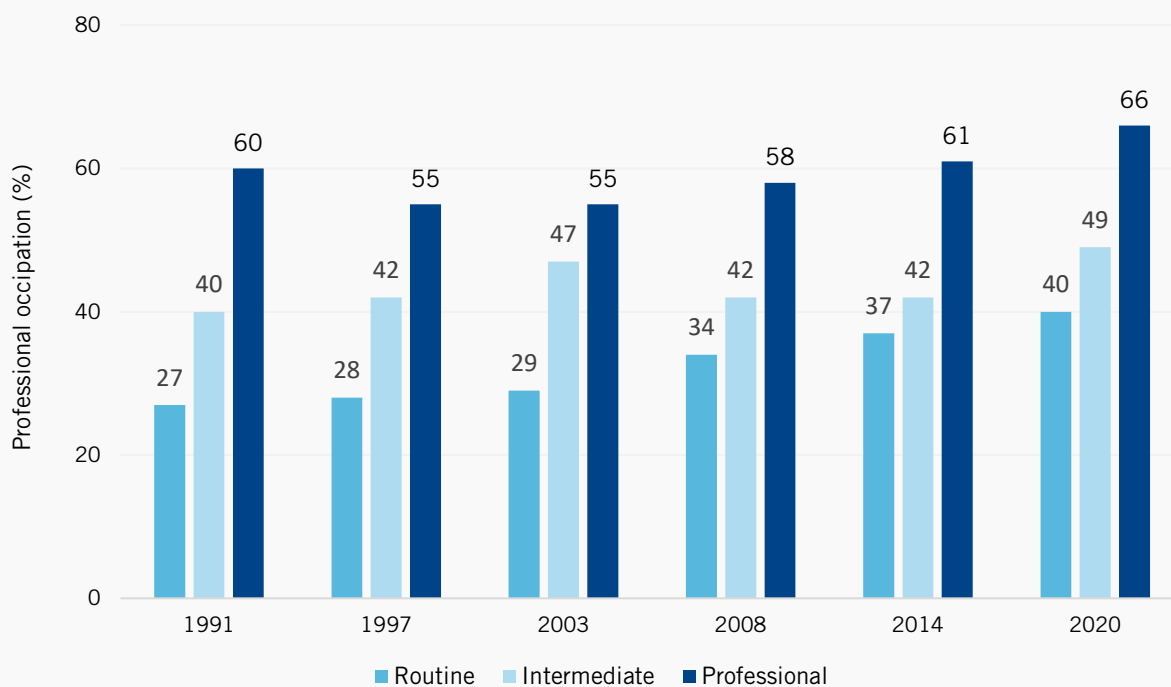
We next consider occupational based class measures. We group people into three broad class groups: professional and managerial backgrounds, intermediate backgrounds, and lower socio-economic backgrounds, using the national statistics socio-economic classification (NS-SEC).⁷ Individuals in the same social class share similar levels of income, economic security and chances for economic advancement as well as authority and control.

⁶ The extent to which intergenerational persistence in income has changed for cohorts born after 1970 is likely to remain an open question until labour market information is available for Next Steps cohort members at age 32.

⁷ The professional/managerial occupational category includes accountants, chief executives and teachers; the intermediate socio-economic background category includes secretaries, nursery nurses and small business owners; the low socio-economic background category includes farm workers, HGV drivers, and plumbers.

Figure 4 uses BHPS/Understanding Society data to plot differences in the likelihood of ending up in a professional and managerial class at age 40-46, for a series of successive cohorts from 1991 to 2020.⁸

Figure 4: Professional occupational based measures, by parental class, age 40-46



Note: BHPS/Understanding Society data. We use the collapsed NS-SEC3 classification for both parents (whose occupation is elicited via a retrospective question) and sample participants aged 40-46. The years on the x-axis refer to the year where most of the data are collected for the relevant wave i.e. the 2020 data is based upon Wave 11 of USoc. Parental occupation is assigned using the dominance method.

Occupation based measures give a somewhat different finding to the income-based measures in Table 1. In our sample, there is a rise in the proportion of people who are in the professional and managerial classes. In 1991, 37 percent of workers are in these occupations as compared with 52 percent in 2020.

Looking at the likelihood of obtaining a professional job, we see that those whose parents had routine jobs disproportionately benefited from this expansion between 1991 and 2020. In 1991, those from routine backgrounds are 33 percent less likely than their peers from professional backgrounds to gain a professional job themselves. This gap shrinks to 26 percent in 2020. Two thirds of those from higher social classes go onto to become professional and managerial classes themselves at age 40-46, compared with four in ten of those from lower social classes who go onto become professional and managerial classes.

⁸ The results in Figure 4 rely upon eliciting parental class via retrospective questioning.

The results of Table 1 and Figure 4 provide differing conclusions on mobility trends but are consistent when changes in the occupational structure of the economy and widening income gaps within occupations are considered. If wage inequality within occupation rises⁹ – and those from less affluent backgrounds find themselves in the lowest paying roles within each occupational category – the findings of falling income mobility and stagnant, or even rising, occupational class mobility can be reconciled. A variety of explanations for the seemingly disparate finding are considered in Blanden, Gregg, and Macmillan (2013) who argue that economic inequality rises sharply within big social class groups over time and that social class acts as a poor proxy for the permanent income concept that economists tend to be interested in.¹⁰

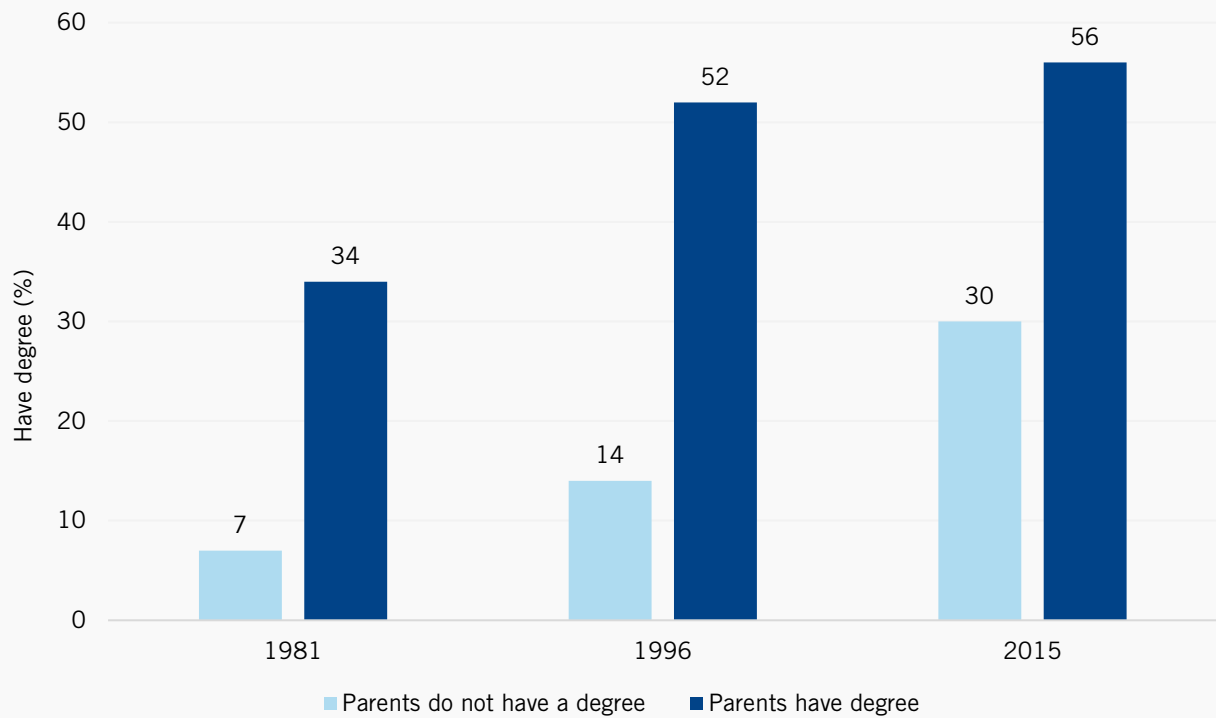
Intergenerational persistence in education

Next, we consider the relationship between parental and child education. Education achieved earlier in life is a key driver of both future income and occupation and, unlike these two measures, is reasonably stable at an earlier age. This enables us to focus on trends in education for younger cohorts. Figure 5 does this by plotting differences in degree attainment for those with graduate and non-graduate parents. Here we use data from the 1958 National Child Development Study (NCDS), the 1970 British Cohort Study (BCS), and Next Steps, which follows the lives of around 16,000 people in England born in 1989-90.

⁹ This has indeed been shown in the UK. Schaefer and Singleton (2019) show that, between 1996 and 2005, greater wage variance within firms accounted for eighty-six percent of the total increase in wage variance among employees.

¹⁰ The picture is complicated further if one looks at more disaggregated classes or even occupations. Jonsson et al (2009) argue that most of the social reproduction of income and big class-based measures is 'occupational reproduction in disguise'. The extent of social reproduction – which can be measured by income, highly aggregated class-based measures, or occupations – can exhibit different trends depending upon the measure used.

Figure 5: Degree Attainment by parental education level



Note: data are taken from the NCDS (age 23), BCS (age 26) and Next steps (age 25). Parental education is assigned using the dominance method.

As with professional occupations, the number of degree holders has risen dramatically over time. Figure 5 highlights how the graduation gap between children of graduate and non-graduate parents widened during the rapid expansion of universities in England between 1981 and 1996. The gap in graduation rates widened from 27 percent to 38 percent. However, by 2015 the absolute difference in the likelihood of attaining a degree, by parental education level at least, looked no different than it did in 1981. As with occupational class measures, comparisons over time need to be interpreted carefully as the overall composition changes significantly, with very few graduate parents in 1981 compared with 2015.

At the same time, large differences remain: children from graduate parents are still twice as likely to graduate themselves compared with those from non-graduate parents. After three and a half decades, the graduation rate for those from non-graduate parents (30 percent in 2015) was still lower than the rate for those from the graduate parents in 1981 (34 percent). It should also be noted that there is increasing variation in the wage returns for different university degrees. What degree you gain matters. The figures do not necessarily correlate with improved mobility prospects.

The findings from Figure 5 also resonate with those summarised in our literature review. Making comparisons of mobility levels across countries is difficult because changes for one generation can be quickly reversed. Karlson and Landersø (2021) make this point in the case of Denmark. Rapid education

expansions in Denmark initially benefited the least fortunate pupils. Subsequent expansions, from 1970 onwards, attracted relatively more affluent pupils into higher education tracts. The result is that educational mobility estimates based upon cohorts born between 1940 and 1960 make Denmark look much more mobile than the US. In later cohorts, mobility levels have been shown to converge between the two, very different, countries (Heckman and Landersø, 2021).

Intergenerational persistence in wealth and housing

As mentioned in our review of the research literature, the potential for wealth inequality to grow over time and impact on life chances has become of increasing interest to economists (Piketty, 2014). But lack of data has limited studies in the UK. Blanden, Eyles, and Machin (2022) argue that one can make meaningful inferences about how wealth elasticities have changed over time by looking at home ownership correlations across generations. Housing wealth is both the primary component of wealth in Britain (Crawford, Innes and O’Dea, 2016) and has an almost exact linear relationship with total wealth. Increases in homeownership transmissions are thus indicative of decreases in wealth mobility over time. Figure 6 shows the relationship between the housing tenure of those aged 42 and that of their parents in teenagehood.

Figure 6: Home ownership by parental ownership status, age 42.

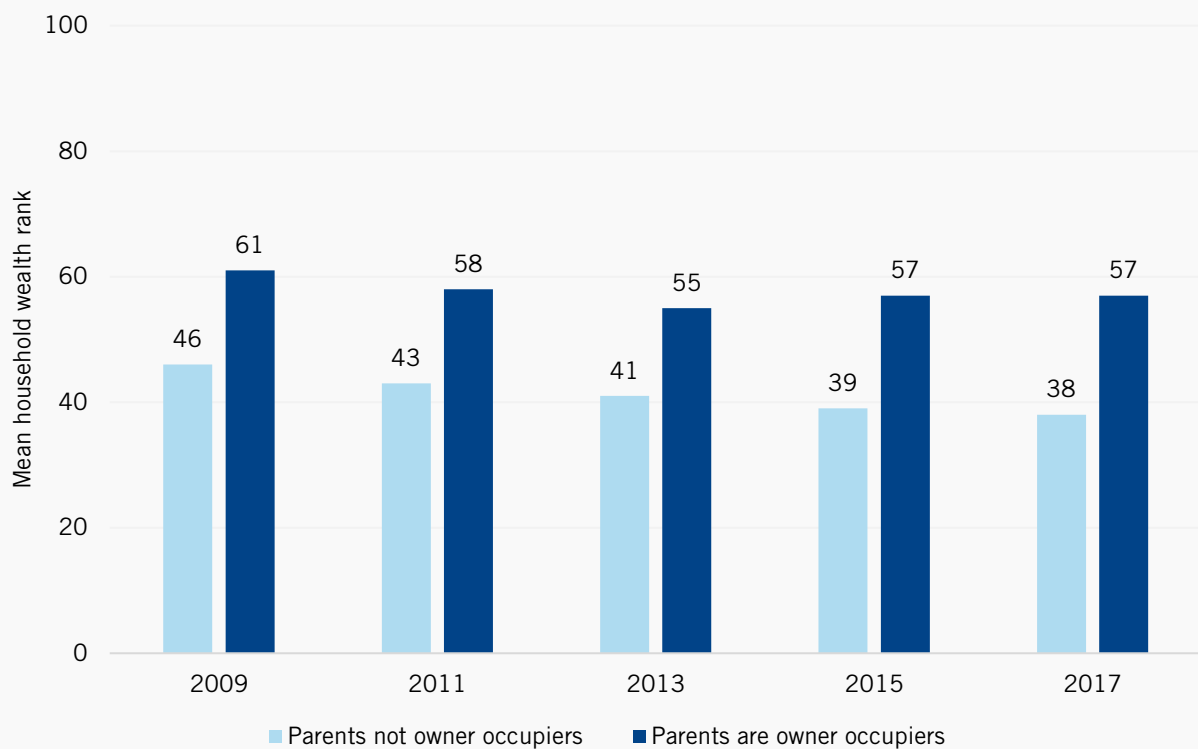


Note: This figure shows home ownership for offspring of parents who are or are not owner occupiers (OO) themselves; data are taken from the NCDS, BCS, and Wealth and Asset Survey. In the latter, participants are asked retrospectively whether their parents owned their home when sample participants were aged 14. Similar results hold using matched BHPS/USoc data for a comparable sample (see Blanden, Eyles, and Machin; 2022).

Figure 6 is comparable with Figure 4 and 5 in that it shows how large aggregate changes have not been felt evenly by those from different socioeconomic background. Home ownership, commensurate with rapidly rising house prices, fell for those in middle age between the years 2000 and 2017; however, the fall has been much more pronounced for those whose parents were not owner occupiers. While 74 percent of those who were born in 1958 and grew up in rented accommodation ended up as homeowners by 2000, this number fell sharply to 51 percent by 2017. Looking at those who grew up in owner-occupied housing, the fall is much less stark. 88 percent of those whose parents were owner-occupiers owned a home in 2000 and this fell to 81 percent by 2017. As a result of these changes, the gap in ownership rates between those who grew up in rented as opposed to owner occupied accommodation grew by 16 percentage points between 2000 and 2017.

Figure 7 shows the implications of such changes for wealth. Unfortunately, data linking parental housing tenure and the wealth of their offspring is only available for 2009 onwards, but the Figure does highlight how pronounced wealth differences are between those who grew up in owner-occupied housing and those that did not.

Figure 7: House wealth by parental ownership status, age 40-44



Note: Data are taken from the Wealth and Asset Survey. Years on the x-axis refer to the middle year of the three years in which data is collected for each Wave. Household wealth ranks are computed on the whole sample using household sample weights. These are then averaged by parental ownership status.

The differences in wealth ranks are pronounced according to whether one's parents owned their own home. The average percentile wealth rank is between 15 and 19 points higher for those who grew up in owner occupied housing as opposed to rented accommodation.¹¹ The differences in wealth by parental tenure suggested that the strengthening in the relationship between someone's own tenure status and that of their parents is likely to increase intergenerational wealth persistence. Interestingly, the upwards shift in wealth persistence that is suggested by home ownership trends coincides closely with the shift in income persistence observed between the 1958 and 1970 birth cohorts. It also coincides with the increase in educational persistence between these same cohorts.

Evidence from successive cohorts show that while educational persistence has reverted somewhat, the upward jumps in the social reproduction of wealth observed between these cohorts appear to have plateaued at a permanently higher level. The total effect of these intergenerational shifts is a housing market that is strongly divided across socioeconomic lines. If we take the 2017 Wave of the Wealth and Asset Survey, we find that ownership rates differ greatly according to household income percentile and education level of the household reference person. For the sample of households headed by those aged 40-44, those with degree educated household heads are 25 percentage points more likely to be homeowners. An even starker gap is present between the bottom and top of the income distribution. Households in the bottom 20 percent of the income distribution are 57 percentage points less likely to be homeowners than those in the top 20 percent.¹²

The outcomes above are the latest observations available for people around middle age. Looking at differences in wealth, income, and occupation for those who have only recently entered the labour market is unlikely to provide reliable estimates of future outcomes. The exception to this is degree attainment which provides a relatively static measure once an individual reaches their mid-20s. Even so, we can only look at mobility in terms of the latter for those who grew up in the 1990s.

Outcomes indicating future mobility rates

Our final set of results turns to a recent cohort of individuals born at the turn of the Millennium. Rather than looking at adult outcomes for these individuals, we focus on the homes that they are growing up in. As we noted earlier, Putnam (2015) has documented an increasing divide in single parent families in the US, driven by the changing circumstances of those born to less educated parents.

¹¹ We use the term rented to refer to housing tenures that are not owner occupied i.e. those in local authority housing are referred to as renters.

¹² The calculations are based upon deflated (using monthly Consumer Price Index data) household income where household income is total net regular housing income before housing costs. Ranks of income are computed using the full sample i.e. not only those aged 40-44, and are computed using household cross sectional weights.

As we have identified in our literature review, there is a growing body of evidence suggesting that particular home environments (those with family stability and positive parental investments) are associated with higher chances of future upward mobility. Heckman and Mosso (2014) highlight the primacy of early childhood investments and the family in driving longer term success in life. Chetty et al (2014a) demonstrate that high mobility areas in the US are associated with areas where there is greater family stability. In general, studies suggest that families matter more than we originally thought. Charting these home characteristics allows us to provide indications of future mobility prospects.

Table 2 looks at how family structure has changed over time in the UK for recent generations. We provide descriptive evidence on family structure at birth and at age 16 for two birth cohorts – the 1970 British Cohort Study (BCS) and the 2001 Millennium Cohort Study (MCS). Following Putnam 2015, we split our sample by parental education, considering differences between households where either parent has a degree and those where neither parent has one.

Table 2: Family structure by parental education

	Parental Education		
	Average	No Degree	Degree
British Cohort Study (1970)			
Mother age at birth	26	26	27
Two parent at birth (%)	97	97	99
HH size at birth	4.6	4.7	4.4
Two parent at 16 (%)	76	76	87
Own home at 16 (%)	73	71	96
Millennium Cohort Study (2000)			
Mother age at birth	28	27	32
Two parent at birth (%)	83	78	98
HH size at birth	4	4.1	3.8
Two parent at 16 (%)	64	58	82
Own home at 16 (%)	68	60	91

Note: parental education is assigned using the dominance method. Two parent family refers to the situation when both 'natural' parents are in the household.

The findings in Table 2 highlight large differences between children of graduate and non-graduate households, and also considerable changes in family structure that have evolved over time. For the 1970 generation, almost all children resided with both natural parents at birth. But for the millennial

generation 30 years later, only 83 percent of children were born into two parent households. Strikingly, the decline in two parent households is driven almost solely by fractured family structures amongst non-graduate parents.

Divorce after birth has also increased since the 1970s with the biggest rise for non-graduate parents. Rising separation rates, coupled with the increased incidence of births to single mothers, means that only 64 percent of the millennial generation resided with both parents at 16. Beneath this average is a large divide by parental education. 82 percent of millennials born to graduate parents resided with both parents at age 16 compared with only 58 percent of non-graduate parents.¹³

Other demographic changes – such as family size – have fallen at a similar rate across the socioeconomic spectrum. However, in line with the results presented in Figure 6, the gap in homeownership rates between graduate and non-graduate parents has widened over time. The millennial generation are less likely to live in owner occupied housing than those born in 1970. This is true for both levels of parental education, but the disproportionate fall for less educated parents means that the ownership gap widens between the two birth cohorts.

Private tutoring

Our last finding concerns the socio-economic divide in parental investments outside school. Private tuition is arguably the most salient way by which parents can supplement the education of their children outside of standard classroom settings. Here we use the longitudinal household panel study Understanding Society (USoc). Three Waves of data collection in April 2020, November 2020, and January 2021 asked parents questions about home-schooling and whether they have purchased private tuition for their children.

Children residing in the top 20% of household incomes were between 11 and 14 percentage points more likely to have had paid tuition than children in the bottom 20% of household incomes. These effects are quantitatively large given that, in our sample, no more than 9.5% of children had paid tuition in any one period. Children of the richest households are twice as likely to have benefitted from private tutoring than children from the poorest households.

¹³ There is a somewhat mechanical relationship here given that education levels for both parents are only observed if both parents reside in the family home. As we assign education using the highest education level of either observed parent, we are more likely to assign higher education levels to two parent households.

Pandemic impacts

We have previously used data from Understanding Society and official school attendance figures to assess the consequences for social mobility from unequal learning and labour market losses arising in the UK due to the Covid-19 pandemic (Elliot Major, Eyles, and Machin, 2021). For this review we extend this work by considering how the unprecedented disruption to face-to-face schooling during the Covid pandemic may impact on the country's intergenerational income elasticity (IGE).

A recent meta-analysis collating estimates from 34 studies across 12 countries shows that estimated learning losses in the UK appear to be high when compared with other nations.¹⁴ Of the 10 estimates that report learning deficits of over 0.5 of a standard deviation, 6 of these come from UK based studies (Betthausen et al, 2022). Worryingly, these deficits are starkest amongst the nation's least advantaged pupils.

We use a number of studies (See for example Lavy, 2015; and Andersen et al, 2016) to estimate lower and upper bounds for lower attainment and university enrolment as a result of the learning loss observed in the UK. These allow us to estimate lower and upper bounds for a new post pandemic intergenerational income elasticity (IGE). According to our calculations the IGE is set to rise by somewhere between 4.8 percent and 11.9 percent due to the steep socioeconomic gradient in lost learning hours. This translates to an IGE of between 0.395 and 0.422 which is high by international standards. This suggests a step change down in the UK's relative income mobility levels unless something is done to reduce education inequalities.

¹⁴ There is large variation amongst the estimates with some UK studies suggesting minimal losses and others suggesting very sizeable learning deficits.

Conclusions

The 2005 landmark Sutton Trust study marked a major milestone in the social mobility literature, catapulting the topic into mainstream public debate in Britain, and signalling a boom in academic activity that continues to proliferate to this day.

It came at a time when the bulk of social mobility research was based on relatively small samples often using self-reported earnings. The differences between modern day studies and those of 25 years earlier can be highlighted by the numbers of observations involved: some studies measured correlations in earnings on samples numbering just over 300 individuals, while the latest research can exploit samples in the tens of millions.

The new wave of social mobility research has significantly moved on from where it stood 25 years ago, with some research building and further developing key literature (e.g. social class research in sociology, cross-sectional economic intergenerational mobility studies), and other research pushing out in new and innovative directions that had not been considered previously (e.g. highly influential geographical mobility work based on rich administrative data, and study of new areas of mobility research like the study of housing ownership and wealth). Increasingly researchers have turned to a range of measures, at different levels of aggregation (individual, family, community), to show how a multitude of economic and social outcomes are reproduced across generations.

A resultant new wave of social mobility research has produced important insights and developments, documenting a range of metrics of intergenerational persistence, demonstrating variation in mobility rates across distributions, and detailing geographical differences in mobility. The UK is associated with particularly stark intergenerational persistence of poverty and privilege - immobility among those on low and high incomes.

The evidence suggests that so far at least the education system has overall failed to act as the great social leveller. This is not to say that specific schemes and schools cannot be transformative for children and young people's lives, or that addressing education inequalities is not important, or indeed that education cannot be utilised to better effect in the future. Improving educational opportunities for a wider range of children is necessary but not sufficient in itself to tackle national levels of low social mobility. At the same time, we know that children's home environments have a profound impact on future life chances. A recurring finding is that the workplace is as at least as important as education in determining mobility prospects.

We also present results drawing on several data sources to describe trends in mobility in Britain. Some of these update old results while others add different outcomes in the hope of painting a richer picture

of mobility trends over time. No single metric fully captures life chances for a given cohort and the results above point to a complex overall picture of mobility in the UK.

Relative income mobility levels have plateaued for the latest generations, while relative social class and education mobility have improved slightly. On whatever mobility measure used, large gaps by background remain in the likelihood of climbing the income ladder, ending up in a higher social class, or getting a university degree. Meanwhile, there is increasing intergenerational persistence in home ownership for recent generations, with children from home owning parents increasing more likely to own homes themselves compared to children who grew up in rented accommodation.

Finally, we observe a widening family gap for children growing up in the early 21st century. Children with non-graduate parents are now significantly less likely to grow up in two parent homes and family-owned homes than children with graduate parents. Children from high income parents meanwhile are twice as likely to benefit from private tutoring outside school than those from low income parents. These stark divides in home environments and parental investments do not bode well for future social mobility levels, particularly as the country braces itself for the cost of living crisis and potential economic recession in the wake of the Covid pandemic.

Estimated learning losses during the pandemic in the UK appear to be high when compared with other nations. Our own estimates suggest a step change down in income mobility for this Covid generation, with the intergenerational elasticity set to rise (in calibration exercises by between lower and upper bounds of 4.8 percent and 11.9 percent) due to the steep socioeconomic gradient in lost learning hours induced by the pandemic.

In order to improve social mobility prospects for future generations the evidence suggests we need a more systematic, longer-term perspective. We should seek not only better targeted education policies but also consider how we might improve the home learning environment and the transition between education and work. Admissions to highly selective universities remain tilted to the already advantaged, but we must also address the inequities suffered by the half of young people who do not attend university, for example by improving the supply of quality apprenticeships.

We need to consider distinctive strategies to break intergenerational cycles of poverty and intergenerational cycles of privilege. In the wake of the pandemic we need a well implemented long term programme, incorporating targeted help for the most disadvantaged pupils and extended school days. If learning losses for current generations are not offset, there look to be bleak consequences for social mobility.

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